# Non-performing Loans in the Greek Case: Evolution and Initiatives in the Regulatory Framework

Simeon Karafolas\* • Paraskevi Ktenidou\*\*

**Abstract** The paper examines the evolution of non-performing loans in the Greek banking market. The study focuses on the conditions related to the development of non-performing loans, (NPLs), their evolution and the regulation framework.

NPLs have been one of the major consequences of the crisis in Greece, which started after the world financial crisis, and can be mainly attributed to the Greek public debt. The Greek economy suffers from the austerity policies applied after the Memorandum of Understanding was signed between Greece and its lenders in order to reduce the public deficit and in the long term the public debt. The paper distinguishes some conditions that resulted in the NPLs. One of them is the excessive increase in borrowing which took place before the crisis; it was favored by the banks' policies but also the stable economic environment since the mid-90s, thanks to the upcoming entry of Greece into the European Monetary Union. During the crisis, the great depression of the economy along with the reductions in income and deposits caused the development of the NPLs in Greece.

NPLs appeared mainly in 2010 and continue to exist up until the year 2019. They concern all the categories of loans, housing, consumer and business loans. The Greek State with the approval of its lenders tried to introduce some regulatory frameworks regarding the borrowers, households and corporations, and banks with special emphasis to housing loans. Despite those initiatives, NPLs remain a major problem for the banking system and the Greek economy and society.

Keywords: Non-performing loans; Banks; Households; Corporations; Greece

JEL Classification: E43; E44; G21; G28

### 1. Introduction

Non-performing loans (NPLs) are considered to be loans in default for more than 90 days (Bank of Greece, 2018). In the Greek case, they are one of the main problems in the banking sector; their extent has also turned them into a major

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social problem. The phenomenon of NPLs appeared during the crisis period that followed the obligations undertaken by Greece in the Memorandum of Understanding (MoU) signed with its lenders, (European Commission, European Central Bank and International Monetary Fund). The consequences of the austerity plan dictated by the MoU appeared also in the reduction of the GDP, the investments, the consumption, (private and public), and the growth of unemployment (Karafolas, 2018).

The crisis in the Greek economy came after a long period of notable growth; during the economic growth, banking loans had a positive role in facilitating the investments and consumption of households and corporations. On the other hand, the excessive growth can characterize them as one of the causes of the NPLs problem. The social consequences of NPLs led to the intervention of the Greek State. Regulatory initiatives were undertaken to face the problems, with a preventive legal framework being established as a protection measure.

This paper is interested in examining the evolution of NPLs in the Greek case through some major parameters. The first section of the study discusses the conditions that permitted the creation of this problem by referring not only to the crisis but the pre-crisis period as well. Section 2 analyses the evolution of NPLs and their structure by referring to the housing, consumer and business loans. Section 3 examines the regulation framework concerning both, the borrowers and the banks, as well as the initiatives undertaken by the public authorities. Conclusions follow in the next section.

#### 2. Conditions for the creation of NLPs

Conditions for the creation of NPLs are placed in two periods: the first is before the crisis, in particular before the MoU in 2010, characterized by the excessive growth of loans; the second is the time period that followed the MoU, characterized by the growth of NPLs.

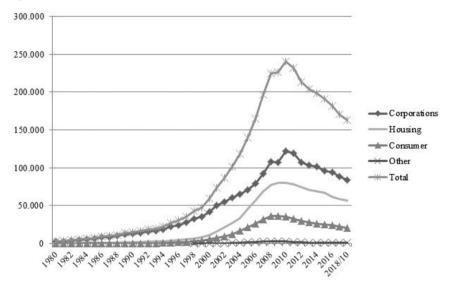
### 2.1 The excessive growth of loans

Since the mid-90, the loans to the private sector have followed a substantial growth that was accelerated in the beginning of the decade of 2000 as a consequence of the entry of Greece to the Eurozone, (figure 1). In 1992, following the Maastricht treaty, some criteria were decided for the entry of a European Union country to the Eurozone. The prerequisites decided are related to the stability of price, low interest rates, low public deficit and public debt, and the stability of the exchange rate, (European Commission, 2018).

Greece's decision to join the Eurozone resulted in an economic stability related to those pre-requisites. Thus, after many years, inflation and interest rates have fallen sharply, (figure 2), approaching the average of the Eurozone countries. The favorable economic environment has created trust and very favorable conditions for households and corporations, prompting them to request for bank loans. The economic stability and the competition in the banking market after its liberalization in the early 1990s', favored

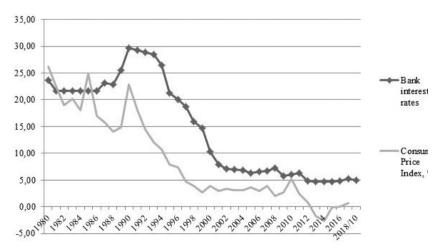
the offer of loans especially those that had not been developed until then. In the second half of the 90s, housing and consumer loans were a significant portion of the private loans and since 2005 they have increased to more than 50% of private loans.

Figure 1. Credit to the Greek domestic private sector by domestic Monetary Financial Institutions per category of loan, (1980 - 2018), (outstanding amounts at end of period in Meuros) (1)



Source: Bank of Greece, 2018a, author's calculations

Figure 2. Evolution of consumer price index and banking interest rate for loans to individuals and private non-profit institutions in Greece.



Source: Hellenic Statistical Authority, 2018, and Bank of Greece, 2018b.

<sup>(1)</sup> Loans to corporations, housing loans, consumer and other loans

### 2.2. The economic depression

In 2010, loans to the private sector reached their highest in the Greek economy, 240 billion euros. From 2011 to 2018, the sharp decline in loans is observed in figure 1. This is attributed to the depression which characterized the Greek economy during this period of time. As it appears in table 1, the main macroeconomic indicators have a negative evolution and only in 2017 a slight positive change in GDP and private consumption began. A major problem is the high unemployment reaching more than 23% during the time period of 2011-2017. These conditions created serious difficulties for household and corporations which reduced their income and their savings capacity, (table 1). It has to be noted, however, that part of the decline in their savings capacity is also attributed to the withdrawal of deposits from the Greek banking market either to transfer funds to other countries or even to be kept at home.

Table 1. Evolution of macroeconomic indicators, (rate change, %)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Gross Domestic Product (GDP)	-2,0	-5,3	-8,9	-6,6	-3,2	0,7	-0,4	-0,2	1,5
Private consumption	-2,2	-6,9	-9,7	-7,2	-2,6	0,6	-0,2	0	0,9
Public consumption	-10,3	-4,4	-6,3	-6,7	-6,4	-1,4	1,6	-0,7	-0,4
Unemployment of the year	9,5	12,7	17,9	24,4	27,5	26,5	24,9	23,5	21,5
Total savings <sup>(1)</sup>	237,5	209,6	174,2	161,5	163,3	160,3	123,4	121,4	126,3

Source: Bank of Greece, 2015, 2018c and 2018d (author's calculations), On 2019: Bank of Greece, 2011 (1)In billion Euros

#### 3. Evolution and structure of NPLs

The Bank of Greece considers non-performing loans as those loans that have been in default for more than 90 days. These are to be distinguished from non-performing exposures that include non-performing loans and loans whose debtors are assessed as unlikely to pay their credit obligations in full without realization of collateral, regardless of the existence of any past due amount or the number of days past due (Bank of Greece, 2018). This study is interested in non-performing loans.

The data on NPLs is provided by the Bank of Greece under the following notes, (Bank of Greece, 2018e):

- a) The data is on an individual basis and refers to the balance sheet of loans (before provisions) of the Greek commercial and cooperative banks operating.
- b) For the period of 2014 and thereafter, the data submitted by credit institutions follows the definitions of the European Banking Authority.
- c) For the period of 2002 September 2014, the data submitted by the credit

institutions was in accord with the Act of the Governor of the Bank of Greece 2452/1999; according to this, NPLs also include loans from regulated debts for which the time period of 12 months, since the start of payment, has not been completed.

- d) Changes between some quarters in amounts may appear due to the restructuring of the Greek banking system (bank clearances, sales of affiliates abroad, etc.).
- e) The data refers to loans comprised in the balance sheet in order to be consistent with the operational objectives of reducing non-performing loans. For this reason, differences may appear with previous publishing data that comprise balance items as well.

In table 2 the evolution and structure of NPLs in the Greek banking system are presented for the time-period of 2002 up until 2018 (June). Four categories are examined, consumer loans, housing loans, corporation loans and the total of loans as a distinct category. Two main sub-periods are distinguished. In the first time period, from 2002 to 2010, two sub-periods can be distinguished; one till 2008 and the other one till 2010, including, thus, the years 2009 and 2010. During the time period 2002-2010 NPLs are not very important. The average of total NPLs during the period of 2002-2008 is 6,9% and only in 2009 and 2010 a notable growth is registered, (table 2), since the consequences of the world financial crisis began to influence the Greek economy, (table 1). The second period is from 2011 to 2018. A huge change is observed from 2011, one year after the agreement of MoU in 2010. During this time period the total NPLs are more than 40% while the their average of the period is 40,9%; for the last 4 years the average has been 48%, (table 2).

Table 2. Evolution of non-performing loans, total and per category

	Consumer loans	Housing loans	Corporation loans	Total of NPLs
2002	9%	7%	8%	8%
2003	8%	5%	9%	8%
2004	7%	5%	9%	8%
2005	8%	4%	9%	7%
2006	7%	4%	7%	6%
2007	6%	4%	6%	5%
2008	9%	5%	5%	6%
2009	16%	9%	8%	10%
2010	27%	14%	12%	14%
2011	38%	21%	19%	22%
2012	51%	28%	29%	31%
2013	56%	34%	39%	40%
2014	58%	36%	45%	44%

	Consumer loans	Housing loans	Corporation loans	Total of NPLs
2015	63%	41%	49%	48%
2016	62%	42%	50%	49%
2017	58%	44%	47%	47%
2018/06	57%	44%	48%	48%

Source: Bank of Greece, 2018e.

Table 3. Evolution of non-performing loans per country, (significant institutions (1))

	(Q4/2016)	(Q3/2017)	(Q2/2018)
Belgium	3,4%	2,9%	2,5%
Germany	2,5%	2,0%	1,7%
Estonia	С	С	С
Ireland	15,9%	12,2%	8,7%
Greece	45,9%	46,6%	44,8%
Spain	5,7%	4,8%	4,2%
France	3,7%	3,2%	3,0%
Italy	15,2%	11,9%	9,7%
Cyprus	37,8%	34,0%	29,2%
Latvia	3,2%	2,6%	1,9%
Lithuania	3,8%	3,1%	3,4%
Luxembourg	1,8%	1,4%	0,6%
Malta	4,4%	3,7%	3,8%
Netherlands	2,4%	2,3%	2,1%
Austria	5,7%	4,2%	3,3%
Portugal	19,5%	18,1%	15,3%
Slovenia	15,4%	13,6%	9,0%
Slovakia (2)	-	-	-
Finland	1,6%	1,6%	С
Total	6,2%	5,2%	4,4%

Source: European Central Bank, 2018.

The Greek banking market has the highest percentage of NPLs among the Eurozone countries. During the time period of 2016-2018 the average of NPLs for the Eurozone

<sup>(1)</sup> Significant institutions at the highest level of consolidation for which common reporting (COREP) and financial reporting (FINREP) are available.

C: the value is suppressed for confidentiality reasons.

<sup>(2)</sup> There are no significant institutions at the highest level of consolidation in Slovakia.

countries, (regarding significant banks for the economy), was 5,2%, while for Greece it was 45,8%, (calculations from table 3); NPLs in the Greek market are almost 9 times higher compared to the Eurozone average. In table 2, the earliest and highest movement of non-performing consumer loans can be observed. In 2008 and 2009 they are somewhat higher compared to the other categories of NPLs and in 2010 and 2011 they are almost double. From 2012, more than half of the consumer loans are non-performing loans; in 2015, 63% of consumer loans were NPLs, (table 2). Consumer loans include secured and unsecured loans offered to households for the coverage of consumers' needs in the form of credit cards, overdrafts and consumer loans, (Bank of Greece, 2018).

Households were the first to act on the crisis difficulties by delaying the payment of consumer loans by more than 90 days. These loans are mostly non-secured and of small amounts compared to housing and corporate loans; the risk weight of these exposures is 75% mainly, while the risk weight for housing loans is placed mostly at 50% and 35% because they are secured by mortgages, (Piraeus Bank, 2018). The growth of these loans was higher compared to the total, at the time period of 2000-2010, (figure 1), since households were encouraged to take a consumer loan by the banks, even if their interest rates were the highest in the market as non-secured loans.

Housing loans were developed mainly during the period 2000-2010, (figure 1), thanks to the favorable conditions created for the households in the Greek market by the low interest rate and the banking competition. Non-performing housing loans have the lowest growth compared to the other categories of NPLs, table 4, however their part remains considerable. In the second half of the crisis period, that is 2015-2018, housing NPLs had a significant growth, compared to the first half, 2011-2014. House loan presents a further difficulty since, in most cases, it concerns the main residence of the borrower and the amount of the loan is important.

Thus, an arrangement between the interested parties, households and banks, has been the preferable option, encouraged by the Greek State. This policy appears in the delay of the growth of non-performing housing loans compared to the others, (table 2). Moreover, the continuous depression of the Greek economy and especially the growth of unemployment further limited the possibilities of performing these loans.

Up until the decade of 2000, the majority of banking loans was mainly to corporate because of the limited demand for consumer and housing loans due to the unfavorable conditions, mainly the high interest rates, (see figure 1 for loans and figure 2 for interest rates). Non-performing corporation loans followed the general aptitude of total NPLs reflecting the economic situation. The decline in consumption, private and public and the non-performing consumer loans resulted in a delayed increase in non-performing corporation loans, (table 2).

### 4. The initiatives on the regulatory framework

### 4.1 The existing framework

The over-indebtedness of households and corporations and the huge growth of NPLs led the Greek legislators to exercise their regulatory intervention in order to counter

such a phenomenon. Several legislation and regulatory measures have been undertaken. Legislation was put into effect for the first time in Greece under the law 3689/2010 in order to deal with the over-indebtedness of households without commercial status, (Hellenic Republic, 2010). According to the law, heavily indebted debtors who may be subject to the law can regulate and get rid of their debts in part; they can apply if they have overdue debts, if their inability to fulfill them is permanent and if they have reached the permanent state of impossibility of paying their arrears without deceit. The aim of the legislation is to permit these households their economic return to society and the protection of their main residence.

The bankruptcy law concerning traders was amended and updated. In 2007, the current bankruptcy code under the law 3588/2007 came into force, (Hellenic Republic 2007); it has been amended many times during the years of the financial crisis. It provides for a comprehensive and autonomous system of legal rules that supervises appropriate procedures for the purpose of collective creditors' satisfaction by their debtors, (traders, households or associations of persons with legal personality and financial purpose). Debtors are in a situation of insurmountable economic dyspraxia but they can provide potentialities for the rescue of their businesses. Exclusively for debts arising from business allocation, the law 4307/2014 attempted to take measures to tackle the effects of the economic crisis by providing incentives so as to regulate business and professional debt to financial institutions through an alternative out-of-court settlement, (Hellenic Republic 2014). This initiative did not have the expected results as there was no obligation by credit institutions to conclude an agreement. In 2017 a novel process for the Greek legislation was introduced for out-of-court settlement of debts of traders and businesses. This process is carried out through an electronic platform under the supervision of an independent accredited mediator in the negotiations between the debtor and the creditors. The law 4469/2017, introducing the "Extra-Judicial Mechanism for Dealing with Dealers and Businesses", aims to empower debtors who are unable to pay but viable to regulate their total debts simultaneously to all creditors, as banks, tax authorities, social security funds, local authorities, suppliers, workers and other individuals, (Hellenic Republic 2017). It is important that, despite the out-ofcourt procedure, the borrower is protected by a strict and concrete automatic suspension of persecution from new and old claims against him. Similar arrangements have been made also for those who are self-employed and the farmers who receive income from a business activity but have no bankruptcy capacity and are, therefore, excluded from the possibility of using law 4469/2017. They can settle their debts to the State and social security funds with favorable provisions of law 4469/2017, such as a reduction in fines, surcharges but also in a basic debt with the possibility of repaying the balance up to 120 installments. In addition to the above, other preventive legal measures were applied in favor of debtors. They are the following: a) the legal framework for the protection of over-indebted debtors by the collecting societies, pursuant to law 3788/2009, (Hellenic Republic 2009); b) the program facilitating loyal borrowers, law 4161/2013, that is an extra-judicial procedure aiming in facilitating the payment of loan installments to borrower whose loan is still performing but has difficulty with its payment, (Hellenic

Republic 2013); c) the possibility of suspending the auctions for non-performing loans for the year 2014 with private initiative under the law 4224/2013 (Hellenic Republic 2013a) and d) the banking ethics under the law 4224/2013 for the purpose of individual adjustment of each borrower's debts.

#### 4.2 The results

The legislation initiatives undertaken by the Greek authorities in order to solve the NPLs problem, by helping households, small and medium enterprises (SMEs) but also the banks had some results. However, the continuing economic depression resulting in the decline and even the disappearance of the revenue of debtors limited the expected results. NPLs continue to be the critical problem of the Greek economy and society and, of course, the banking system. Households proceeded to appeal for inclusion in the law 3689/2010; about 200.000 appeals were registered up until the 3d quarter of 2018; about 60.000 have been examined out of which 65% have been regulated and 35% have been rejected, (Tziortzi, 2019).

Greek systemic banks led to the sale of exposures of their assets in order to deal with their NPLs problem. These exposures were secured and unsecured business, consumer and retail loans. Greek banks first dealt with the debtors by offering good repayment terms of the loan, such as paying only 10% of the balance. The response of debtors was rather limited due to the low disposable income and the more general uncertainty that made them cautious even to favorable offers. Four Greek banks, considered as important for the economy, sold NPLs of a total value of 8,9 billion euros in 2018 to eight different specialized funds, (table 4). Part of the exposures was secured and part was unsecured. That was reflected in the price of sale; exposure packages containing secured loans were sold at a price between 30% and 35% of the book value of the loan, (table 4); for non-secured loans the price was respectively between 3% and 10%.

Table 4. Sell of NPLs of banks to specialized funds-buyers

Bank	Amount (Meuros)	Purchase price as % of book value	Kind of exposure	Buyer
Alpha Bank	900	10%	Unsecured Consumer loan / small business	B2Holding
Alpha Bank	283	35%	Unsecured and Secured Business and retail loans	Anacao/DB/ APS
Alpha Bank	1.000	33,6%	Secured SMEs	Apollo/LLC/ IFC

Bank	Amount (Meuros)	Purchase price as % of book value	Kind of exposure	Buyer
Alpha Bank	1.300	5,8%	Unsecured Consumer loan / small business	Hoist
Eurobank	609	3%	Unsecured Consumer loan	Intrum
Eurobank	1.000	6%	Unsecured Consumer loan	B2Holding/ Waterfall
National Bank of Greece	2.000	6%	Unsecured Consumer loan / small business	CarVal and Intrum
Piraeus Bank	400	5%	Unsecured Consumer loan	APS
Piraeus Bank	1.450	30%	Secured Small and Medium Entreprises (SMEs)	Bain Capital
TOTAL	8.942			

Source: Tzortzi, E., 2019a., (author's calculations)

## 4.3 New legislative reactions

The results so far led the Greek authorities to undertake new legislative initiatives in order to deal with the sale of NPLs held by the banks and the protection of households.

The reduction in the stock of non-performing exposures by 47% has been the subject of a proposal by the Bank of Greece that reminds the creation of a "bad bank". Through this proposal, the Bank of Greece envisages the transfer of 40 billion euros and part of the deferred tax credits of 7,5 billion euros to a Special Purpose Vehicle (SPV) of non-performing exposures (NPEs), including mainly the NPLs, (Pantelias, 2018). Loans will be transferred at net book value, (net of loan loss provisions). The amount of the deferred tax asset to be transferred will match additional loss, so that the valuations of these loans will approach market prices. Subsequently, legislation will be introduced enabling to transform the transferred deferred tax credit into an irrevocable claim of the SPV on the Greek State with a predetermined repayment schedule, (according to the maturity of the transaction). To finance the transfer, the Special Purpose Vehicle will proceed with a securitization issue that may comprise three classes of notes, (senior, mezzanine, and subordinated junior/equity). The lowest class of notes, (subordinated junior/equity), will be subscribed by banks, (each participating by no more than 20%), and the Greek State. The valuation of the loans to be transferred will be carried out by independent third parties, and the final structure of the transaction will be determined by

the arrangers subject to market conditions. The scheme will be managed exclusively by private investors, (servicing companies for loans and credits) and apparently there will be an asset class separation for each transaction and management operation (business, housing, consumer loans, etc.).

The Greek government undertakes a new initiative regarding the non-performing housing loans. The Government's proposition provides for a substantial haircut on the housing loan, lower interest rates and a state subsidy of 1/3 of the installment or even 50% in the case of economically inactive households, (Anoixto parathyro, 2018). The central idea of this, is to protect the weakest households from losing their homes, but also to have a rapid consolidation of the bank's loan portfolio. The basic criteria for the entry to the program will be the value of the property, (up to 250.000 euros in objective value) and disposable income, (up to 35.000 euros per year). The plan provides for a reasonable interest rate and a monthly installment to repay the loan, as well as a repayment term of up to 25 years. In addition to the charge already bearing in favor of the creditor bank, a new charge in favor of the State will be applied. In the case of the sale of the property, the State may demand payment for the amount corresponding to the subsidy offered. The repayment of the amount will correspond to the present value of the property rather than the initial value and the difference will be cleared.

### 5. Conclusions

Non-performing loans constitute one of the main socio-economic results of the crisis affecting Greece, especially after the agreement with its lenders with the aim of reducing public deficit and public debt. Examining NPLs one has to distinguish at least two periods. The first one is during the economic growth, when the banking market and the economic stability favored the offer of loans, even excessively; during this period NPLs were limited. The second is during the period of crisis, when economic depression does not permit debtors, households and corporations to meet the repayment of the loans. Greek authorities undertook legislative and regulatory measures in order to solve the problem of NPLs. These initiatives have been ineffective to a large extent, mainly because the economic crisis is very profound in the Greek economy and society. Households and corporations tried to respond to their debt obligations but the high unemployment, as a consequence of the economic depression, reduced the available revenue and, therefore, the possibilities of honoring the debt obligations.

Thus, NPLs continual growth corresponded in total to 48% of loans in mid2018 while the average for the Eurozone countries was no more than 4,4% at the beginning of 2018. The biggest problem is presented by the consumer loans which are the least secured loans. The response of banks was to sell part of NPLs to specialized funds, whose creation was

permitted by the legislative framework. Till 2018, NPLs of an amount of almost 9 billion euros were sold by the four banks which are important for the economy, with prices ranging from 3 to 30% of the book value of the loan.

In addition to previous legislative and regulatory measures, the Greek authorities intend to take further measures, more drastic ones compared to the past. One is provided by an

initiative of the Bank of Greece proposing the creation of a "bad bank" under the name of a Special Purpose Vehicle that will absorb about 47% of NPEs. The other is provided by the Greek government in favor of households concerning the housing loans. This plan provides for a substantial haircut of the housing loan with lower interest rate and in particular a State subsidy of 1/3 of the loan installment, under some conditions nonetheless.

These measures may help with the NPLs problem. However, a main parameter still remains to be considered. That is the economic recovery of Greece and with it, the particular one of households and corporations.

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