Introduction of the new book

**Non-Performing Loans and Resolving Private Sector Insolvency: Experiences from the EU Periphery and the Case of Greece**

**Speakers**

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Under the auspices of

**Hellenic Bank Association & LSE Hellenic Observatory**
About the Book and the editors

- The book leans on the existing scientific literature and the relevant international experience to assess the challenges arising from the sharp increase in non-performing loans in several euro area periphery economies in the aftermath of the global financial upheaval of 2007-2008
- It presents a number of econometric studies on the macroeconomic, institutional, regulatory and borrower-specific determinants of non-performing loans as well as an empirical approximation of moral hazard and strategic default behavior in Greece following the outbreak of the euro area sovereign debt crisis
- The book provides useful lessons on how to deal with the problem of private sector over-indebtedness, by designing efficient insolvency frameworks that can afford a fresh start for liquidity constrained, yet viable, entities while minimizing market distortions and moral hazard

Platon Monokroussos is Group Chief Economist and Deputy General Manager of Eurobank Ergasias S.A. He is Visiting Professor in Practice at the Hellenic Observatory of the London School of Economics and Political Science. He is Chairman of the Scientific Council of the Hellenic Bank Association and its representative to the Chief Economists’ Group (CEG) of the European Banking Federation. Before joining Eurobank, he held high-level positions in leading financial institutions, including ABN AMRO and Bank of America. Dr. Monokroussos has written extensively on contemporary macroeconomic and financial issues and is co-editor of the book A Financial Crisis Manual: Reflections and the Road Ahead (Palgrave). In recent years, his team has repeatedly been included in the Reuters top-10 list of most accurate global forecasters of major exchange rates.

Christos V. Gortos is Professor of International Economic Law at the Panteion University of Athens, Greece. In addition, he has multiple standing teaching assignments across leading institutions such as the Law School of the National and Kapodistrian University of Athens in Greece, the Faculty of Law at Izmir University of Economics in Turkey, the European Institute at Zurich University in Switzerland and the European Institute at Saarland University in Germany. His main fields of teaching are financial regulation, international and EU monetary and financial Law, Greek administrative financial law, general EU law, international trade law, as well as economic analysis of law.
Book structure

Part I presents an overview of the theoretical and empirical literature on the determinants of NPLs as well as the challenges and options arising for banks and corporations in dealing with them.

Part II focuses on the experience of several euro area periphery economies in addressing private sector insolvency in the years after the outbreak of the global crisis as well as the applied remedial policies and the lessons learned.

Part III presents a number of empirical studies on the macroeconomic and microeconomic characteristics of corporate and household financial distress in Greece as well as the drivers of strategic default behavior in the context of the unprecedented domestic recession that followed the outbreak of the sovereign debt crisis in late 2009/early 2010.

Part IV closes with three position papers on the legal aspects and the institutional characteristics of Greece’s existing insolvency framework as well as the recent reforms introduced for dealing with private sector bad debts.
Chart bank
A graphical depiction of the drivers and the evolution of NPLs in the euro area periphery and Greece
NPL Drivers - Core Variable #1: Real GDP
During the period 2007-2016, Greece’s real GDP contracted by 26.4%
NPL Drivers - Core Variable #2: Unemployment Rate
Greece’s unemployment rate skyrocketed to 27.5% in 2013 from 7.8% in 2008

Source: Eurostat, Eurobank Research
NPL Drivers - Core Variable #3: Residential Real Estate Prices
Greece’s real house price index declined by 44.0% in 2007-2016

Source: OECD, ECB, Eurobank Research
Initial conditions at the beginning of the global financial crisis
Greece’s private sector leverage lower relative to other EA periphery economies

Credit to Private Sector (% of GDP)
in 2008

Bank Assets (% of GDP)
in 2008

Source: ECB, BIS, Bloomberg, Bank of Cyprus, Eurostat, Eurobank Research
The Greek banking sector experienced a major “liquidity squeeze”

**Loans to Deposits Ratio: +54.8 ppts in Greece (2017 H1 - 2008)**

Note: MFI sector excluding the ESCB. Data refer to the ratio between total loans and total deposits vis-à-vis domestic and Euro Area households and NFCs, and non-domestic and non-Euro Area residents excluding banks and general government.
Effectively managing the large stock of non-performing loans constitutes a major challenge for the Greek economy and the domestic banking system.

According to EBA, Greek banks had the highest NPLs ratio (46.2% of total loans) among EU countries at the end of 2017:Q1 (EBA data).

NPLs plus restructurings were at 5.4% at the end of 2008 and increased dramatically to 43.5% at the end of 2015 (Bank of Greece). The respective ratios for consumer, mortgage and business loans were 62.6%, 42.1% and 40.8% at the end of 2015.

Source: EBA, Bank of Greece
Note: EBA individual country NPLs include subsidiaries. The latter are excluded from the EU NPLs data.
Greece: NPE reduction targets agreed with the ECB/SSM

Time – Bound NPEs Reduction Strategy
(2016Q2 – 2019, bn Euros)

Source: Bank of Greece, Eurobank Research
Greece: sectoral breakdown of NPEs
Where most of the problems lie

Structure of Total Exposures per Sector (%)
(2015)

NPEs and Provisions Coverage per Sector (%)
(2015)

Source: Bank of Greece, Eurobank Research
Book chapters & contributors
Book chapters & contributors

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Rodrigo Olivares-Caminal and Andrea Miglionico

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Konstantinos I. Nikolopoulos and Andreas I. Tsalas

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Seamus Coffey

Part II - Chapter 6
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Post-Crisis Corporate Insolvency and Creditor Rights Greece: An Assessment of the Post-Crisis Corporate Insolvency Framework
Constantinos N. Klissouras
NPLs and Financial Regulation under the EU Law
Some final remarks
### Table 1
The conditions for the resolution of credit institutions under Article 32(1) BRRD and Article 19 SRMR

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>The credit institution is failing or likely to fail</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>No reasonable prospect for effective alternative private sector measures or supervisory action</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>A resolution action is necessary in the public interest</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
</tbody>
</table>

**Outcome**

1. **Recapitalisation** with the use of **private sector funds**
   2. Potential resort to support measures in the form of ‘**precautionary recapitalisation**’ (add-on)

1. **Resolution**
   2. Potential use of the SRF’s available financial means
   3. Potential use of the GFSTs *(only under the BRRD)*

1. **Winding up** under normal insolvency proceedings
   2. **Activation of DGS** to repay covered depositors
The first condition for resolution consists in that the competent authority (i.e., as the case may be the ECB for significant credit institutions or the national competent authority for less significant ones) determines, after consulting the resolution authority, that the credit institution is ‘failing or likely to fail’

(1) A credit institution is deemed to be in such a situation upon assessment of one or several of the objective elements relating to the following areas:

| Capital position | (a) It infringes, or there are objective elements to support a determination that it will, in the near future, infringe own fund requirements relating to the continuing of its authorisation, in a way that would justify its withdrawal by the competent authority. This includes, but is not limited to, the fact that the institution has incurred or is likely to incur losses that might deplete the entirety or a significant amount of its own funds
|            | (b) Its assets are, or there are objective elements to support a determination that they will, in the near future, be less than its liabilities |
| Liquidity position | It infringes, or there are objective elements to support a determination that it will, in the near future, infringe regulatory liquidity requirements for continuing authorisation in a way that would justify its withdrawal by the competent authority |
### Table 2 (cont.)
The ‘failing or likely to fail’ criterion

| Other requirements for continuing authorisation | It infringes, or there are objective elements to support a determination that it will, in the near future, infringe **other requirements** of its authorisation, in a way that would justify its withdrawal by the competent authority. For that purpose, the competent and/or the resolution authority should consider: • governance arrangements, and • the reliability and operational capacity to provide regulated activities |

The assessment of the objective elements is usually carried out by the competent authority in the course of the ‘Supervisory Review and Evaluation Process’ (‘SREP’), which is performed in accordance with the “**EBA SREP Guidelines (2014)**”

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(2) ‘Extraordinary public financial support’ is required, unless that support takes any of the three (3) permissible forms
Appendix

Summary of book chapters

Key issues and themes,
empirical findings,
and policy implications
Part I - Chapters 2 & 3

Chapter 2

Non-performing Loans: Challenges and Options for Banks and Corporations
Rodrigo Olivares-Caminal and Andrea Miglionico

- The most important part of a bank’s balance sheet is the quality of the asset portfolio; however, this remains difficult to assess at any given point in time
- There is a lack of a common financial language in the classification of bank assets; this contrasts with the serious efforts undertaken by policymakers and scholars w.r.t the sources of bank funding
- Need for a holistic approach to balance sheet regulation that will consider both sides of the balance sheet
- Need to develop common standards that make comparisons across jurisdictions and firms meaningful

Chapter 3

Non-performing Loans: A Review of the Literature & the International Experience
Konstantinos I. Nikolopoulos and Andreas I. Tsalas

- Recent empirical studies focus on a range of variables in explaining the evolution of credit risk and NPLs
- Potential determinants can be categorized as: macroeconomic, bank-specific, regulatory and borrower-specific
- Results of relevant empirical studies should be taken into consideration by regulators and policymakers
- Bank performance and inefficiency indicators should be thought as crucial determinants of future NPLs
Part II - Chapters 4 & 5

Chapter 4
The Spanish Experience
Ana Rubio, Olga Gouveia and José María Álvarez

- One particular feature of the Spanish experience was the high concentration of credit in the real estate sector
- The Spanish financial system has been completely restructured following the outbreak of the global crisis
  - Banks have been active in loan forbearance as well as in the sale of NPLs and problematic assets
  - Significant public initiatives have been undertaken: Asset Management Company (SAREB); Code of Good Practice for housing debtors; reforms to the personal and corporate insolvency frameworks
- Overall, the Spanish case can be considered as a success; however, there are still pending issues and it is probably too early to analyze the full effects of some of the regulatory initiatives undertaken

Chapter 5
Non-performing Loans in Ireland: Property Development Versus Mortgage Lending
Seamus Coffey

- In the 2000s, there was a build-up of private sector debt, which left a legacy of NPLs when the crisis erupted
- For delinquent business lending, particularly for land and real estate development:
  - Government moved quickly to transfer these loans off the balance sheets of lenders
  - Domestic lenders engaged in enforcement action to take possession of property and assets used as collateral for business lending, while there was significant restructuring of loans, including principal write-downs
- On the household side, the reaction has been pedestrian by comparison
Chapter 6

Niels Storm Stenbæk

- Danish households and firms are among the most leveraged in Europe
- Even though gross debt is high, the asset side is also substantial
- Going into the financial crisis of 2008, the build-up of debt was huge; yet, low interest rates have mitigated the impact on insolvency and losses in credit institutions
- Impairments on households have had an impact on consumption; Similar impacts are observed among firms in terms of investments

Chapter 7

The Cyprus Experience in Dealing with Private Sector NPLs
Marios Clerides, Michalis Kammas and George Kyriacou

- Sheer size of NPL ratio and its slow rate of reduction suggest that the problem may take a long time to correct
  - On the negative side: large portion of NPLs consists of terminated loans; problem cannot be resolved by internal transactions only (e.g. foreclosures or swaps), but foreign investor interest is key
  - On the positive side: New, more efficient legal framework for foreclosure and insolvency (May 2015); relatively high “quality” of current restructurings (~75% of restructured loans do not re-default)
- Significant challenges remain, but following the significant restructuring of the sector banks have strengthened their balance sheets and improved their provisioning levels and profitability
Part III - Chapters 8 & 9

Chapter 8
*The Road to Recovery: Are Greek Banks Able to Finance Greece’s Economic Recovery?*

*Nikolaos V. Karamouzis*

- Four major challenges faced by Greek banks today: i) overcome tight liquidity conditions and regain access to international capital markets; ii) effectively manage and substantially reduce the stock of bad loans; iii) remove the fetters of the official sector that impede business development and growth; iv) effectively adapt to a rapidly changing European banking environment
- If the question is *Can Greek banks help finance Greece’s economic recovery?*, then the answer is: Yes
- That is, provided that Greece can help its banks to recover by undertaking groundbreaking policy initiatives to create a more extrovert and business friendly environment and restore market confidence

Chapter 9
*LLP determinants: An Analysis of the Greek Banking System in Light of the Recent Crisis*

*Co-authored by P. Monokroussos, D. Thomakos, T. Alexopoulos, and E. L. Tsioli*

- Empirical examination of the determinants of industry-wide loan loss reserves (LLRs) to total loans ratio
  - Greek banks generally behave in line with the stylized facts of provisioning policy procyclicality
  - Yet, sharp rise in NPLs primarily due to unprecedented recession (not due to lending practices in pre-crisis era)
  - Possibility of macro regime-related effects on banks’ provisioning policies should be taken into account when macro prudential stress tests of the banking system are designed and implemented
Part III - Chapters 10 & 11

Chapter 10

*Micro-behavioral Characteristics in a Recession: Moral Hazard and Strategic Default*

I. Asimakopoulos, P. Avramidis, D. Malliaropulos, and N. Travlos

- Study assesses percentage of businesses in Greece that may be classified as strategic defaulters and identifies the potential determinants of such behavior
  - One out of six firms with non-performing loans was found to be a strategic defaulter
  - Positive relationship between strategic default and outstanding debt and economic uncertainty
  - Negative relationship between strategic default and the value of collateral
  - Relationship between strategic default risk and size and age is an inverted U-shape

Chapter 11

*Financial Distress, Moral Hazard Aspects and NPL Formation Under a Long-Lasting Recession: Empirical Evidence from the Greek Crisis*

P. Kapopoulou, E. Argyropoulos, K. M. Zekente

- Study jointly explores the “inability to pay” and the “unwillingness to pay” behavior of obligors in Greece
  - Examined macroeconomic factors, reflecting “inability to pay”, are associated with NPL formation in long-term equilibrium
  - Furthermore, both the relaxation of institutional framework regarding foreclosure and the decline in the value of residential property prices, intending to approximate the “unwillingness to pay” behavior, increase NPL formation
  - Business sector seems to be more sensitive to the phase of the cycle compared to the retail portfolio
Chapter 12

*Non-performing Loans in the Greek Banking System: Navigating Through the “Perfect Storm”*

Paul Mylonas and Nikos S. Magginas

- Study examines the key drivers of NPE formation in banks’ balance sheets following the outbreak of the crisis
  - Both macroeconomic and financial factors can be blamed for the weakening of borrowers’ debt servicing capacity
  - More idiosyncratic factors also at play e.g. increased uncertainty, Grexit fears, fiscal pressure, liquidity squeeze
  - Idiosyncratic factors are estimated to explain a significant part (~1/3rd) of the NPE buildup in the period 2008–2015
  - In horizons < 1 year, idiosyncratic factors play a more important role, accounting for nearly half of total NPE variance
  - At longer horizons, more systematic factors (e.g. changes in GDP, lending rates) explain most of the NPE variation

Chapter 13

*Characteristics and Possible Solutions to Problems Related to Loans to SMEs in Greece*

Nikolaos Vettas, Sophia Stavraki, and Michalis Vassiliadis

- Chapter presents a financial instrument for the refunding of SMEs’ past due loans with EU funds
- Proposed tool is structured to provide credit risk protection to banks that refund SME loans
- This has the form of a financial guarantee in case of default of a proportion of the refinanced undertakings
- Since eligible businesses should be viable, the study proposes a set of relevant eligibility criteria
Part IV - Chapters 14 & 15

Chapter 14
Existing Corporate and Household Insolvency Frameworks:
Characteristics, Weaknesses and Necessary Reforms
Spyros Pagratis, Christina Lolou, and Nikolaos Vettas

- Analysis of Greece’s insolvency framework and its interaction with prudential requirements for banks
- Said interaction has arguably contributed to the perpetuation of the NPL problem, delaying its viable resolution
- Recent and forthcoming reforms, such as CRR/CRD IV, Code of Conduct for Credit Institutions and standard IFRS9 for accounting provisions, could significantly contribute towards a viable solution to the NPL problem

Chapter 15
Financial Inclusion: An Overview of Its Various Dimensions and Its Assistance in Reducing Private Sector Insolvency
Christos V. Gortsos and Vasilis Panagiotidis

- Financial exclusion (non access to payment systems, banks, capital markets and the private insurance sector) is present in both economically less developed and in economically developed countries
- Different rationales for “involuntary” and “voluntary financial exclusion”
- Severe implications for monetary and financial stability
- Significant correlation between borrowers with NPLs and financial exclusion
- In particular: “financial education” as a decisive factor for efficient participation of households and firms in financial systems – currently, low level – the role of supervisory authorities
Chapter 16

Post-Crisis Corporate Insolvency and Creditor Rights Greece:
An Assessment of the Post-Crisis Corporate Insolvency Framework
Constantinos N. Klissouras

- Crisis pushed Greek business insolvency and creditor rights law into a state of flux without a guiding paradigm
- The reasons are structural and institutional:
  - Low efficiency and effectiveness of the legal framework;
  - The inadequacy of incentives to use and, thereby, improve it both explicitly, through reform, and implicitly, through the development of jurisprudence
- Recent liberalization of the market for bank credit management and acquisition has the potential to change the dynamics by:
  - Introducing a large number of competing agents exercising creditor rights; and
  - Raising their voice in favor of reforming the law towards more efficiency and effectiveness
Thank you for your attention!