# ABSTRACTS

# XIII INTERNATIONAL COLLOQUIUM

SCHOOL OF ECONOMICS & MANAGEMENT

FCT

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of Art & Science

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Universidade de Brasília

**CEsA**—Centro de Estudos sobre

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ISEG—Instituto Superior de Economia

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África. Ásia e América Latina

Centro de Estudos sobre África. Ásia e América Lat

# Post-2008 Global Dynamics and Structural Changes:

# Economic, Political and Eco-Societal Transitions

This colloquium results from the scientific-based conviction that is necessary to think about the present, with systemic stresses taking place everywhere, Europe in particular. The year of 2016 may well be a year when (after the Paris meeting) socioeconomic and political transformations will be initiated. The power of international finance and of its associated dominant theoretical apparatus has been instrumental and leading to structural changes worldwide. In addition, the mistaken orientation of general policies of economic management is having a perverse impact on growth and distribution as well as on stability. The recent global financial and economic crisis has underscored the fact that despite significant increases in income and other "development" indicators in many parts of the world in the last fifty years, or so, the appropriate paths to development require serious rethinking, financial sector in the global economy has made economies fragile. Increases in inequality seem to be making societies more unjust and unstable. The problem of global warming continues to be major threat for the future.

11 - 13 MAY 2016 | CEsA/ISEG, Lisboa

### FIRST DAY: 11/05/2016

# 09:15 - 09:30 | Special Speaker

AUGUSTO SANTOS SILVA, Minister of Foreign Affaires of Portugal.

# 09:30 - 11:10 | PLENARY SESSION I

Paper I: The (Un)bearable Cost of the European Public Debt Sustainability. Paper 2: The Supremacy of Financial Capital and the Current Crisis. Paper 3: The Global Crisis and Unconventional Monetary Policy: ECB versus FED. Paper 4: A Characterization of the Global Financial Crisis of 2007-2008.

# 11:30 – 12:50 | PLENARY SESSION II

Paper 5: Homoeconomico-politicus, Scientific Consciousness, and the Defense of Fundamental Values in the Context of the Climate Change Crisis. Paper 6: The Asian Infrastructure Investment Bank: China's Ultimate Financial StateCraft?

Paper 7: Socioeconomic Challenges and Crisis: Brazilian Illustration and the Search for a New Paradigm.

# 14:30 – 15:50 | PLENARY SESSION III

Paper 8: The Market Myth. Paper 9: Foundations of Economic Theory. Money and Social Power. Paper 10: The Eurozone Crisis and Democratic Legitimacy.

# 16:10 – 17:30 | PANEL A

TRANS-DISCIPLINARY FOUNDATIONS OF THE MARKET

### SECOND DAY: 12/05/2016

## 10:00 – 11:20 | PLENARY SESSION IV

Paper II: Optimized Economic Capital for Emerging Markets Portfolia: Integrated Approach to Risk Assessment. Paper I2: Towards a Society of Living. Provocations on Economy and Economics by a Layman and Entrepreneur. Paper I3: Is it possible to shift the economic system onto a sustainable path and avoid collapse?

# 11:40 - 13:00 | PANEL B

ECONOMICS AND SYSTEM INTERPENDENCIES

# 14:30 – 16:30 | PLENARY SESSION V

Paper I4: Economic Crisis, European Welfare State Models and Inequality. Paper I5: Domesticating Finance for Pursuing Post-Crisis Growth not only Equality. Paper I6: How to Finance our Sustainable Development Goals (SDGs): Socioecological Quantitative Easing (QE) as a Parallel Currency to Make the World a Better Place. Paper I7: Macroeconomic theories of investment and development of a New Economic Theory.

# 16:50 – 18:30 | PANEL C

MONEY AND FINANCIAL MARKETS AS SOCIAL INSTITUTIONS

# THIRD DAY: 13/05/2016

# 09:30 – 10:50 | PANEL D

FOUNDATIONS OF ECONOMICS AS A SCIENCE

# 11:10 – 12:30 | PLENARY SESSIONS VI

Paper I8: Self-Enforcing Agreements under Unequal Nationally Determined Contributions. Paper I9: Valuing Eco-Systems Services – Panacea or Pandora's Box for Biodiversity Conservation? Paper 20: An insight into Payments for Ecosystem Services: presentation of the topic and application to Arbio project in Amazon rainforest. Paper 21: Decoupling Resource Use and Wellbeing: A Key Element of a New Economic Theory.

# 12:30 – 12:45 | SPECIAL SPEAKER

#### JOSÉ MENDES,

Advisor and Secretary of State for the Environment of Portugal.

### 09:30 - 11:10 | PLENARY SESSION I

Chair: Maria Rosa Borges

#### Paper 1: The (Un)bearable Cost of the European Debt Sustainability.

Sofia Vale and Francisco Camões, ISCTE Business School, Instituto Universitário de Lisboa.

The recent debt crisis is the major challenge faced by European Monetary Union since the creation the euro. This crisis was the outcome of the 2008 financial crisis having its roots on the delimitation of financial disruption within its sphere, on the automatic stabilizers that were released by the signs of a flagging economy, and on countercyclical fiscal policy intervention as specified by European authorities in a struggle to repress the greatly feared recessive effect on an already uneven economy. The roaring 2000s, as at the time believed, condescendingly witnessed the deepening of disparities among European economies such as their significant current account imbalances. The advent of the crisis soon unraveled the fragility of both the European integration project and the euro, exposing the large disparities that existed between countries and the absence of adjustment mechanisms to counter-act them. Europe lies on a dysfunctional monetary system targeted to control inflation, combined with a fiscal treaty resting on the idea that sound public finances are inevitable to restore economic growth. Additionally, the political speech towards adjustment and the measures chosen to achieve it display a biased preference towards reducing deficits without a concern for limiting surplus. However, these measures have proven ineffective and despite the assistance from unconventional monetary policies, public finances are not under control and economic growth has not yet recovered.

In this paper we address the European debt crisis describing the main events that took place during 2000-2015 and waving the imbalances that emerged among Eurozone economies. We analyse how, from the creation of the euro to the financial crisis, there was a build-up in private credit, fed by low interest rates and by the absence of barriers to capital movements across Eurozone countries. We also emphasize how these flows corresponded to an application of capital from surplus countries into peripheral countries that drove (sluggish) growth and ended up nourishing

an asset bubble. These capital movements took place in a broader environment where gross capital flows increased between developed economies boosting a credit boom.

We pay special attention to public finances showing that, up to the 2008 financial crisis, the majority of Eurozone countries ran controlled public deficits in accordance with the rules of the Stability and Growth Pact, although the limits to public debt were not being respected by about half of these countries. During the crisis peripheral economies saw the public sector progressively taking on private sector debt in a framework of decreasing international capital flows and increasing interest rates spreads whereas interest rates kept falling. The public debt crisis settled as an asymmetric crisis, smiting the most fragile countries from the Eurozone, but soon became the haunting ghost that frightened stability and common economic and policy goals. To cope with an imminent break of European unity, a unison tone was announced defending purging austerity measures thought to reinsure debt sustainability and especially conceived for peripheral countries at once unstable and outliers. Alongside, the Treaty on Stability, Coordination and Governance imposed stronger limits to debt accumulation forcing countries to reduce in 20 years the accumulated excess over the 60% rule. In some cases this reduction amounts to more than 60 percentage points. It is common knowledge that debt sustainability depends on three central variables, being the growth rate of nominal GDP, nominal interest rates, and the budget balance. In a recent past, even during the most prosperous economic growth periods, there is no record of combined figures for these variables that would allow a convergence rhythm as the one imposed by the Treaty. In this work we conceive different possible scenarios for European countries to simulate convergence to the European threshold for debt/GDP ratio. Our findings show that, given present-day economic conditions, choosing to solve public debt levels through budget surplus will contribute to emphasize asymmetries within Eurozone and as so to doom the European integration project to fail.

# Paper 2: The Supremacy of Financial Capital and the Current Crisis.

Maria L. Rollemberg Mollo, Department of Economics, University of Brasilia.

The article discusses the untouched finance's supremacy, despite its responsibility in the current crisis. It uses mainly ideas of Marx, Hilferding, Keynes and Minsky to make conceptual clarifications of terms such as financial capital and fictitious capital, and propose an interpretation of financialization as the development of the latter. It also shows how the concept of financial fragility helps us to understand the current crisis. Finally, it will describe the role of neoliberalism in stimulating the development of fictitious capital, and the supremacy of financial capital before, during and after the 2008 crisis. The inequality stimulated by neoliberalism and by the growth of financial capital is also related to its untouched supremacy even after the beginning of the crisis.

#### Paper 3: The Global Crisis and Unconventional Monetary Policy: ECB versus FED.

Carolina Tucwell and António Mendonça, CEsA/ISEG, Universidade de Lisboa.

In the aftermath of the global economic and financial crisis, which broke-out in 2007, the major central banks started implementing so-called unconventional monetary policy measures. Following a fundamentally qualitative methodology, the aim of this paper is to compare the unconventional measures adopted by the ECB and the Fed, assessing their characteristics and also their impacts on the economy.

# Paper 4: A Characterization of the Global Financial Crisis of 2007-2008.

Neantro Saavedra-Rivano, Professor Emeritus, University of Tsukuba.

This paper examines the Global Financial Crisis of 2007-8 in the context of the theory of crises advanced by Saavedra-Rivano (2016). It argues that this crisis is part of a large systemic crisis that has been unfolding up to present days and moving from one region and one sector to the other. The paper goes on to analyze the evolution of the financial sector from its original role of supporting productive activities to its current oversized presence that crowds out other economic activities. It concludes with a characterization of this systemic crisis as a crisis of governance.

# 11:30 – 12:50 | PLENARY SESSION II

Chair: António Mendonça

#### Paper 5: Homoeconomico-politicus, Scientific Consciousness, and the Defense of Fundamental Values in the Context of the Climate Change Crisis.

Winston P. Nagan, University of Florida Levin College of Law, Distinguished Visiting Professor at Al-Farabi Kazakh National University of Kazakhstan. Megan Weeren, Institute of Human Rights and Peace.

The general framework of this paper is to focus on the evolution of scientific consciousness and the dramatic technological developments it has generated, which have vital and highly consequential consequences for social organization on a global basis. The central fact about the current technological revolution is the enormous challenges it provides for political and economic decision-making. The political and economic choices are often merged in a symbiotic wave of challenges. In politics, we have understood the background and challenges that confront homopoliticus. These challenges are even more pronounced as challenges for homoeconomicus. In short, homoeconomico-politicus is both an observer and a participator in the challenges of dramatic technological change. What ties these two concepts together is that they are fed by a form of scientific consciousness. Dramatic forces of change, now unleashed, literally require new paradigms of political and economic thinking to inform wise policy makers about sensible political and economic choices. Both economics and politics are dramatically interrelated and shaped by the philosophy of science known as Logical Positivism. The problem with this approach is that it demands a form of scientific objectivity that rigorously excludes the study of values in the science of politics and economics. But the broader level of scientific consciousness would virtually require that these disciplines adequately account for the value implications of their work. These generalized comments may be an appropriate introduction to a deeper understanding of the impact of technological changes on the organization of political economy at all levels of social organization from the local to the global. One of the issues that we seek to underscore in this paper is a better understanding of the idea of economic consciousness. It would seem to be

obvious that economic consciousness influences economic theory and economic practice. In this sense, economic consciousness would seek to have a connection to the idea of political consciousness. The two are clearly intimately interrelated. In the field of political science, there is a well-developed theory of the power-oriented personality. When we connect the poweroriented personality to the personality focused on political economy, it may be appropriate to suggest the idea of a marriage of homopoliticus and homoeconomicus. This connection could be expressed in neologism: homoeconomicuspoliticus. It is the centrality of the idea of economic and political consciousness that merges these ideas in the form of an inclusive level of consciousness, which we wish to explore. If we accept the idea of homoeconomico-politicus level of consciousness, the next assumption would have to be that this form of human consciousness is obviously influenced by science and the interposition of value-based analysis. These few introductory comments are simply used to raise the question of the role of values in the evolution of the technological capacity in economics and politics of the human family.

#### Paper 6: The Asian Infrastructure Investment Bank: China's Ultimate Financial StateCraft? Enrique Martínez Galán.

International Affairs of the Finance Ministry in Portugal and UECE/ISEG. Luís Mah, CESA/ISEG - Universidade de Lisboa.

The global financial architecture has been closely dominated by international financial institutions created and controlled by US and Japan. However, China is starting to challenge this status quo nevertheless: (i) the step-by-step internationalization of the renminbi, (ii) the Chiang Mai Initiative Multilateralisation, (iii) the BRICS Bank, (iv) the Contingent Reserve Arrangement and, more recently, the (v) Asian Infrastructure Investment Bank (AIIB). By focusing on the latter, this paper analyses why China is now attempting to redefine the global financial architecture. We will analyse the motivation and international consequences of this Chinese policy shift, in particular for the World Bank and the Asian Development Bank, and formulate a conceptual framework about where this new institution could locate in terms of its business and governance model.

#### Paper 7: Socioeconomic Challenges and Crisis: Brazilian Illustration and the Search for a New Paradigm.

Joanílio R. Teixeira.

Department of Economics, University of Brasilia. Rodolfo M. Teixeira,

Department of Political Science, UniEuro University.

Economic Neoliberalism in its most perverse form has been recapturing the imagination of policy makers worldwide. It emerged in the context of a prolonged crisis, increasing unemployment and lack of sustainability concerning the accounts of the public sector. Growth slowdown reflects several factors, including domestic errors of economic policies, lower commodity prices and structural bottlenecks. To undertake these problems, most of the dominant governmental proposals, reminiscent from questionable austerity strategies, reflect the Washington Consensus's vision. Such framework - mainly enforced by the financial elite and stimulated by the supporters of the fictitious capital - underestimate the intricacy of fragile economies and do not solve some fundamental questions regarding their policies. Neoclassical based dominant austerity actions are not a proper scheme to deal with the vast challenges presented to the nations. Actually, we need a careful construction of a new socioeconomic, political, environmental and multidisciplinary theory and programme to deal with the roots of our problems. This article contains insights towards the search of a new paradigm for those concerned with the required top-down reforms not just in Brazil, but worldwide

# 14:30 – 15:50 | PLENARY SESSION III

Chair: Erich Hoedl

#### Paper 8: The Market Myth.

Thomas Bjorkman, Founder of the Ekskäret Foundation, Stockholm.

The Market is a self-organizing system that is constantly evolving. Like all social institutions, it is governed by principles and rules created by society, not by any universal laws of nature. If it does not work the way we want it to, we have the power and freedom to change its rules. Prevailing notions about the market are veiled in myth. There is a vast gap between economic models of how the market is assumed to work and how it actually functions. There is also a gap between the way it now functions and alternative possible ways it could be structured to more effectively promote social welfare and equity. Unveiling the myth is necessary to alter its workings for the betterment of humanity. Changing the constitutive rules can radically improve the pre-distribution of social benefits while preserving the dynamic freedom of the market and limit the need for regulating rules.

#### Paper 9: Foundations of Economic Theory. Money and Social Power.

Garry Jacobs,

World Academy of Arts & Science – Chief Executive Officer.

The future science of Economics must be human-centered, value-based, inclusive, global in scope and evolutionary in perspective. It needs to be fundamentally interdisciplinary to reflect the increasingly complex sectorial interconnections that characterize modern society. It must also be founded on transdisciplinary principles of social existence and development which constitute the theoretical foundation for all human sciences. This paper examines the role of markets and money in modern economy to illustrate the types of issues and perspectives relevant to a reformulation of Economics within a broader political, social, cultural, psychological and ecological context. It examines the social forces responsible for the present functioning of economies, which can be effectively addressed and controlled only when they are made conscious and explicit. Whatever the powers that have shaped it development in the past, the rightful aim of economic science is a system of knowledge that promotes the welfare and wellbeing of all humanity.

#### Paper 10: The Eurozone Crisis and Democratic Legitimacy.

Maria Amélia Valle-Flôr, GHES/ISEG - Universidade de Lisboa.

Since the burst of the sovereign debt crisis in 2010, the EU responses to the crisis have translated in the expansion of EU institutions' competences into areas directly affecting national sovereignty, with great redistributive effects. Furthermore, many of the responses were taken by non-majoritarian institutions or ad-hoc formations, without a parliamentary scrutiny. As

such, concerns about an alleged democratic deficit have widened. The 'old' debate on 'supranationalism versus intergovernmentalism', shifted to a new one focusing on the mechanisms of representation and accountability that accompany the political process, the quality of governance, and a greater inclusiveness of European and national parliaments in the political process - 'parliamentarism versus executivism'. Drawing on the concepts of input, output and throughput legitimacy, this paper offers a view on some of the EU's democratic shortcomings.

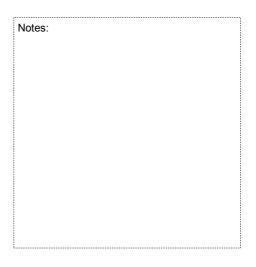
## 16:10 – 17:30 | PANEL A

Chair: Garry Jacobs

# Subject: Trans-disciplinary foundations of the market

Panelists: Tomas Bjorkman, Philip Koenig, Dimitrios Kyriakou, Carlos Alvarez Pereira.

«This session will explore the relationship between economic theories and models and the political, legal, social, technological and commercial factors influencing the functioning of markets to identity the scope for designing and regulating markets in a manner that promotes full employment more equitable income distribution with the context of a market economy. To what extend do our models represent or distort economic reality? Can we conceptualize a market system that more effectively promotes human welfare and well-being?»



## 10:00 - 11:20 | PLENARY SESSION IV

Chair: Robert Hoffman

#### Paper 11: Optimized Economic Capital for Emerging Markets Portfolio: Integrated Approach to Risk Assessment.

Mariya Gubareva and Maria Rosa Borges, UECE/ISEG- Universidade de Lisboa.

The main objective of this research is an assessment of interest rate risk and credit risk present in banking books of financial institutions. A derivative-based integrated approach to jointly quantify economic capital requirements for these two risks is developed following the historic value-at-risk method. It is based on the time series of credit default swap (CDS) spreads and interest rate swap (IRS) rates used as proxy measures for credit risk and interest rate risk. respectively. The developed technique is applied to assess interest rate and credit risks jointly as well as to measure them on individual basis. We also compare the outcomes of the proposed derivative-based integrated approach with a value-at-risk approach based on time series of bond yields, the methodology widely employed throughout financial sector.

We apply our derivative based technique to modeling economic capital for fixed-income portfolios exposed to developing countries debt. Based on the proposed approach, the cross elasticity of interest rate risk and credit risk is addressed through the prism of economic capital optimization. The employed historical data allow us to demonstrate that such cross-risk elasticity is a function of a business cycle phase, maturity of instruments, and creditworthiness of obligors. Our contribution to the new economic thinking regarding interest rate risk and credit risk management consists in their integrated treatment as the dynamics of interest rate and credit spread demonstrates the features of automatic stabilizers of each other. Such behavior does not represent an exceptional case but rather common and expectable circumstances, as crashes and recessions usually always coincide with downward tendency in interest rate dynamics. Thus, this research sheds light on how financial institutions may address hedge strategies against crystallization of downside risks. These strategies could be based either on only IRS contracts, or only CDS contracts, or on a combined employment of both IRS and CDS instruments. Possible outcomes of such strategies allow for optimizing economic capital allocated to banking books. As developing countries are heavily affected by creditworthiness related volatility of credit spreads our approach using historical data for diverse geographies offer a clue for improving risk management practices in terms of capital adequacy and Basel III rules. By taking into account inter-risks diversification effects, it allows enhancing financial stability through jointly optimizing Pillar 1 and Pillar 2 economic capital.

#### Paper 12: Towards a Society of Living. Provocations on Economy and Economics by a Layman and Entrepreneur.

Carlos Alvarez-Pereira, Innaxis Foundation & Research Institute.

This contribution explores the shortcomings of our current understanding of economy and economics, and how the incumbent framework of interpretation relates to structural failures which are all too obvious since the crisis of 2008. It proposes a reformulation to frame the economy as part of a larger, complex system of systems which is the planetary society at large. It points as well to social blind spots which have driven us into the accelerated gridlocks in which we live, and suggests some ideas to illuminate potential pathways for the evolution of human societies, in order to get out of the present bifurcation towards desirable futures.

#### Paper 13: Is it possible to shift the economic system onto a sustainable path and avoid collapse?

Graeme Maxton, Secretary General of Club of Rome.

Today's economic system is driving humanity towards a dead-end, literally. It is widening inequalities and reducing living standards in much of the world. The need for continuous economic growth is also the cause of society's environmental troubles; species loss, pollution and, most importantly, climate change. Yet change appears impossible. If society tries to reduce its dependency on economic growth using conventional policy options, unemployment rises and inequalities increase. This is seen as politically unacceptable. It is as if society were on a vast treadmill, which is driving it in a damaging direction, yet any attempt to get off makes the situation even worse in the short term. Our work shows that it is possible to solve this problem, by gradually shifting the economic system onto a more sustainable path without major disruption. There are unconventional policy options available which would boost average living standards in the rich world, reduce unemployment and inequality, and slow the pace of environmental destruction. Moreover, these options would provide an immediate advantage to the democratic majority, making them politically feasible.

### 11:40 - 13:00 | PANEL B

Chair: Mark Swilling

#### Subject: Economics and system interdependencies

Panelists: Robert Hoffman, Joachim Spangenberg, Seeraj Mohamed

«This session will examine the interdependencies between economies/Economics and the monetary, institutional, political, social, cultural and ecological systems and the implications for the formulation of more a realistic and effective economic theory.»

### 14:30 - 16:30 | PLENARY SESSION V

Chair: Emil Constantinescu

#### Paper 14: Economic Crisis, European Welfare State Models and Inequality.

Carlos O. Claramunt, Department of Applied Economics, University of Valencia.

The objective of this study is to analyze the relationship between European Welfare State models and inequality. This paper takes as its starting point the work of Sapir (2006). Sapir considers there are four European welfare state models in the European Union: 1) the *Nordic model* (Denmark, Finland, Sweden and the Netherlands) featuring the highest levels of social protection, high tax burden, active labour policies

and highly compressed wages; 2) the Continental model (Austria, Belgium, France, Germany and Luxembourg) with a high level of social contributive protection (pensions and nonemployment benefits) and a rigid labour market; 3) the Mediterranean model (Greece, Italy, Portugal and Spain) which concentrate their social spending on pensions and also have a rigid labour market and finally 4) the Anglo-Saxon model (United Kingdom and Ireland) with low levels of social protection (mainly healthcare), an extremely flexible labour market, weak labour unions and high wage dispersion. In this paper we have analyzed two other welfare state models: a) Central and Eastern European model and b) Baltic model.

#### Paper 15: Domesticating finance for pursuing post-crisis growth not only equality.

Dimitrios Kyriakou,

European Commission's Institute for Prospective Technological Studies; Commercial Bank of Greece; New Economic Theory Working Group of WAAS.

There has been a total (public and private) debt bubble that has been growing since the 80s, accompanying an implicit promise of higher standards of living through large market deregulation experiments (chief among them capital markets deregulation and capital mobility). The path chosen for delivering on this implicit promise was debt accumulation. This debt-based road to growth raised the weight, power, risk-taking and returns in finance - the larger its weight/ centrality, the likelier that losses would be socialised - while benefits remain private. Moreover, the concomitant attractiveness of finance siphons away talent from the scientific/ technological endeavours that could propel growth and ultimately justify higher indebtedness (i.e. the way the digital revolution building on science dating back to the 60s, justified ex-post credit expansion since the 80s). In sum, the meteoric rise of finance may be sawing off the proverbial branch on which it sits.

#### Paper 16: How to Finance our Sustainable Development Goals (SDGs): Socioecological Quantitative Easing (QE) as a Parallel Currency to Make the World a Better Place. Stefan Brunnhuber,

Medical Director and Chief Medical Officer, Diakonie Hospital, Germany. This presentation tries to find an answer to the question of how to finance the Sustainable Development Goals (SDGs) that the world has just decided to implement. I argue that besides the existing wealth of proposals, mainly along the lines of better governance and co-financing strategies, we need a complementary approach: parallel Quantitative Easing (QE) for SDGs only. Reverse pricing effects, drying out shadow economies and the impact of such a QE-SDG on the current liquidity trap and the debt trap are explained.

#### Paper 17: Macroeconomic theories of investment and development of a New Economic Theory.

Seeraj Mohamed, Department of Economics, University of the Western Cape.

In response to Jacobs (2015) challenge to develop a 'New Economic Theory', this paper examines different perspectives in macroeconomic theory to begin a discussion of what aspects of current theory could be useful to take forward into the discussion and point towards what should be left behind. The paper will focus on the important area of investment in this discussion of macroeconomics because the nature of accumulation in a society shapes the economic path of that society. The attainment of the universally recognised human values, such as economic rights, inclusiveness and sustainability that Jacobs (ibid) says the New Economic Theory should be based upon is shaped by a path-dependent process through which households and businesses reproduce themselves. This paper provides a survey of macroeconomic investment theory and models to show that key aspects inherent in heterodox macroeconomic theory are suited to the development of a New Economic Theory.

# 16:50 – 18:30 | PANEL C

Chair: Winston Nagan

#### Subject: Money and Financial Markets as Social Institutions

Panelists: Zbigniew Bochniarz, Stefan Brunnhuber, Erich Hoedl, Neantro Saavedra-Rivano «This session will focus on the role of money in society, the social and institutional framework within which money functions to determine the political, legal, cultural, social, psychological and organizational factors that determine how money and wealth are generated, measured, utilized, multiplied and distributed; the relationship between the monetarized and non-monetarized sectors of economy; and concepts related to different types of capital. What is the purpose of financial markets and how effectively do they fulfill their intended purpose? Can we envision a monetary system that more equitably promotes the welfare and well-being of all?»

Notes:

# 09:30 – 10:50 | PANEL D

Chair: Joanílio Teixeira (with the contribution of Ricardo Araújo & Danielle Pinheiro)

# Subject: Foundations of Economics as a Science

Panelists: Garry Jacobs, Graeme Maxton, Mark Swilling

«This session is intended to explore underlying premises on which Economics science (and other social sciences) are based: including assumptions regarding the characteristics of a science, value-based science, interdisciplinarity, transdisciplinarity, the role and validity of models and monetary measurements, objectivity and subjectivity, the evolutionary nature of society, the power of organization and networks, certainty and uncertainty, the multiple levels of social reality that determine economic outcomes, social power, and the role of individuals in society.»

# 11:10 – 12:30 | PLENARY SESSIONS VI

Chair: Zbigniew Bochnairz

#### Paper18: Self-Enforcing Agreements under Unequal Nationally Determined Contributions.

Emilson C.D. Silva, Alberta School of Business, University of Alberta.

For a large global economy with normal goods, and an unequal world income distribution, we consider the endogenous formation and stability of an international environmental agreement (IEA) under nationally determined contributions (NDCs). Nations share green R&D efforts and enjoy R&D spillovers if they join an IEA. Nonmembers do not enjoy R&D spillovers. We show that the Grand Coalition is stable under NDCs if all nations are active carbon abatement and R&D contributors. If some nations are inactive, because they lack sufficient income to provide carbon abatement and R&D, the stable coalition under NDCs is the coalition of all active (wealthier) nations.

#### Paper 19: Valuing Eco-Systems Services – Panacea or Pandora's Box for Biodiversity Conservation?

Joachim H. Spangenberg,

UFZ – Helmholtz Centre for Environmental Research.

Josef Settele,

SERI – Sustainable Europe Research Institute/ iDiv - German Centre for Integrative Biodiversity Research.

Scientists talk of "ecosystem services" and their economic value when arguing for the conservation of biodiversity. The limits to this line of argumentation are analysed based on the philosophy of values (axiology), exploring different kinds of values and discussing which of them can be adequately described with economic methods. Applying economic valuation to other objects than those for which economic valuation is defined is classified as a category error.

The three promises of economic valuation, raising awareness in polity, saving biodiversity by internalising external cost, and contributing to better decisions are assessed and turn out to be more than questionable. Finally, the niche is defined where economic valuation makes sense, taking into account the restrictions from the axiological and the economic analysis.

#### Paper 20: An insight into Payments for Ecosystem Services: presentation of the topic and application to Arbio project in Amazon rainforest.

Dario Belluomini, CEsA/ISEG, Universidade de Lisboa.

Payments for Ecosystem Services (PES) are perhaps the most innovative and fascinating market-based instrument of the 'environmental policy toolkit': they compensate landowners for conserving their forest and vegetative areas in order to generate environmental services like watershed protection and carbon storage (i.e. sustainable management), instead of clearing land or exploiting natural resources (a common feature of developing countries). PES have their roots in the field of public economics theory that studies possible solutions to the market failures generated by negative environmental externalities. In this paper, after debating the link with Coase theorem, we offer both a theoretical and applied analysis of PES. After presenting their definition and related problems, we shall briefly discuss all the main elements of a proper PES

scheme, e.g. conditionality, additionality, perverse incentives. Given the voluntary adhesion, potentialities of these tools are exceptional: indeed, possible economic implications for rural and indigenous communities shall be taken into account as well, presenting a few positive examples of their successful inclusion in PES schemes. The last part of the work focuses instead on the Peruvian-Italian project named Arbio in Amazon rainforest that aims at protecting pristine green areas by means of 'productive conservation': it shall be shown how PES, albeit their complex and time-consuming design, may represent a crucial asset and be exemplary for other similar small-scale projects.

#### Paper 21: Decoupling Resource Use and Wellbeing: A Key Element of a New Economic Theory.

Mark Swilling,

School of Public Leadership of Stellenbosch University, South Africa; Member, UN Environment Programme Resource Panel; Cofounder, PLANACT.

Those who think about the sustainability of natural resources in the context of a new economic theory to replace neo-liberalism tend to focus on climate change or eco-system degradation, or both. However, the adoption of the Sustainable Development Goals has focussed attention on a third dimension, namely the sustainable use of resources. In this paper I will review the body of work generated by the International Resource Panel since its inception in 2007 in order to demonstrate why it will be necessary to ensure that a New Economic Theory includes a thorough understanding of global resource flows and why it will be necessary to decouple resource use from human wellbeing. Indeed, without this, the twin goals of economic justice and human wellbeing envisaged by a New Economic Theory will not be achieved. It will be shown that rising resource use cannot continue, and that there are major new economic opportunities that flow from the innovations required to do a lot more with a lot less (resource efficiency) and a lot more with a lot more of what we currently use little of (renewables). Suggestions for how resources can be included in a New Economic Theory will be made.

#### List of Participants

António Mendonça President of Organizing Committee and CEsA/ ISEG-Universidade de Lisboa

Augusto Santos Silva Minister of Foreign Affairs of Portugal

Carlos Alvarez Pereira Founder and President, INNAXIS Foundation & Research Institute, Spain; CEO of Telenium; Chairman of SKYBUS and CXP, Member, Spanish Chapter of the Club of Rome

Carlos Ochando Claramunt Department of Applied Economics, University of Valencia

Carolina Tucwell ISEG – Universidade de Lisboa

Danielle Sandi Pinheiro Professor, University of Brasilia

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