Journal of Economics and International Business Management
Vol. 9(1), pp. 20-34, May 2021
doi: 10.33495/jeibm_v9i1.21.108
ISSN: 2384-7328
Research Paper

Financial Implications of Capital Controls Enforcement on Large-Cap Companies Listed on the Athens Stock Exchange

Aikaterini Derdemezi[1] • Kanellos Toudas[2] • Paraskevi Boufounou[3*] • Georgios Georgakopoulos[4]

[1]National Kapodistrian University of Athens, Greece.
[2,3]Department of Economics, National and Kapodistrian University of Athens, Greece.
[4]Department of Agricultural Economics and Rural Development, Agricultural University of Athens, Greece.

*Corresponding author. E-mail: pboufounou@econ.uoa.gr.

Accepted 8th April, 2021.

Abstract. The aim of this study is to examine the effects of the capital controls on the process and financial performance of large-cap companies operating in Greece listed on the Athens Stock Exchange. More specifically, the markets' behavior is studied, as well as the reactions of the investors after the announcement of the implementation of the measure. The mixed method (quantitative research with questionnaires and qualitative research with interviews with financial managers and senior executives) was used. The main findings of the research are that the measure of capital controls: was deemed necessary and effective based on its aims, which were (a) the protection of the mass withdrawal of deposits and (b) the stabilization and security of the financial system had a significant effect on increasing the use of electronic banking. But also had significant negative effects: on the investment decisions of companies, on their competitiveness and reputation abroad, on the ability to raise new capital, on their liquidity and therefore on their ability to cope with key functions, as well as on their imports and exports.

Keywords: Capital controls, listed large-cap companies, crisis, Athens Stock Exchange, Greece.

JEL Classification: M40, M41, M48.

INTRODUCTION

In the context of the growing fear of Grexit that threatened Greek banks, but also the astonishing political unrest that existed in Greece four years ago, on 28th June, 2015 the Greek authorities took a series of measures to mitigate the risk of Grexit, to prevent the collapse of the banking system, but also to stabilize the economy, which are part of capital controls (Priftis and Rousakis, 2017), as applied in similar cases abroad (Samitas and Polyzos, 2016). The implementation of the capital control measure resulted in the establishment of strict limits on daily cash withdrawals, 60 Euros per day per cash card, which led to the impossibility of withdrawing large amounts of deposits, but also led to enhance the use of credit cards. There were also significant implications for businesses, which were initially faced with a lack of liquidity to finance the import of imported products (Samitas and Polyzos, 2016; Priftis and listed on the Athens Stock Exchange of business, its size, while an important role in the effectiveness of this measure is the culture of the country in which the company operates.

The purpose of this study is to examine the effects of the application of capital controls on the operation and financial performance of large-cap companies operating in Greece listed on the Athens Stock Exchange. More specifically, the present work seeks to answer the following sub-objectives:

a) identify the necessity and effectiveness of the capital controls enforcement in Greece in the specific time period,
b) quantify the direct impact of capital controls enforcement on large-cap companies listed on the Athens Stock Exchange, operating in Greece
c) specify the long-term impact of capital controls on large-cap companies listed on the Athens Stock Exchange, operating in Greece

Answers to the above sub-objectives are attempted using the mixed research method (a combination of quantitative and qualitative research), so as to further improve the results' validity and reliability. The sample of the quantitative method consists of the large-cap companies that are listed on the Athens Stock Exchange and are active in Greece. The sample of the qualitative method consists of questionnaires and interviews with owners /senior executives of these companies.

LITERATURE REVIEW

Capital Controls Enforcement in Greece

In June 2015, according to the parliament's decision 2015 (Gazette 62/A) was published regarding the referendum of 5th July 2015. More specifically, "the Council of Ministers at its meeting of 26/06/2015, following a proposal by the Prime Minister on the progress of the negotiation of the agreement as it was recorded during the successive meetings with the leaders of Europe and the heads of the institutions and specialized in the Eurogroup of 25th June, 2015 decided to proceed with a proposal for a Referendum on a crucial national issue according to article 44 par. 2 ed. A of the Constitution. The Referendum was proposed by the Council of Ministers in order for the Greek people, after being informed in detail about the progress of the negotiations that lasted from 20th February, 2015 until then intensively at all institutional levels of the European Union and the Eurozone, to take a position on the proposal of the three institutions and to authorize his Government to further handle the crucial national affair. Accordingly, the Referendum was part of the negotiation process for the conclusion of the agreement. According to Government Gazette 62/28.06.2015, the question posed to the Greek people was whether the draft agreement submitted by the European Commission, the European Central Bank and the International Monetary Fund to the Eurogroup on 25th June, 2015 should be accepted and which consisted of two parts which formed their single proposal. The first document was entitled "Reforms for the completion of the Current Program and Beyond" and the second one was entitled "Preliminary Debt Sustainability Analysis".

After the announcement and conduct of the referendum, in which 62% of Greek voters decided to reject the proposal of the institutions, the Eurogroup decided not to extend the support program of Greece after 30th June, 2015 (Chrysolora, 2015). Furthermore, on 28th June, 2015 the European Central Bank Governing Council decided not to increase the liquidity of granting to Greek banks via emergency liquidity assistance facility (ELA) (Kotidis and Malliaropulos, 2018).

Shortly, the Systemic Stability Council proposed the imposition of restrictions on the movement of funds to the Council of Ministers, which was accepted. The Legislative Content Act "Short-term banking holiday" was issued with the Government Gazette 65/28.06.2015 in order to protect the Greek financial system and the Greek economy in general from the lack of liquidity caused by the decision of the Eurogroup of 27th June 2015 to refuse the extension of the loan agreement of Greece. According to Article 1, the period from 28th June, 2015 to 6th July, 2015 is declared a bank holiday. During the banking holiday, the institutions will remain closed to the public and will be accessible only to the staff necessary for the implementation of this transaction and the preparation for the resumption of transactions with the public after the bank holiday. An exception to this Act was the payment of pensions. This was the beginning of the implementation of capital controls in Greece.

According to the Legislative Content Act "Short-term bank holiday" (Government Gazette 65 /28.06.2015), during the period from 28th June, 2015 to 6th July, 2015 it was not possible to conduct any banking transaction except cash withdrawals from the automatic cash registers, subject at a daily limit per card set at 60 euro, which can be modified by the Minister of Finance, transactions without restrictions, in addition to those that were valid before the issuance of it with credit and debit cards for payments within the country, i.e for payments in account credit kept in Greece, payments using prepaid cards exclusively up to the amount that appeared as a balance before the start of the bank holiday. New prepaid cards cannot be issued, distance transactions (electronic banking - Web Banking - or transactions through phone), for payments within the country, i.e for payments on an account held in Greece, cash withdrawals through cards issued abroad by automatic teller machines. Restrictions on the withdrawal limits of these cards may be determined by the Minister of Finance.

According to article 3 of Law 4350/2015, the duration of the banking holiday that was declared with the Act of Legislative Content from June 28, 2015 "Short-term bank holiday" (AD 65) was extended until 16.07.2015. According to article 4, the bank holiday ended on 20th

July, 2015 which was declared with the Legislative Content Act of 28 June 2015 (AD 65). Cash not withdrawn on any given day or days could be withdrawn cumulatively up to the amount of four hundred and twenty euro (420) per week. Early, partial or total repayment of a loan to a credit institution was not allowed, with the exception of cash repayment or remittance from abroad, as well as early, partial or full-term repayment of time deposits. It was also forbidden to open new accounts or deposits, to add co-beneficiaries to existing ones and to activate dormant accounts. It was possible to open accounts exclusively for payment of staff salaries, payment of the depositor's obligations to the same credit institution, coming from contracts concluded before 28th June, 2015 payment of new pensions and new welfare benefits, settlement of card transactions from new contracts (acquiring), the service of newly established, after 1st May, 2015 legal entities, the service of start-ups participating in new entrepreneurship support programs, the deposit of cash as collateral of a letter of guarantee, guarantee or credit institution, the opening of an account in favor of a third party for the purpose of either complying with a check for the execution of a pecuniary claim, based on a payment order, court decision or other enforceable title or repaying a claim for which a third party has, unless he has the deposit account with any procedural act, the credit of amounts from abroad in euros or foreign currency amounting to at least ten thousand (10,000) euro or the equivalent in foreign currency, the acceptance of time deposit only if its beneficiaries are identified with the beneficiaries of its account feeder, deposit or cash, any other case, after approval by the Banking Transaction Approval Committee.

According to the Government Gazette B/2282/22.7.2016 "Regulations on issues of restrictions on the withdrawal of cash and the transfer of funds", certain amendments to the above law were decided. More specifically, cash that was not withdrawn on a certain day or days can be withdrawn cumulatively up to the amount of 840 Euro every two weeks. It is also permitted to open a demo or deposit account (a) for students who, during the current academic year, have participated in ERASMUS student exchange programs and the existence of an account is a condition for the payment of the provided compensation, if there is no other account available of which they are beneficiaries or co-beneficiaries, b) to pensioners who are residents abroad, for the payment of their pension in Greece. In addition to the above, it was possible a) to withdraw cash up to 100% in total, from funds which, after 22th July, 2016 are deposited in the bank accounts of the beneficiaries legal and natural persons, in cash, b) the Cash withdrawal up to 30% in total, from amounts of money which, after 22th July, 2016 are transferred from abroad by transfer of credit to existing accounts, held at a credit institution in Greece.

By the decision of 31 May 2018, the amount of cash withdrawal was increased from 4th June, 2018 from 2,300 euro to 5,000. Specifically, it is allowed to withdraw cash up to the amount of 5,000 euro, per calendar month, per depositor (Customer ID) per credit institution, from institutions in Greece and abroad. Also, the amount of euro or foreign currency transfer abroad was increased from 2,300 euro to 3,000, while at the same time the acceptance and execution of funds transfer orders abroad was allowed up to the amount of 4,000 euro, per customer code (Customer ID) and per calendar quarter, from 1 July 2018. In addition, the transactions of legal entities or tradesmen abroad were facilitated in the context of their business activities, through the increase of the amount they can send abroad, from 20,000 euro to 40,000 euro, for each transaction per customer and per day.

According to the Government Gazette B'4315 / 28.9.2018 "Regulations on issues of restrictions on the withdrawal of cash and the transfer of funds" from October 1, 2018 are allowed any form of cash withdrawals from institutions abroad, including withdrawals using credit and prepaid cards have been issued by credit institutions operating in Greece, up to the amount of five thousand euro (5,000) or the equivalent in foreign currency, per calendar month per depositor (Customer ID), per credit institution. Also, from October 1, 2018, cash withdrawals of any kind from a store or from ATMs by institutions in Greece are allowed without limitation, including withdrawals using credit and prepaid cards issued by credit institutions operating in Greece, as well as any other cash payments by institutions, regardless of currency, including, inter alia, check receipts and payments based on letters of guarantee.

Also, from 01.10.2018 the following were valid according to KG Law Firm, 2018: Transactions with foreign counterparties being worth up to € 100,000 per customer per day are now processed without prohibitions or restrictions and are subject only to the submission of appropriate tax invoices and other supporting documents. Individuals traveling abroad can now carry banknotes with a total value of up to 10,000 euro (or equivalent in any foreign currency) per individual for each trip abroad, there is no value limit for cash withdrawals from banks and credit institutions operating in the Hellas. The abolition of the value limit also applies to credit cards and prepaid cards, as well as to bank payments in any currency, such as the redemption of bank checks and letters of guarantee, cash withdrawals from banks operating abroad are now allowed up to the amount of 5,000 euro per month, per customer, per Hellenic Bank and finally, the profits and dividends from invested funds can now be transferred without restriction to the beneficiary's bank account abroad. This measure applies to funds transferred from abroad to a Greek bank account after 1st October, 2018.

The Board of Directors of the Athens Stock Exchange

Group in its meeting of 29th June, 2015 decided the following:

a) to remain closed, throughout the validity of the banking holiday in accordance with the Act of Legislative Content of 28th June, 2015 (Government Gazette A '65) and any decision authorized by the Minister of Finance, the organized Market of the Athens Stock Exchange and the Multilateral Trading Mechanism, Alternative Market (ENA), following a relevant decision of the Board of Directors of the Athens Stock Exchange,

b) to remain closed, throughout the validity of the banking holiday, in accordance with the Legislative Act of 28th June, 2015 (Government Gazette A '65) and any decision authorized by the Minister of Finance, the Electronic Secondary Securities Market (HDAT), following a relevant decision of the Bank of Greece,

c) the suspension of the redemption of units of mutual funds for the above period;

d) the suspension of operation of the Liquidation Company (ETEK) for the securities traded in the Greek market and in the MTF;

e) the suspension of the operation of the securities settlement on the Greek market by the Hellenic Central Securities Depository (ELKAT), approving a relevant decision of its Board of Directors

The Theoretical Background

In the discussion on capital restrictions/controls, reference should first be made to the freedom of cash flow. The huge increase in foreign capital, especially in emerging markets after the global financial crisis of 2008-2009, has led to a renewed debate on the benefits of international capital mobility. While the free flow of international capital has many benefits, such as reducing capital costs, increasing investment, economic growth and international diversification gains for foreign investors, it also poses significant risks to recipient economies when flows are volatile reversals or are subject to sudden interruptions. The case of capital controls is mainly based on prudential measures aimed at mitigating the volatility of foreign capital inflows. However, according to Alfaro *et al*. (2014), controls also have a tacit protective aspect designed to maintain currency devaluation.

From a neoclassical perspective, in a world with perfect capital markets, the case for international financial integration is clear. Free capital markets allow for a wider range of diversification and therefore lower portfolio risk for investors. In addition, they reduce the cost of capital for domestic businesses and therefore stimulate higher levels of investment. Also, most emerging economies have relatively low physical capital reserves. The increase in capital - and the consequent increase in output - after the liberalization of the financial sector should make liberalization even more attractive. However, studies attempting to measure the impact of capital inflows on post-liberalization prosperity show that the results are rather mediocre at best. The emphasis is that the indirect effects of liberalization are far more important to creating prosperity than raising capital itself: such as the efficiency with which capital is used to prosperity, not the level of equity. If this is the case, it makes sense for a country to stimulate these types of capital flows that can be effectively disposed of while discouraging the types of capital that are considered destabilizing to the economy. However, the literature failed to try to determine the effect of capital controls. According to Versteeg (2008), most of the studies investigating the impact of capital controls on economic growth have yielded uncertain results.

The global financial and European sovereign debt crises have led to a diminished consensus among economists that financial globalization is unconditionally desirable. However, declining financial integration and greater constraints on capital flows could alleviate these negative symptoms of financial globalization without addressing the root causes of financial instability and cycles of prosperity and recession. In this context, policymakers must ensure that financial globalization is effective, sustainable and fair. Effective financial globalization involves channeling capital flows into productive uses rather than fueling ineffective consumption-driven policies. Continuing financial globalization means monitoring and, where necessary, leaning the flow composition towards less volatile types and avoiding dangerous mixed positions. The issue is particularly important for the euro area. Free movement of capital is one of the four basic freedoms of the single market. Increasing financial integration with the completion of the capital markets union will help ensure the flow of capital to areas where it can be used more productively to stimulate growth and employment, while minimizing its side effects. According to Suerf (2016), financial globalization should be based on institutional, regulatory and structural reforms that strengthen domestic financial markets, improve resilience and increase their ability to effectively allocate funds to productive uses.

According to Altınkemer (2005) and Versteeg (2008), capital flows in the 1990s, their sudden upheavals and the resulting financial market turmoil, along with heavy financial losses, revived interest in Previous experiences of capital inflows and outflows and the crisis of the 1990s have led to the assumption that capital controls can be used temporarily, provided that the time available is used productively to make the necessary adjustments to the inconsistent policies that led to capital controls. In such a context, for countries with high domestic debt, where even the intervention itself can be a source of speculation, an exchange rate zone, taxing offenders, could be an alternative to central bank intervention. Such a strategy would be beneficial if the country used the time to address structural issues. This method is beneficial for the intervention used to reduce exchange rate volatility resulting from speculative inflows, firstly because it will keep the central bank reserve intact, and secondly because it will force exchange rate zone violators to responsibility for their violation. Thus, according to Altınkemer (2005), if interim controls are very carefully coordinated with appropriate support policies, they could replace IMF programs with financial assistance, at least until the new and improved international financial system is operational.

Alfaro *et al.* (2014) examine the effects of capital controls on firm-level corporate returns and actual investment using data from Brazil where a series of extensive controls on capital flows took place between 2008 and 2012. This theory suggests that the imposition of capital controls may increase the cost of capital and limit investment. Business-level credit constraints are also more likely to bind companies that are more dependent on external financing. Particularly, if production is associated with fixed costs and is dependent on external financing, financial constraints at the enterprise level become significant. Businesses with easier access to external financing or greater access to low-cost funds may be able to overcome the barriers associated with this fixed cost and experience increased investment and sales. On the other hand, capital controls can increase uncertainty while reducing the availability of external financing, which can reduce investment at the enterprise level. The results showed that there was a significant reduction in return on capital for Brazilian companies following the imposition of capital controls, in line with the increase in capital costs. However, controls over debt flows are associated with lower negative returns, suggesting that the market views equity and debt control differently. The data also show that large companies and export companies are less affected by controls. Larger export companies in particular, with revenues of over $ 100 million, are somewhat protected by controls. However, in terms of size, the data show that a reduction in average yields significantly reduces the advantages offered by size and export status. In addition, companies that depend on external financing are more affected by the imposition of capital controls. The rationale for capital control measures ranges from macro-prudential efforts to reduce the volatility of foreign capital inflows to a hedging policy to maintain external competitiveness. However, the data from this study suggest that capital controls can increase market uncertainty and reduce the availability of external financing, which in turn can reduce investment at the enterprise level. Overall, the results of the Alfaro *et al.* (2014) study suggest that capital controls disproportionately affect small, non-exporting enterprises, especially those that are more dependent on external financing.

Versteeg (2008) investigated the effect of capital controls on economic growth and assessed the hypothesis that different types of controls have different results. The author has created a new capital control measure that covers a much wider range of controls than previous measurements, allowing a) measuring the intensity of existing controls, b) differentiating input and output controls, and c) using recent econometric techniques to address some of the statistical problems that existed in previous studies. This study showed that improved measurement of capital controls is more able to achieve the effects on economic growth. In the sample of 63 countries surveyed with various econometric techniques, the results show a strong positive effect of capital controls on economic growth. In addition, the separation of the capital control ratio shows that this positive result is due to the existing input controls. Especially in samples with only emerging countries, the results are great. In addition, this study is able to confirm that controls in stock markets have a negative impact on economic growth. The negative effect of equity controls is greater than that of other output controls. This confirms and supports the fact that countries tend to liberalize their stock markets before opening other capital markets.

Cantu García (2017) relies on the fact that the literature on capital controls focused on their use as tools for capital management and improving macroeconomic and financial stability. However, there is no analysis of their impact on foreign exchange market liquidity. More in particular, technological and regulatory changes in foreign exchange markets over the past decade have affected the impact of capital controls on alternative foreign exchange market liquidity ratios. Cantu García (2017) introduced a theoretical model that shows that if capital controls are formulated as entry costs, then fewer investors will enter an economy. This will reduce the market's ability to accept large investment flows without a significant change in the exchange rate (a measure of market depth liquidity). On the other hand, if capital controls are formulated as transaction costs, they can reduce the actual difference (cost-based liquidity measure). Using a team of 20 emerging market economies and a new capital account constraint measure, Cantu García (2017) provides empirical evidence that capital controls can reduce measures based on the cost of foreign exchange market liquidity. The results suggest that capital controls are effective in reducing the indirect cost component of foreign exchange market liquidity, but may also have a negative structural effect on the foreign exchange market, making it more vulnerable to imbalances in the flow of orders.

Effects of Capital Controls Enforcement in Greece

The negative effects of the imposition of capital controls in Greece as noted by Karamouzis (2015), who was then Chairman of the Board of Directors of the Eurobank

Group, were: Feeding the recession, Preventing the return of deposits and the opening of international markets, Creating competitive inequalities to the detriment of small businesses, Increasing bureaucracy, costs of import and production process, Facilitating the development of by-trade, informal economy and tax evasion, while creating unofficial and unreported tax channels and trading methods, the Negative impact of exports and undermining the international competitiveness of companies, the Difficulty of companies to access the same cash available in banking institutions, but also in bank financing, The Retention of income from export activities abroad, The requirement for 100% advance payment of imports, because of their refusal of foreign insurance companies to insure the Greek risk and the Increase of doubtful liabilities to the Banks (NPLs) and to third parties, due to repayment difficulties.

Stamatiou and Gogos (2015) refer to the way consumers and companies deal with a sudden change in their trading capabilities, based on the fact that the choices of economic agents are determined by the combination of available options and preferences. To analyze the net effect of the aforementioned change in the behavior of the actors, they hypothesized that expectations for the stability and solvency of the domestic banking sector remain unchanged. This means that they have isolated the "uncertainty or risk" effect of capital controls. Due to restrictions on cash withdrawals, the relative cost of banknote transactions becomes very high. Therefore, rational behavior dictates that most financial agents will turn to online and cash card transactions. So, the authors estimated that trade would slow significantly and employment and incomes would shrink.

Kotidis and Malliaropulos (2018) examined the credit channel of precautionary capital controls in international trade. An experimental policy check was used for capital outflows in Greece in June 2015 and the fluctuation of credit dependence between sectors within the same company. Although the result is theoretically ambiguous, it was found that for the same company the exports of goods belonging to sectors with greater dependence on short-term credit decrease relatively more than those with sectors less dependent. Overall, the findings show that, despite the nature of macro-prudential capital controls as a crisis management tool, there is a credit crunch with negative real effects that depends heavily on the health of the banking system.

Samitas and Polyzos (2016) used VBanking, an object-oriented banking simulation model, to examine whether capital controls in Greece were implemented at the right time. The capital controls were implemented in Greece at the end of June 2015 in an effort to stop the possible mass withdrawal of deposits due to the political instability in the country. However, the banking data of the ECB and the Bank of Greece show that Greek banks have suffered a significant loss of deposits and a deterioration of the loan-to-deposit ratio (LTD) since the last quarter of 2014. Empirical findings show that when the authorities monitor the loss as a criterion for applying or withdrawing capital controls, the restrictions remain in place for a much longer period of time than when the LTD rate is used.

METHODOLOGICAL APPROACH AND KEY FINDINGS

Methodological Approach

As it is known:

- Qualitative research "is a situated activity, which places the observer in the world, qualitative research, includes an interpretive, naturalistic approach to the world. This means that quality researchers study things in their natural context, trying to give meaning or interpret phenomena in terms of the meanings that people give to them "(Isari and Pourkos, 2015). Therefore, it is a method that focuses on the meaning given by the participants to the phenomenon under consideration, providing an interpretation based on their experiences, beliefs, but also their quality (Cohen *et al.*, 2008; Paraskevopoulou-Kollia, 2008; Isari and Pourkos, 2015; Creswell, 2015). Consequently, it has the potential to lead to the production of new knowledge (Tracy, 2013). Also, the qualitative method is appropriate in case the research concerns companies (Tracy, 2013).
- Quantitative research focuses on the investigation of specific phenomena through measurement and numerical (statistical) analysis (Creswell, 2015). This method allows the collection of data from a large sample of respondents regarding their views, beliefs, experiences and behaviors on a particular issue, as well as the grouping of their answers to highlight specific trends, after statistical analysis (Creswell, 2015; Bacon-Shone, 2015).

The quantitative method does not allow the respondents to freely express their opinion, as they are asked to answer a questionnaire with standard, mostly closed-ended, questions, which is the advantage of the qualitative method.

On the contrary, the qualitative method allows the free expression of the views of the respondents, but is also governed by certain limitations: Usually the sample is very small and therefore the answers cannot be grouped through statistical analysis and emerge dominant trends and involves more risk of bias and prejudice on the part of the researcher, as he is called upon to interpret the views of the participants.

The combination of quantitative and qualitative research, i.e the mixed research method (Cohen *et al.*, 2008, Creswell, 2015):

a) may lead to more valid and reliable results;

b) reduces the negative impact of the limitations of each method and accordingly utilizes the advantages of both quantitative and qualitative research.

Thus, for the elaboration of this present research, the mixed method was used, i.e the simultaneous use of both quantitative and qualitative research.

The questionnaire for data collection was selected as part of the quantitative research. The questionnaire is the methodological tool used in the context of the poll method (Creswell, 2015). There are several advantages of this methodological tool that led to its selection and more specifically (Cohen *et al.*, 2008; Creswell, 2015; Muijs, 2004; Leavy, 2017): a) it can be completed directly by the respondents, as it is an easy-to-use tool, with which most people are familiar with how to complete them, b) can be distributed to a large sample of respondents, c) can be distributed in various ways, such as e-mail and conventional mail, as well as posted on e-mail platform, d) is low, if not zero, cost and therefore does not burden the researcher with additional costs, d) is more objective than an interview, as the researcher distances himself from the subjects of the research. The questionnaire used in the present research consisted of 15 questions, which were designed based on the international literature – mainly on Samitas and Polyzos (2016), Rousakis and Priftis (2017), Karamouzis (2015), and Kotidis and Malliaropulos (2018)- with the aim of answering the research questions.

In the context of qualitative research, the interview was chosen as a methodological tool. The interview refers to the interaction, the communication between persons, guided by the researcher or the questioner - in order to extract information related to the object of the research it is the method that has as its object to form a "mental content" […] To reveal aspects of personality and to recognize behaviors" (Paraskevopoulou-Kollia, 2008, p. 3). In the context of the present research, the structured interview was chosen as it enabled the comparison of the views of the respondents with each other, consisting of specific questions that were asked in a given order to all participants (Given, 2008; Greener, 2008). The interview used in the present research consisted of 14 questions, which were designed based on the international literature – mainly on Samitas and Polyzos (2016), Rousakis and Priftis (2017), Karamouzis (2015), Cantu García (2017) and Alfaro *et al.* (2014) and with the aim of answering the research questions. All questions were open-ended, so that respondents could freely express their views on the questions asked.

The sample refers to a specific part of the total population (Bacon-Shone, 2015). As the aim of the present study was to investigate the views of executives of large-cap companies, the sampling method was "intentional sampling," according to which the sample is being selected based on the specific characteristics (Palys, 2008). No other criteria were set for the participation of the respondents in the research. Regarding the number, Cohen *et al.* (2008) state that for quantitative research the sample should be large, but its number depends on the nature of the research and the researcher's access to the sample. For qualitative research, it is argued that the sample should not be large, as the goal of qualitative research is not to generalize the results (Greener, 2008). Given the above, a sample of 22 large-cap companies listed on the Athens Stock Exchange belonging to 9 sectors of activity was used, from which 91 questionnaires were collected. The sample data summary statistics are presented in Table 1 below. The majority of questionnaires' respondents are men (51.6%), aged 51-60 (37.4%), either owners or financial managers (34.1%), active in the banking and financial services sector.

Furthermore, regarding the qualitative research, 10 interviews were held. All participants in the qualitative study were men aged 35-55 years old, six of which are financial managers and the rest four of which are senior executives.

To research was conducted via internet and the communication data met research ethics with the consent of participants (Cohen *et al.*, 2008; Creswell, 2015; Given, 2008; Greener, 2008; Tracy, 2013; Leavy, 2017). The questionnaires and the answers of the interviewees were returned in the same way.

Main Findings

All the respondents in the qualitative research answered that the failure to achieve a positive result in the government negotiations with the Partners was the main factor which led to the enforcement of capital controls in 2015. Eight of the participants in the survey stressed that the refusal of the European Liquidity Mechanism to provide support was the factor that forced the Greek government to impose the capital controls.

Figure 1 below presents the opinion of the respondents in the quantitative research on capital controls. It shows that they estimate that capital controls enforcement was necessary at the given time of 2015 and that it was an effective measure that was unavoidable. This is line with the findings of (Chrysolora, 2015) and (Kotidis and Malliaropulos, 2018).

In the corresponding question of the qualitative research, the respondents were asked to answer whether the measure of capital controls in 2015 was necessary and effective in achieving its objectives. As participants' answers were common between these two questions, in the majority of interviews, the answers to these questions were processed together. The participants in the research answered that capital controls enforcement was absolutely necessary at the time for two reasons:

a) to prevent the mass withdrawal of deposits by primarily natural persons (private depositors); and

b) to ensure the stability of the financial system.

Based on these criteria, the majority of participants

Table 1. Sample Summary Statistics

		Frequency	Percentage
Sex			
-	Male	47	51,6
-	Female	44	48,4
Age			
-	Up to 30	16	17,6
-	31-40	22	24,2
-	41-50	19	20,9
-	51-60	34	37,4
Position			
-	Owner	31	34,1
-	General manager	29	31,9
-	Financial manager	31	34,1
Sector			
-	Banks and financial services	5	27,7
-	Food and beverage	1	4,5
-	Industrial products	4	18,2
-	Differentiated traders	1	4,5
-	Personal and household items	2	9,1
-	Constructions and Cement	3	13,6
-	Services of General Interest / Telecommunications	4	18,2
-	Oil and gas	2	9,1

stressed that the measure yielded the expected results. It is worth mentioning that a small part of the respondents also stated that the measure of capital controls had negative consequences and therefore its effectiveness should be examined as a whole. Thus, the findings of quantitative and qualitative research are in line.

However, the research of Samitas and Polyzos (2016) showed the opposite result, namely that this measure was not implemented at the right time and that it may not be an effective measure in the event of a banking crisis. On the other hand, some researchers (Altınkemer, 2005; Versteeg, 2008) refer to the relationship between the measure of capital controls and the institutional security of the financial system. At the same time, the implementation of the measure of capital controls was necessary for the non-mass withdrawal of bank deposits, which does not contradict the results of the research of Rousakis and Priftis (2017), which showed that this measure mitigated the withdrawal of deposits. Also, Monokroussos *et al.* (2016) point out that private sector deposits stabilized after the imposition of the measure of capital controls, while Samitas and Polyzos (2016) emphasize the positive impact that the implementation of such a measure can have on the non-loss of bank deposits.

Table 2 below shows the views of the participants in the quantitative research on the sectors of the sample companies that were affected the most by the capital controls enforcement in 2015, and reveals that the three main sectors that were mostly affected are: Payment of creditors / suppliers, Human Resources Management and Investment decisions.

In the corresponding question of the qualitative research, the answers of the respondents showed that the most direct impact of the implementation of the measure of capital controls was primarily in:

- difficulty in paying salaries and other claims of suppliers and creditors;

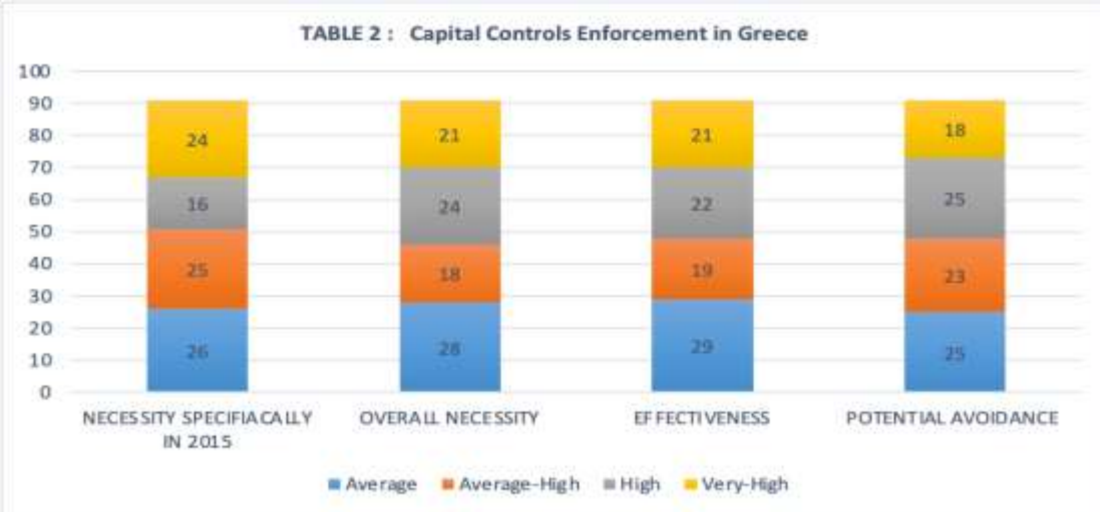

Figure 1. Capital Controls Enforcement in Greece

Table 2. Areas Affected by Capital Controls Enforcement in 2015

	Average	Standard Deviation
Investment decisions	4,66	1,056
Imports	4,54	1,138
Exports	4,43	1,185
Cash transfer	4,55	1,098
Loans	4,46	1,088
Payment of creditors / suppliers	4,68	1,053
Ontime money collection by clients	4,34	1,067
Letters of guarantee	4,51	1,047
Letters of credit	4,41	1,192
Demand for products / services	4,33	1,126
Completing orders	4,55	1,118
Human resources management	4,67	1,076

*1=not at all, 2=a little, 3=average, 4=average-high, 5=high, 6=very high

- postponement of investment decisions confirming the findings of the quantitative research. Other impacts noted include:
- difficulty in concluding contracts and agreements inside and mainly outside Greece;
- raising funds, in particular through loans, imports and exports;
- completion of various banking operations, such as issuing letters of guarantee.

These results do not contradict what Karamouzis (2015) mentions, and also the report of the Bank of Greece (2016).

Table 3 below presents the challenges that the companies participating in the quantitative research considered important since capital controls enforcement, showing that the respondents pointed out the main lack of liquidity and the inability to transfer funds, while to a lesser extent it was found that HR Management has been a particular challenge too.

All respondents to the qualitative research stressed that

Table 3. Challenges since Capital Controls Enforcement

	Average	Standard Deviation
Lack of liquidity	2,68	2,240
Inability to transfer funds	3,76	2,396
Delay / Postponed investment decisions	4,15	1,885
Loss of confidence in government economic policy	4,16	2,446
Loss of confidence in the banking system	4,68	2,422
Loss of trust on the part of companies / financial institutions abroad with which the company cooperates	4,70	2,111
Decrease in demand	4,74	2,309
Human resources management	6,11	2,331

*1=more important, 10=not important

Table 4. Business Actions to Mitigate the Effects of Capital Controls Enforcement in 2015

	Average	Standard Deviation
Increased use of electronic banking	5,11	0,809
Usage of point of sales systems	2,32	1,144
Starting a relationship with a bank abroad	3,71	1,128

*1=not at all, 2=a little, 3=average, 4=average-high, 5=high, 6=very high

capital controls enforcement in 2015 had a significant negative impact on the operation of the company as a whole. The main negative consequences were mentioned as follows:

a) lack of liquidity and therefore inability to meet payroll obligations, payment of claims to creditors and suppliers (confirming the findings of the quantitative investigation)
b) reduction of exports due to the requirement for an advance of 100% of the amount;
c) difficulty of raising funds primarily through bank lending and rising capital costs;
d) reduction of their corporate reputation and competitiveness in foreign markets;
e) postponement and significant delay in their investment plans.

These results do not contradict to Karamouzis (2015) and to the report of the Bank of Greece (2017) as discussed in the literature review. Negative effects of capital controls enforcement on companies' operation and on the real economy as a whole have been also evidenced in another research (Versteeg, 2008; Alfaro *et al*., 2014; Cantu García, 2017; Kotidis and Malliaropulos, 2018) as presented above.

Furthermore, the research showed that the large-cap index had a downward trend after capital control were imposed, in contrast to the mid-cap index, whose course was better.

Table 4 below presents the respondents' views in the quantitative research on the actions taken by the large-caps in order to mitigate the negative effects of capital controls enforcement in 2015. It shows that

- to a small extend, they used point of sale systems
- from a moderate to quite large extent, they started relations with a bank abroad and
- to a very large extent they increased the use of electronic banking.

In the corresponding question of qualitative research, the main actions to mitigate the adverse effects of capital controls enforcement, were the use of cash to cover direct liabilities, the postponement of investment decisions and the increase in the use of electronic banking. The latter finding is consistent with the result of quantitative research. The increase in the use of electronic banking has been found to be a consequence of capital controls enforcement in the studies of

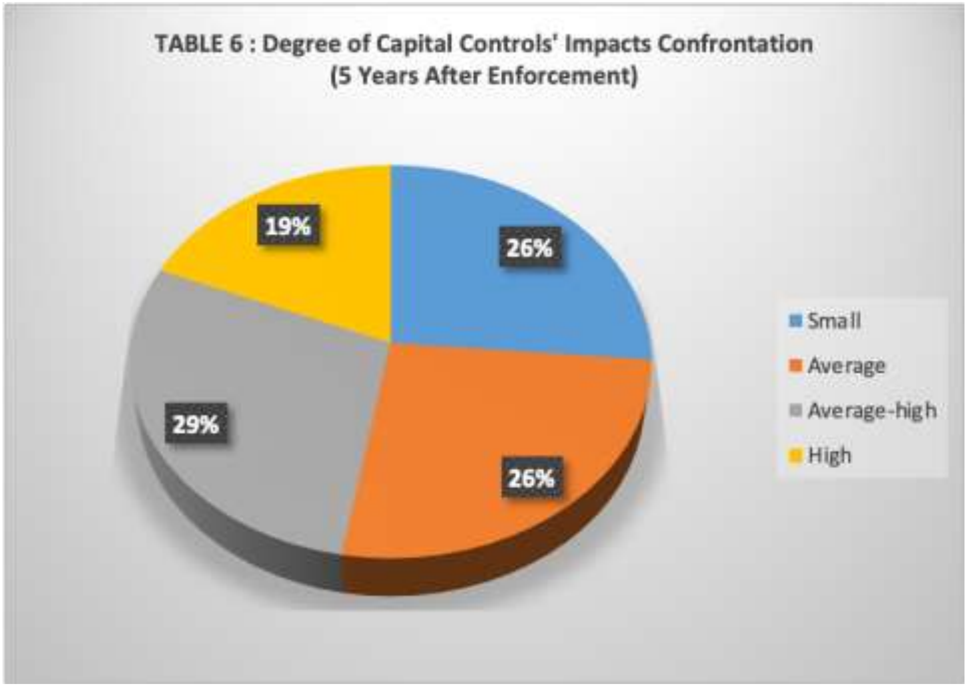

Figure 2. Degree of Capital Controls' Impact Confrontation (5 Years After Enforcement)

(Stamatiou and Gogos, 2015) and (IOBE, 2015).

42.9% of the participants in the survey believe that capital controls enforcement affected them to a considerable extent compared to their competitors, while 28.6% estimate that they were moderately affected by the same percentage (28.6 %) very.

As shown in Figure 2 below, five years later, respondents in the quantitative survey, to a large extent believe that they have completely overcome the problems that rose in the company due to capital controls enforcement in 2015.

These findings are in line with those of the qualitative research, where the majority responded positively, emphasizing that the recovery was moderate to very large extent.

These findings are confirmed by Table 5 below, which presents the evolution of the ASE indices over time, which shows that capital controls enforcement had a negative impact on the course of the index to which companies are listed in direct time (2015) - and even more so than in medium-sized companies - although the following year this trend was reversed.

Apart from the above data, on Table 6 below it is observed that the majority of companies reduced real estate investments, which is in line with the findings of the present research that the measure of implementation of capital controls had a significant negative impact primarily on investment decisions. In addition, it is observed that several of the companies recorded an increase in profits before taxes. Finally, it is important that in several of the companies in the sample there was an increase in their long-term liabilities, which indicates that capital controls enforcement had a significant negative impact on their liquidity.

It is interesting that, as shown in Figure 3 below, 25.3% of respondents in the quantitative survey believe to a very large extent that there will be a complete lifting of capital controls in the near future, while 23.1% believe it to a large extent. However, it is worth mentioning the percentage of 18.7% who do not believe that such a thing will happen in the near future.

However, as shown in Figure 4 below, the answers of respondents in the same survey share about whether positively or negatively assess the prospects of the business in the future. More specifically, 49.5% responded positively, while 50.5% responded negatively.

The qualitative research showed that the level of trust of the respondents in the banking system is at high levels and that there is no specific tendency to assess the prospects of their business after the implementation of capital controls.

Finally, it was examined whether there is a difference in the views of the respondents depending on the industry in which they work. Applying the one-way Anova control, a significant difference was found on the following views:

a) the implementation of the capital controls measure affected the completion of orders ($p = 0.0.25 < 0.05$),
b) the companies increased the use of Point of Sales in order to mitigate the negative effects of capital controls enforcement in 2015 $p = 0.033 < 0.05$).

These results are considered reasonable, given that

Table 5. Annual Change of ATHEX Indicators

ATHEX Indices	Annual change 2014-2015	Annual change 2015-2016	Annual change 2016-2017	Annual change 2017-2018
Price Index	-23,58%	1,95%	24,66%	-23,56%
FTSE/ATHEX LargeCap	-30,78%	-5,05%	19,67%	-22,79%
FTSE/ATHEX MID cap	5,62%	-7,69%	58,98%	-18,62%
FTSE/ATHEX International act. Plus	-6,97%	18,74%	54,58%	-14,75%
FTSE/ATHEX Mid&SmallCap fundamentals	-0,65%	6,78%	45,72%	13,39%
FTSE/ATHEX price Index	14,55%	-5,08%	20,56%	-22,48%
Greek Mid & Small Cap Index	-29,27%	9,94%	31,18%	-12,15%

Source: Capital Market Commission, 2015, 2016, 2017, 2018

Table 6. Basic Economic Figures of Sample Companies (2015-2018)

	Fixed Assets Investments			**Pre-tax Results**			**Long-term Responsibilities**		
	2018	**2017**	**2016**	**2018**	**2017**	**2016**	**2018**	**2017**	**2016**
Banks and Financial Services									
Attica Bank	57.862	58.047	56.369	56.009	90.513	12.384	2.860	2.928	2.971
Eurobank	41.000	28.000	67.000	56.000	(24.000)	(42.000)	12.816	8.147	11.677
Alpha Bank	493.161	577.112	614.092	(361.363)	104.588	138.516	52.864	51.181	55.759
National Bank of Greece	1.016	874	869	9	(137)	43	4.092	3.523	2.886
Marfin Investment Group	-	-	-	-	-	-	-	-	-
Food and Beverage									

Table 6. Contd

Kri Kri S.A. Milk Industry	10	121	123	14.240	9.891	8.162	18.745	15.007	18.038
Industrial products									
Mytilineos S.A.	-	-	-	283.559	305.978	222.363	908.999	897.198	789.130
Viohalco	150.000	165.247	155.553	331.857	302.546	231.680	1,068,965	913.829	1.046.529
Karatzis S.A.	-	-	-	18.459	21.284	19.944	34.699	31.113	17.439
Daios Plastics S.A.	2.326	2.346	2.346	12.011	11.857	10.869	88.305	92.805	97.305
Differentiated traders									
Jumbo S.A. (01.07-30.06)	14.639	16.709	17.371	124.380	116.267	117.113	15.526	15.218	15.352
Personal and Household items									
Karelia Tobacco Company	-	-	-	102.841	71.762	88.902	11.187	6.500	10.862
Gr. Sarantis S.A.	-	-	-	46.990	39.660	35.920	11.530	16.200	7.050
Constructions and Cement									
Titan Cement International S.A.	12.202	12.130	9.820	27.200	14.800	30.000	745.222	820.382	710.965
Ellaktor	137.593	145.606	148.450	(25.761)	39.744	(37.778)	1.641.733	1.582.298	1.668.841
Intracom Constructions S.A technical & Steel	58.912	62.513	78.097	6.842	4.166	1.001	5.476	28.299	3.305
Services of General Interest / Telecommunications									
Hellenic Telecommunications Organization	6.700	7.600	-	413.400	272.700	130.000	1.751	1.792	-

Table 6. Contd

Water Supply Company	(15.413)	(14.992)	(8.442)	96.700	84.700	87.300	521.007	537.825	537.949
Water Supply Company of Thessaloniki	(730.880)	(1.499)	(2.170)	37.185	24.560	7.210	31.371	31.274	18.960
Public Power Corporation	-	-	-	(509.100)	145.300	68.100	6.559	6.369	6.957
				Oil and Gas					
Greek Petreleum	1.421	1.524	1.442	368.930	519.785	465.671	2.047	1.220	1.879
Motor Oil Hellas	-	-	-	355.395	450.301	428.760	901.498	972.004	1.238.908

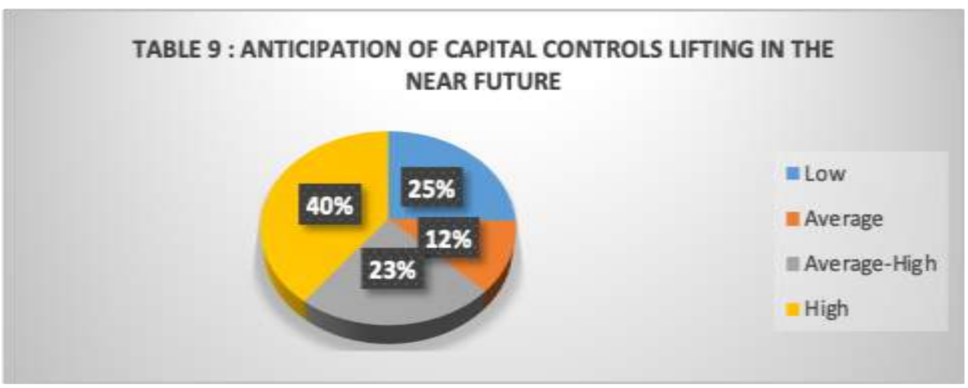

Figure 3. Anticipation of Capital Controls Lifting in the Near Future

some companies (e.g industrial products, constructions and cements) focus more on wholesale to other companies, while also cooperating abroad. Therefore, the use of Point of Sales is not applicable to them, while at the same time they may have more problems in completing their orders.

CONCLUSION AND PROPOSALS FOR FORWARD RESEARCH

The main findings of the present study can be summarized as follows:

a) The enforcement of capital controls in 2015 was deemed as necessary, but also as effective too, based on its objectives, i.e., a) protection against mass withdrawal of deposits and b) stabilization and security of the financial system

b) The capital controls enforcement had a significant impact on increasing the use of electronic banking

c) The primarily adverse impact of capital controls enforcement was on the investment decisions of companies, on their competitiveness and reputation abroad, on their ability to raise capital, on their liquidity and therefore on their ability to cope with key functions, imports and their exports

d) No specific trend was evidenced as to whether the prospects of companies for the future are positive or

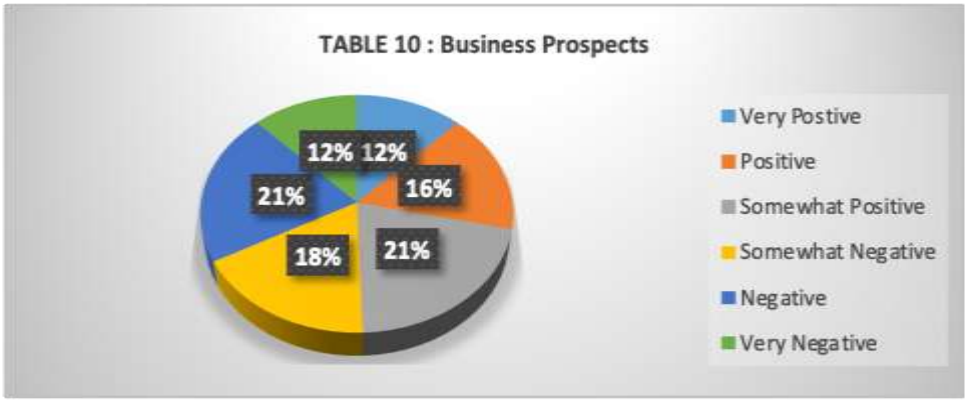

Figure 4. Business Prospects

negative

e) No difference was evidenced on the impacts of capital controls on different sectors of the economy

Therefore, as a general conclusion it appears that capital controls enforced in Greece to stabilize the financial system and avoid mass withdrawal of deposits were necessary and fulfilled their objectives, but at the same time had significant negative consequences on companies' operation, in particular on the large-cap companies examined in this paper. Overall, capital controls enforcement had a significant impact on the Greek economy and on the competitiveness of companies. It has also been shown that it led to an increase in the use of plastic money, which is accompanied by more control over transactions and therefore improved tax efficiency. Therefore, a very thorough Cost-Benefit Analysis should be conducted in order to assess the full picture of positive and negative results of capital controls enforcement.

The above conclusions demonstrate the importance and necessity of studying the views of entrepreneurs on economic policy measures, as they can enrich the international literature, but also provide feedback to economic policy makers.

REFERENCES

Alfaro L, Anusha C, Fabio K (2014). The Real Effects of Capital Controls: Financial Constraints, Exporters, and Firm Investment. Harvard Business School Working Paper, No. 15-16, September 2014.

Altınkemer M (2005). Recent Experiences with Capital Controls: Is There A Lesson for Turkey? Central Bank Review.

Bacon-Shone J (2015). Introduction to Quantitative Research Methods, Hong Kong: The University of Hong Kong.

Cantu García CA (2017). Effects of capital controls on foreign exchange liquidity. BIS Working Papers, No 659.

Greener S (2008). Business research methods, Sue Greener & Ventus Publishing.

Given LM (2008). The SAGE encyclopedia of qualitative research methods, California: Sage.

Karamouzis N (2015). The Impact of Capital Controls on Greek Businesses.

KG Law Firm (2018). Capital Controls: A New Era.

Kotidis A, Malliaropulos D (2018). Prudential Capital Controls, Credit Supply and International Trade: Evidence from Greece.

Leavy P (2017). Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches, New York: Guilford Publications.

Monokroussos P, Dimitriadou A, Gkionis I, Gogos SG, Petropoulou P, Stamatiou T (2016). One year capital controls in Greece. Eurobank Economic Research. Available online: https://www.eurobank.gr/Uploads/Reports/GLOBAL_FOCUS_NOTE_20160805.pdf (accessed on 12 October 2020).

Muijs D (2004). Doing Quantitative Research in Education with *S*PSS, London: Sage.

Palys T (2008). Purposive sampling. In Given, M.L. (Ed.). The Sage Encyclopedia of Qualitative Research Methods, pp. 697-698. Los Angeles: Sage.

Paraskevopoulou-Kollia EA (2008). Qualitative research methodology in the social sciences and interviews. Open Education - The J. Open Distance Educ. Educ. Technol. 4(1).

Rousakis M, Priftis R (2017). Deposit Flight and Capital Controls: A Tale from Greece. Economics Series Working Papers, No. 822.

Samitas A, Polyzos S (2016). 'Freeing Greece from capital controls: Were the restrictions enforced in time?'. Res. Int. Bus. Finan. 37:196-213.

Stamatiou TD, Gogos SG (2015). Some preliminary thoughts on the macroeconomic effects of capital controls in Greece. Greece Macro Monitor. Eurobank Global Market Research.

Tracy SJ (2013). Qualitative research methods, West Sussex: Wiley.

Versteeg RJ (2008). 'Capital Controls and Economic Growth: How Controls on Inflows and Outflows are Different', SSRN Electronic Journal, DOI: 10.2139/ssrn.1098261.

Cohen L, Manion L, Morrison K (2008). Methodology of Educational Research, Athens, Metexmio.

Creswell J (2015). The research on Education, Athens, Iwn Hellenic Capital Market Commission (2015, 2016, 2017, 2018), Annual Reports.

IOBE (2015). Electronic payments after capital restrictions: Aid measures and tax revenues.

Isari F, Pourkos M (2015). Qualitative research methodology, Athens: SEAB.

Bank of Greece (2016). Governor Report for the year 2016.