GIKAS A. HARDOUVELIS

- Professor, Department of Banking and Financial Management, University of Piraeus T: +30 - 210 - 6724 458, M: +30 - 6944 442 376, e-mail: gikas.hardouvelis@gmail.com web pages: http://www.hardouvelis.gr, http://www.hardouvelis.com
- Chair, Board of Directors, National Bank of Greece S.A.

Education:

University of California, Berkeley, Ph.D., Economics, 1985 Harvard University, M.Sc. and B.A. (Magna Cum Laude), Applied Mathematics, 1978

Advisory Positions:

- First Vice Chair of the Board of Directors & Member of the Executive Committee, Foundation for Economic & Industrial Research (IOBE)
- Board of Trustees, Anatolia College
- Academic Council, Cyprus International Institute of Management
- Research Fellow, Centre for Economic Policy Research, London

Banking & financial sector experience:

08/19 – present National Bank of Greece S.A.

- Chair of the Board of Directors
- Senior Independent Director (until 04/21)
- Vice-Chair of the Risk Committee (until 07/21)
- Member of the Strategy and Transformation Committee (until 07/21)
 Member of the Corp. Governance and Nominations Committee (until 04/21)
- Acting Chair of the Audit Committee (9/20 -12/20)

01/16 - 07/19 Eurobank Ergasias S.A.

Consultant

02/05 - 06/14

- Director of Research & Group Chief Economist
- Member of the Executive Committee (12/13 06/14)
- Member of the Wholesale Banking Executive Committee
- Member of the Investment Committee (EURICO)
- Vice Chair of the Committee on Economic Strategy (ECES, 12/13-06/14)

01/96 - 12/04 National Bank of Greece S.A.

- Director of Strategic Planning & Research & Group Chief Economist
- Head of Group Risk Management (01/96 01/99, established it)
- Head of the Asset-Liability Management Unit (established it)
- Head of the Investor Relations Unit (established it)
- Key contributor to NBG's early transformation and its expansion abroad
- Member of ALCO & Adviser to the Executive Committee

10/95 - 05/00 **National Securities S.A.**

Member of the Board of Directors

05/98 – 05/00 Athens Derivatives Exchange

Member of the Board of Directors

Foundation for Economic & Industrial Research (IOBE)

05/10 - 02/12 • Member of the Board of Directors

 Member of the Board of Directors & the Executive Committee 04/18-present

Hellenic Bank Association

02/05 – 11/11 • Member of the Scientific Council

06/12 – 06/14 • President of the Scientific Council (11/09 - 11/11)

European Banking Federation

06/96 - 05/00Member of the European & Monetary Affairs Committee

02/13 – 06/14 • Member of the European & Monetary Affairs Committee

Central Banking Experience:

03/94 - 12/95 **Bank of Greece**

- Economic Adviser to the Governor of the Central Bank
- Alternate to the BoG Governor at the European Monetary Institute (EMI)
- Member of the Monetary Subcommittee at EMI (precursor to the ECB)
- Country negotiator in the establishment of ECB rules and bylaws

09/87 - 06/93 Federal Reserve Bank of New York

- Economist, Senior Economist and External Research Adviser
- Research was instrumental in transferring the stock futures margin policy to the Federal Reserve from the Futures Exchanges

Government Experience:

06/14 – 01/15 Hellenic Republic

- Minister of Finance (until January 27, 2015)
- Set the economic agenda and the budget; oversaw and coordinated the ministries; formed the bond issuance and swap policy strategy from floating-to fixed-rate; negotiated with the country's official lenders
- Legislated the establishment of bank Deferred Tax Credit in Greece, which enhanced the much-needed bank regulatory Tier I capital
- Member of ECOFIN and Eurogroup (and its President for one month)

12/11 – 05/12 Hellenic Republic

- Director of the Economic Affairs Office of the Prime Minister on secondment from Eurobank
- Oversaw the official negotiations on the 2nd Economic Adjustment Program and the design of the largest government bond swap in history (PSI)
- Oversaw the design of the first major bank recapitalization framework

05/00 – 03/04 Hellenic Republic

• Director of the Economic Affairs Office of the Prime Minister on secondment from the National Bank of Greece

Academic Experience:

09/93 -present University of Piraeus

- Full Professor, Department of Banking & Financial Management
- Department Chair (06/96 06/98)

09/00 - 05/04	University	y of Peloponnese,	Member o	f the (Governing Counci	i
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07/93 - 09/93 Rutgers University, USA, School of Business, Full Professor

07/89 – 06/93 Rutgers University, USA, School of Business, tenured Associate Professor

07/83 – 06/89 Columbia University, Barnard College, Assistant Professor (on leave from 07/87)

Academic Achievements and Honors:

- In the **Hall of Fame** of the **top 50 referenced authors worldwide** (1989-1995) in Applied Econometrics
- Published in top—ranking academic journals, including the <u>American</u>
 <u>Economic Review</u>, the <u>Journal of Finance</u>, the <u>Quarterly Journal of</u>
 <u>Economics</u>, the <u>Journal of Monetary Economics</u>, the <u>Review of Financial Studies</u>, the <u>Review of Economics and Statistics</u>, and other.
- Wrote and edited books on the financial crisis, the housing market, the euro, sources of growth, bank risk management, etc.

Please see a more detailed CV description in the following ADDENDUM

ADDENDUM

Banking & financial sector experience: Analytical description

08/19 – present National Bank of Greece S. A.

Chair of the Board of Directors

- Senior Independent Director (until 04/21)
- Vice Chair of the Risk Committee (until 07/21)
- Member of the Strategy and Transformation Committee (until 07/21)
- Member of the Corporate Governance & Nominations Committee (until 04/21)
- Acting Chair of the Audit Committee (9/20-12/20)

01/16 - 07/19 Eurobank Ergasias S.A.

Consultant

Established and co-authored the Eurobank Cyprus Quarterly Economic Monitor

02/05 - 06/14 Eurobank Ergasias S.A.

Director of Research & Chief Economist

- Member of the **Executive Committee**, (12/13 06/14), contributing to the Bank's strategy, business development and recapitalization plan
- Member of the Wholesale Banking Executive Committee, EURICO and ECES
- Created and managed the Division of Research & Forecasting, which analyzes the domestic & international economy and publishes regular reports (https://www.eurobank.gr/en/group/economic-research/)
- Managed the Research Department's **Capital Markets Division**, which is located within the Treasury Department and follows the markets on a timely basis
- Responsible to shape and deliver the Bank's public messages regarding the macroeconomic environment, international economic trends, and the movements of financial markets in road shows and other events in Greece and abroad
- Provided advising services to Bank customers as well as other banking divisions & Bank subsidiaries, such as asset management, private banking, or Treasury
- Organized conferences addressed to the Bank's customers on key economic themes (e.g. real estate, sources of growth, FX developments, China, the Euro Area crisis) by utilizing own personal contacts to attract high-caliber international academics (some are Nobel laureates) as guest speakers
- Participated in high-profile expert forums, panels and debates with major opinion makers of world economic policy
- Contributed applied research articles to the Bank's publications, and initiated and edited book volumes sponsored by Eurobank
- On secondment to the Hellenic Republic from 12/2011 to 05/2012

01/96 - 12/04 National Bank of Greece S.A.

Director of Strategic Planning & Research & Group Chief Economist Head of Risk, Head of Asset-Liability Management, Head of Investor Relations

- Established and headed the Strategy & Asset-Liability Management Unit and performed monthly analyses on the effects of changes in the composition of the asset and liability portfolio as well as FX and interest rate changes on the Bank's profitability and valuation
- Established and headed the Risk Management Unit (the first in Greece) responsible for measuring Basel I market risk capital requirements for the Bank and the Group, also pioneering the VaR methodology
- Established and headed the Investor Relations unit and participated in road shows of Bank presentations to investors in Greece and abroad

- Responsible for the set up & monitoring of the Group business plan and key contributor to the 1990s Bank transformation into a competitive institution and expansion abroad
- Responsible for the Bank's public messages to its customers regarding its own profitability and strategy and the general economic environment
- Played a leading role in the underwriting and issuance of the Bank's first in its history subordinated bond and the Bank's first in its history official rating by a Rating Firm
- Responsible for the contents and write up of the Bank's Annual Report
- Restructured the Strategic Planning & Research Division and produced a constant stream of publications on the Greek economy and on financial markets
- Created a new Subdivision within the Research Division the South East European Economic Studies, with regular bi-monthly publications
- Co-authored a book on the Euro, sponsored by the Bank
- On secondment to the Hellenic Republic from 05/2000 to 03/2004

10/95 - 05/00 **National Securities S.A.**

Member of the Board of Directors

- Overviewed the transformation of the securities brokerage firm into a transparent and profitable enterprise
- Examined the implementation of new risk management processes, particularly on the flow of information from customers to brokers and markets in order to minimize business risk
- Since 2013 the company is renamed to NBG Securities S.A.

05/98 - 05/00 Athens Derivatives Exchange

Member of the Board of Directors

- Actively involved in the original creation of the Athens Derivatives Exchange and its operational infrastructure
- Contributed to the creation of the first futures contracts to be traded and their characteristics
- Oversaw the original hiring process of personnel
- In 02/2002 the Derivatives Exchange merged with the Athens Stock Exchange

05/10 – 02/12 Foundation for Economic & Industrial Research (IOBE)

04/18 -present First Vice Chairman the Board of Directors, Member of the Executive Committee

- Contributed to the annual strategic planning that sets the research agenda and the list of events organized by the Foundation
- Oversaw the execution of the annual budget
- Member of the Executive Committee since 04/2018
- First Vice Chairman since February 2020

01/96 – 06/14 Hellenic Bank Association (HBA)

Member of the Scientific Council

President of the Scientific Council from 11/09 to 11/11

- Representative of HBA in the government's Fiscal Audit Committee, formed in 10/2009, which reported to the Greek Parliament in 1/2010 on the measurement problems of the fiscal statistics
- Coordinated the activities of the Scientific Council and Advised HBA on current economic issues of banking interest
- In charge of the content and write up of HBA's Annual Report

- Co-edited a book volume (in Greek), sponsored by HBA
- Membership in the Scientific Council was interrupted twice, from 5/2000 to 1/2005 and from 12/2011 to 5/2012, both events related to secondments to the Economic Affairs Office of the Prime Minister

06/96 - 05/00 European Banking Federation

02/13 – 06/14 Member of the European & Monetary Affairs Committee

- Representative of the Hellenic Bank Association in the European & Monetary Affairs Committee
- Led the 1990s discussions on the formation of EMU and its effects on the financial sector
- Promoted the Hellenic interests in the creation of EONIA & EURIBOR
- Discussed European banking issues

Central banking experience: Analytical description

03/94 - 12/95 Bank of Greece

Economic Adviser to the Governor

- Alternate to the Governor of the Bank of Greece at the European Monetary Institute (precursor to the ECB)
- Participated in regular meetings with other Alternates prior to the meetings of central bank governors in Basel or Frankfurt for the purpose of resolving all pending issues ahead of the governor meetings
- Member of the Monetary Policy Subcommittee, which met on a frequent and regular basis in view of the upcoming monetary union
- Represented Greece in EU discussions and negotiations about the optimal design of the Eurosystem, its infrastructure and its rules of conduct
- Combined theoretical and practical knowledge of both Macroeconomics and Finance with central bank experience outside Europe to effectively promote the Bank of Greece positions in the on-going negotiations
- Actively participated in EU discussions and negotiations of how the Maastricht rules for joining EMU would become operational
- Actively participated in EU discussions and negotiations on monetary policy independence, on inflation targeting, on collateral assessment, on TARGET issues, etc.
- Advised the central bank Governor in Greece on domestic monetary policy issues
- Contributed with research articles within the Bank of Greece

09/89 - 09/93 Federal Reserve Bank of New York, USA

External Research Adviser

- Developed a research agenda on Margin Requirements, which subsequently influenced the US policy decision to bring stock futures margins regulation under the auspices of the Federal Reserve
- Performed research on the US Economy and its financial markets and advised the top management on monetary and regulatory issues
- Contributed with research articles to the Bank's Quarterly Review
- Was simultaneously a university professor

09/87 - 08/89 Federal Reserve Bank of New York, USA

Senior Economist

- Contributed to the preparation of the Governor for his participation in the FOMC meetings
- Contributed to the Bank's analysis of the stock market crash of 1987

- Initiated the Bank's research agenda on the term structure of interest rates and its relation to the macro-economy
- Was hired as an economist on leave from the university and then soon promoted to senior economist

Academic experience: Analytical description

Experience in the United States

- 01/93 09/93 Professor, Rutgers University, School of Business, USA
 07/89 12/92 Associate Professor, Rutgers University, School of Business, USA
 07/83 06/89 Assistant Professor, Barnard College, Columbia University, Department of College Columbia University.
- 07/83 06/89 Assistant Professor, **Barnard College**, **Columbia University**, Department of Economics, USA
 - Published in top–ranking academic journals, such as the <u>American Economic Review</u>, the <u>Journal of Finance</u>, the <u>Quarterly Journal of Economics</u>, etc.
 - Was included in the Hall of Fame of the top 50 individual referenced worldwide in applied econometrics over 1989 to 1995. See p. 432, in Badi H. Baltagi, "Applied Econometrics Rankings: 1989-1995," <u>Journal of Applied Econometrics</u> 1999, Vol. 14, pp. 423-441.
 - Active participant in academic conferences (AEA, AFA, NBER, etc.)
 - Taught courses and seminars in Banking, Macroeconomics, Monetary economics, Finance, Statistics
 - Acted as a frequent referee (reviewer) for academic journals

Experience in Greece

09/93 - today Professor, **Department of Banking & Financial Management**, University of Piraeus, Greece

- Succeeded in building up a top-quality Banking and Finance Department internationally, despite the Greek low salary levels and other constraints
- Served as Department Chair for two years
- Contributed to forming a scholarship program based on academic merit, to the initiation of a career day for graduating seniors, etc.
- Brought executives to class to share their experiences and advise students
- Active participant in conferences (Banque de France, EFMA, EEA, etc.)
- Local organizer of EFA meetings in Athens in August 2008
- Taught courses and seminars in Bank Risk Management, Money & Banking and Monetary Policy
- Acted as a referee (reviewer) for journals
- Initiated in the Fall of 2004, organized and conducted for almost a decade the ongoing weekly academic seminar with prominent guest speakers from international universities, central banks and other research institutions.

09/00 – 05/04 Member of the **Governing Council** of the **University of Peloponnese**

- Worked on establishing a new university from ground zero
- Exclusively responsible for the establishment and operation of the School of Management and Economy within the University of Peloponnese: Discussed the city location and building, supervised the creation of its physical infrastructure, advertised and eventually attracted the original core of professors and instructors, formed a student study guide, etc.

Publications in Academic Journals (Refereed):

- "Greek Sovereign Debt: Addressing Economic Distress and Growth in the Euro Area," (with P. Alexakis, D. Paxson, G. Sick and L. Trigeorgis), **Multinational Finance Journal**, 2018, vol. 22, No. 1/2, pp. 1-33
- "A Decade Long Economic Crisis: Cyprus versus Greece," (with I. Gkionis), **Cyprus Economic Policy Review**, 2016, Volume 10, No. 2, pp. 3-40
- Invited Comment on "Lessons for Monetary Policy from the Euro Area Crisis," C.A.E.Goodhart, **Journal of Macroeconomics**, March 2014, Volume 39, Part B, pp.383-386
- "External Financing, Growth and Stock Returns" (with G. Papanastasopoulos, D. Thomakos, T. Wang), **European Financial Management**, 2012, 18:5, pp. 790-815
- "The impact of EMU on the equity cost of capital," (with D. Malliaropoulos and R. Priestley), **Journal of International Money and Finance**, 2007, 26:2, pp. 305-327.
- "EMU and European Stock Market Integration," (with D. Malliaropulos and R. Priestley), **Journal of Business**, 2006, 79:1, 365-392.
- "The Asymmetric Relation between Margin Requirements and Stock Market Volatility across Bull and Bear Markets," (with P. Theodossiou), **The Review of Financial Studies**, Winter 2002, 15:5, 1525-59.
- "Intertemporal Asset Pricing Models with and without Consumption: An Empirical Evaluation," (with D. Kim and Th. Wizman), **Journal of Empirical Finance**, September 1996, 3: 267-301.
- "Price Volatility and Futures Margins," (with D. Kim), **Journal of Futures Markets**, February 1996, 16(1).
- "Margin Requirements, Price Fluctuations and Market Participation in Metal Futures," (with D. Kim), **Journal of Money, Credit and Banking**, August 1995, 27: 659-71.
- "The Term Structure Spread and Future Changes in Long and Short Rates in the G7 Countries: Is there a Puzzle?" **Journal of Monetary Economics**, March 1994, vol. 33, pp. 255-283.
- "Margin Requirements, Speculative Trading and Stock Price Fluctuations: The Case of Japan," (with S. Peristiani), **Quarterly Journal of Economics**, November 1992, 107: 1333-1370. Abstract in the Journal of Economic Literature, June 1993, p. 1157.
- "Temporal Aggregation, Monetary Policy and Interest Rates," (with T. Cunningham), **Journal** of Economics and Business, February 1992, 44: 19-30.
- "Monetary Policy Games, Inflationary Bias, and Openness," **Journal of Economic Dynamics and Control**, January 1992, 16: 147-164.

 Abstract in Journal of Economic Literature, June 1992, p. 1179.
- "The Term Structure as a Predictor of Real Economic Activity," (with A. Estrella), **Journal of Finance**, June 1991, 46(2): 555-576.

 Abstract in Journal of Economic Literature, December 1991, p. 1978.
- "Margin Requirements, Volatility, and the Transitory Component of Stock Prices," **American Economic Review**, September 1990, 80(4): 736-762.

 Abstract in the Journal of Economic Literature, March 1991, p. 366.

- "Commentary: Stock Market Margin Requirements and Volatility," **Journal of Financial Services Research**, 1989, 3: 139-151.
- "The Evolution of Federal Reserve Credibility: 1978-1984," (with Sc. W. Barnhart as the second author), the **Review of Economics and Statistics**, August 1989, LXXI: 385-393. Abstract in the Journal of Economic Literature, June 1990, pp. 1003-1004.
- "The Predictive Power of the Term-Structure During Recent Monetary Regimes," **Journal of Finance**, June 1988, 43: 339-356.

 Abstract in the Journal of Economic Literature, Dec. 1988, p. 2103.

 Summary in The CFA Digest, Fall 1988, vol. 18, pp. 26-27.
- "Stock Prices: Nominal versus Real Shocks," lead article, **FinanzMarkt und Portfolio Management**, Jahrgang 1988, 2: 10-18
- "Economic News, Exchange Rates, and Interest Rates," **Journal of International Money and Finance**, March 1988, 7: 23-35.

 Abstract in the Journal of Economic Literature, Dec. 1988, p. 2120.
- "Optimal Wage Indexation and Monetary Policy in an Economy with Imported Raw Materials," **Journal of International Money and Finance**, December 1987, 6: 419-432. Abstract in the Journal of Economic Literature, June 1988, p. 990.
- "Monetary Policy and Short-Term Interest Rates: New Evidence on the Liquidity Effect," **Economics Letters**, 1987, 25: 63-66.
- "Reserves Announcements and Interest Rates: Does Monetary Policy Matter?" **Journal of Finance**, June 1987, 42: 407-422.

 Abstract in the Journal of Economic Literature, Dec. 1987, pp. 2171-72.
- "Macroeconomic Information and Stock Prices," **Journal of Economics and Business**, May 1987, 39: 131-140.
- "Exchange Rates, Interest Rates, and Money Stock Announcements: A Theoretical Exposition," **Journal of International Money and Finance**, December 1985, 4: 443-454. Abstract in the Journal of Economic Literature. September 1986, p. 1600.
- "Commodity Prices, Money Surprises, and Fed Credibility," (with J. A. Frankel), lead article, **Journal of Money, Credit and Banking**, November 1985 (part I), 17: 425-438. Abstract in the Journal of Economic Literature, June 1986, p. 1053.
- "Market Perceptions of Federal Reserve Policy, and the Weekly Monetary Announcements," **Journal of Monetary Economics**, September 1984, 14: 225-240.
- "Are Rational Expectations for Real?" (with R. Craine), lead article, **Greek Economic Review**, April 1983, 5: 5-32.

Working Papers:

- "The distribution of investor beliefs, stock ownership and stock returns," with Georgios Karalas and Dimitri Vayanos, National Bureau of Economic Research Working Paper no. 28697, April 2021, available at SSRN: https://ssrn.com/abstract=3824433 or http://dx.doi.org/10.2139/ssrn.3824433"
- "Economic Policy Uncertainty and the Greek Economic Crisis," (with G. Karalas, D. Karanastasis, and P. Samartzis), Un. of Piraeus, January 2019

- "Risk sharing, differences of opinion, stock ownership and expected stock returns," (with G. Karalas and D. Vayanos), earlier version entitled: "Style Concentration in Stock Ownership and Expected Stock Returns,", December 2018 http://ssrn.com/abstract=3065191
- "Political, Economic and Economic Policy Uncertainty in Greece," (with G. Karalas, D. Karanastasis, and P. Samartzis), Un. of Piraeus, February 2018, SSRN # 3155172
- "Hedge Funds and the US Real Estate Bubble: Evidence from NYSE Real Estate Firms," (with Th. Stamatiou)
- "Consumer Confidence and Elections," (with D. Thomakos), CEPR Discussion Paper Series, Available at SSRN: http://ssrn.com/abstract=962427

Selected Publications in Journals and Collective Volumes (non-Refereed):

- "Financial crisis and non-performing exposures in Greece," Translation from the original article in Greek, published in a book of conference proceedings, entitled: "Obligations of Financial Institutions," Proceedings from the 29th Panhellenic Conference on Commercial Law," pp.245-297, edited by the Association of Greek Commercialists, Nomiki Vivliothiki, Athens, 2021. Available at: http://hardouvelis.gr/gikas-hardouvelis-financial-crisis-and-non-performing-exposures-in-greece/
- "Financial Development and the Credit Cycle in Greece," with M. Haliassos, M. Tsoutsoura, and D. Vayanos, in C. Meghir, Chr. Pissarides, D. Vayanos, and N. Vettas editors, chapter 7, **Beyond Austerity: Reforming the Greek Economy**, pp. 251-305, MIT Press, Cambridge, Massachusetts, September 2017
- "Overcoming the Crisis in Cyprus," in Michaelides, A., and A. Orphanides (eds), **The Cyprus Bail-in**, London: Imperial College Press, pp. 225-272, ISBN 9781783268757 (Hardcover), 2016
- "The Greek Real Estate market as the crisis unfolds," Authors: Gikas Hardouvelis, Theodosios Sampaniotis, (in Greek), in **H Αγορά Ακινήτων στην Πρόσφατη Χρηματοοικονομική Κρίση**, pp 41-75, Bank of Greece, December 2012, and in **Economy & Markets** Eurobank Research, Volume 7, Issue 2, July 2012
- "The World after the Crisis: S.E.E. Challenges and Prospects," in http://www.bankofgreece.gr/BogEkdoseis/SCP201001.pdf summarized in "Challenges & Prospects of the South Eastern European Economies in the Wake of the Financial Crisis," Bank of Greece, October 16, 2009, summarized in Banking in the SEEEs: Crisis Effects, Outlook and Risks, pp. 31-32, http://www.bankofgreece.gr/BogEkdoseis/TE_SEESOX.pdf
- "The financial crisis and the future of the global economy," in **Economic Policies to Address the Crisis,** (in Greek), EMOP Studies on Economic Policy, Number 11, pp. 15-72, Nick Baltas editor, ISBN: 978-960-86214-8-0, Athens, 2010
- "Actions for a less Procyclical Financial System," Author: Gikas Harouvelis, **Economy & Markets**, Eurobank Research, Volume 5, Issue 5, September 2010
- "The Greek Economy & its Stability Programme," Authors: G. Hardouvelis, D. Malliaropulos, Pl. Monokroussos, A. Anastasatos, Th. Stamatiou, Th. Sampaniotis, **Economy & Markets**, Eurobank Research, Volume 5, Issue 3, June 2010
- "A severe sovereign debt crisis triggers aggressive fiscal measures," Authors: G.Hardouvelis, P.Monokrousos, T.Stamatiou, **Greek Macro Monitor**, Eurobank Research, March 2010

- "2007-2009 financial crisis: causes, effects & prospects," Authors: G.Hardouvelis, T.Kollintzas, M.Psalidopoulos, N.Karamouzis, (in Greek) **Economy & Markets**, December 2009
- "Twin deficits threaten medium-term macroeconomic stability," Authors: G.Hardouvelis, P.Monokrousos, T.Stamatiou, **Greek Macro Monitor**, Eurobank Research, November 2009
- "The importance of Real Estate in economy," at volume "Real Estate: Developments & prospects" (in Greek), pp.13-57, Bank of Greece, April 2009
- "Fiscal risks mount as economy heads for recession," (with P.Monokroussos, C.Vorlow, **Greece- Macro Monitor**, Eurobank Research, May 2009
- "Global financial crisis weights on Greek growth outlook," (with P. Monokroussos, T.Anastasatos, C.Vorlow, <u>Macro Monitor</u>, Eurobank Research, December 2008
- "Effects of world economic slowdown increasingly evident," Authors: G.Hardouvelis, P.Monokroussos, C.Papadopoulos, T.Anastasatos, C.Vorlow, T.Sabaniotis, **Macro Monitor**, Eurobank Research, July 2008
- "Special edition on Cyprus Economy," Authors: G.Hardouvelis, C.Vorlow, E.Davradakis, E.Georgopoulos, I.Gkionis, T.Sabaniotis, **Economy & Markets**, Eurobank Research, Vol II,9, pp.1-32, November 2007
- «Management of the macroeconomy and the need for structural changes in Monetary Union," at volume: **Greek Economy**: **Crucial Issues of Economic Policy**, (in Greek), pp. 77-116, APLHA BANK Historical Archive, Athens 2008
- "New Global Economy: Trends & Challenges," (in Greek) **Economy & Markets**, Eurobank Research, vol. III, issue 7, pp. 1-9, July 2008
- "Future Trends in International Trade and Transportation," (in Greek) **Economy & Markets**, Eurobank Research, vol. III, Issue 4, pp. 1-20, April 2008
- "Special edition on Cyprus Economy," (in Greek) **Economy & Markets**, Eurobank Research, vol.II, Issue 9, pp. 1-32, November 2008
- "Macroeconomics Management and the Post EMU Need for Structural Reforms in Greece" (summary of the original article in Greek), **Economy & Markets**, October 2007, Eurobank Research, vol. II (8), pp. 1-18.
- "Perceptions of Inflation and the Effect of Euro," with O. Kosma and E. Simitzi (in Greek), **Economy & Markets**, (summary of the original article in Greek), June 2007, Eurobank Research, vol. II (5), pp. 1-8.
- "The Differential Rate of Inflation between the Poor and the Rich following the Introduction of the Euro" with O. Kosma and E. Simitzi, (summary of the original article in Greek), **Economy & Markets**, (summary of the original article in Greek), April 2007, Eurobank Research, vol. II (3), pp. 1-5.
- "The Sizable Historical Deviations from the Greek Central Government's Budget" with T. Sambaniotis and M. Davradakis (summary of the original article in Greek), **Economy & Markets**, (summary of the original article in Greek), December 2006, Eurobank Research, vol. I (9), pp. 1-18.
- "Is the Real Estate Market Overvalued? International Trends and Investment Opportunities" with M. Davradakis (in Greek), **Economy & Markets**, February 2006, Eurobank Research, vol. I (1), pp. 1-14.

- "Stock Market bubbles and crashes: A countercyclical policy proposal through margins" (in Greek), pp. 109-148, in: **The New European Financial Environment,** G. Provopoulos & C. Gortsos edt., Hellenic Banks' Association, Sakkoulas Publications, Athens 2004.
- "Asset Prices and the Need for New Policy Instruments: The Case of Countercyclical Margin Policy," Proceedings of a conference on "Monetary Policy, Economic Cycles and Financial Dynamics," **Journees de la Fondation Banque de France**, March 2003, pp.331-350.
- "The Impact of Globalization on the Equity Cost of Capital" (with D. Malliaropulos and R. Priestley), **Journees de la Fondation Banque de France** October 2001, pp. 87-126.
- "Risk, Share Performance and Company Size in Greece," (with D. Malliaropulos), **Economic & Statistical Bulletin**, National Bank of Greece, 1999, vol. 11: 6-14.
- "The Drachma Exchange rate and its Long-Run Equilibrium Level," **Economic & Statistical Bulletin**, National Bank of Greece, (with D. Malliaropulos), January 1998, 9: 6-15
- "The Price Divergence of Greek Closed End Funds from their Net Asset Values," with E. Tsiritakis (in Greek), pp. 129-152, at Volume: **The Greek Capital Market**, University of Piraeus, Globus Invest publications, 1997.
- "The Predictive Power of the Term Structure of Interest rates in Greece," **Economic & Statistical Bulletin**, National Bank of Greece, (with D. Iliadou), March 1997, 8: 6-17.
- "Changeover to the Single Currency: Prospects and Challenges for Credit Institutions in Greece," **Economic Bulletin**, Bank of Greece, (with M. Haralabidis and G. Papageorgiou), November 1995, 6: 65-88.
- "The Term Structure of Interest Rates," forthcoming, **Encyclopedia of Business Cycles**, David Glasner, ed., FTC, Washington, D.C.
- "What Moves the Discount on Country Equity Funds?" (with Rafael Laporta and Thierry Wizman), **The Internationalization of Equity Markets**, Jeffrey Frankel edt., Chicago:the University of Chicago Press, 1994, pp. 345-97.
- "Margin Requirements and Stock Trading," the **New Palgrave Dictionary of Money and Finance**, Fall 1992, vol. 2: 645-647.
- "The Relative Cost of Capital for Marginal Firms over the Business Cycle," (with Th. Wizman), Quarterly Review, Federal Reserve Bank of New York, Fall 1992, 17(3): 44-58.
- "Possible Roles of the Yield Curve in Monetary Policy," (with A. Estrella), in **Intermediate Targets and Indicators for Monetary Policy: A Critical Survey**, 339-362, Federal

 Reserve Bank of New York, July 1990
- "Do Margin Requirements Matter? Evidence from U.S. and Japanese Stock Markets," (with S. Peristiani), **Quarterly Review**, Federal Reserve Bank of New York, Winter 1989-90, 14(4): 16-35.
- "Evidence on Stock Market Speculative Bubbles: Japan, the United States, and Great Britain," lead article, **Quarterly Review**, Federal Reserve Bank of New York, Summer 1988, 13(2): 4-16.
- "Margin Requirements and Stock Market Volatility," **Quarterly Review**, Federal Reserve Bank of New York, summer 1988, 13(2): 80-89.

- "Are Rational Expectations Operational?" (with R. Craine), Proceedings of the 20th **IEEE** Conference on Decision and Control, December 1981, pp. 844-48.
- "Data Based Priors: Stationarity, and Rational Expectations," (with R. Craine), lead article, **Economic Review**, Conference Supplement, FRB of San Francisco, October 1980, pp.4-35.

Books (in Greek, editor):

- "From the international Crisis to the Greek and Euro Area Crisis: What will the Future bring?" (with N. Karamouzis), Livanis Publishing, ISBN 978-960-14-2343-2, Athens, September 2011
- "The International Crisis, the Euro Area Crisis and the Greek Financial Sector," (with Chr. Gortsos), Hellenic Bank Association, ISBN: 978-960-6867-13-2, July 2011
- "The Housing Market: Prospects and Investment Opportunities" with N. Karamouzis, Sakkoulas Publishing, ISBN: 978-960-445-166-1, Athens-Thessaloniki, March 2007
- "Sources of Growth: Can Greece follow the Irish Example?" Kerkyra Publishing, ISBN 960-8386-38-1, Athens, January 2006

Books (in Greek, author):

- "Financial Institutions Risk Management" (with E.Tsiritakis), textbook for the Open University, Patras, 2002.
- "Euro, a Single Currency for Europe" (with Ph. Sachinidis), ISBN: 960-86146-2-7, Athens, 1998

Other Publications, Presentations:

Numerous speeches at public events, seminars, academic conference presentations, presentations to non-academic professional associations, press articles and other related material about the economy and economic policy, some of which can be found in my personal web site www.hardouvelis.gr

Ph.D. Thesis Supervision:

- Paris Zaverdinos, University of Piraeus, "Essays in Bank Risk Management," ongoing
- George Karalas, University of Piraeus, "Essays in Asset Allocation," May 2017
- Theodore Stamatiou, University of Piraeus, "Essays in market microstructure," September 2009
- George Papanastassopoulos, University of Piraeus, "Accounting Information and Stock Market Returns," September 2007.
- Michael Koubouros, University of Piraeus, "The Cross Section of Equity Returns" April 2006
- Eunseok Kim, Rutgers GSM-Newark, "The Cross-Market Effects of Margi Requirements," September 1993.
- Ross Gorman, Rutgers Economics-New Brunswick, "Essays in the Efficiency of Black Markets for Foreign Exchange," November 1993.

External Referee (Reviewer) for:

American Economic Review, Canadian Journal of Economics, Economic Inquiry, Economic Journal: The Journal of the Royal Economic Society, European Economic Review, Financial Management, Financial Review, Global Finance Journal, International Economic Review, International Journal of Central Banking, International Review of Economics and Finance, Journal of the American Statistical Association, Journal of Business, Journal of Development Economics, Journal of Economics and Business, Journal of Empirical Finance, Journal of Finance, Journal of Financial Research, Journal of Futures Markets, Journal of Economic Dynamics and Control, Journal of International Economics, Journal of International Financial Markets, Institutions and Money, Journal of International Money and Finance, Journal of Macroeconomics, Journal of Money, Credit and Banking, Journal of Monetary Economics, Journal of Theoretical Politics, Managerial Finance, Multinational Finance Journal, North American Journal of Economics and Finance, Quarterly Journal of Business and Economics, Review of Economics and Statistics. Review of Financial Economics. Review of Financial Studies, Review of Quantitative Finance and Accounting, Southern Business and Economics Journal, Spoudai, Center for Research and Economic Development, Athens, Greece, City University of New York Internal Research Award Program, Center for Economic Research, Economic University of Athens, National Kapodistrian University of Athens, National Science Foundation

Courses Taught:

- Management of Financial Institutions (Un. of Piraeus)
- Money and Banking (Un. of Piraeus)
- Thesis supervision (Un. of Piraeus)
- Introductory Finance (Rutgers 33:390:300)
- Intermediate Corporate Finance (Rutgers 33:390:400)
- Advanced Corporate Finance (Rutgers 33:390:440)
- Structure of Financial System (Rutgers Graduate Economics 16:220:514)
- Financial Markets and Instruments (Rutgers 33:390:320)
- Managerial Finance (Rutgers 33:390:310)
- Rutgers Ph.D. Defense Committees
- Financial Markets (Barnard BC3036)
- Monetary Economics (Columbia W3711)
- Money and Capital Markets (Barnard BC2032)
- Statistics for Economics (Columbia V1411)
- Topics in Economic Theory (Barnard BC3063)
- Introductory Macroeconomics (Barnard BC1001)
- Barnard Senior Research Seminar (Barnard BC3061-2)
- Columbia Supervised Individual Research (C3997-8)
- Columbia Ph.D. Defense Committees