

Centre for Studies in Economics and Finance

2000 Report



Dipartimento di Scienze Economiche e Statistiche

UNIVERSITÀ DEGLI STUDI DI SALERNO Via Ponte Don Melillo - 84084 FISCIANO (SA)

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What is CSEF?

The Centre for Studies in Economics and Finance (CSEF) performs and promotes research on saving, social security and fiscal policy, portfolio choice, financial intermediation, capital markets and their interactions with the real sector. CSEF started operating in 1997 and its premises are in the Department of Economics of the University of Salerno.

The primary aim of CSEF is to link up the University of Salerno with international research on these issues via seminars, conferences, exchange of visiting researchers and joint research projects. Since February 1998, it hosts researchers and doctoral students from other Italian universities and other countries, and it features a weekly research seminar, open to faculty as well as doctoral students.

CSEF is involved in the Ph.D. Program of the Department of Economics of the University of Salerno and in the Master in Economics and Finance (MEF) at the University of Naples Federico II. The administration of CSEF is entrusted to Lia Ambrosio.

Year 2000: Coming of Age

Year 2000 has been a special year for CSEF. The ranks of our resident researchers grew impressively, with excellent new hires covering areas ranging from macroeconomics to finance, industrial organization, and microeconometrics. In October 2000 there have been five important additions: Klaus Adam (from EUI), Stefan Ambec (from Montreal), Nicolas Boccard and Elena Del Rey (from CORE) and Giovanni Immordino (from Toulouse). This was the payoff of our first venture into the international job market. In January we were at the ASSA meetings in Boston to hire new researchers, with the support of funding from Carisal Foundation and the EU. Moreover, Mario Padula (from UCL) and Annamaria Menichini (from York), who were already at CSEF as post-doctoral fellows, have been appointed to permanent teaching positions in the Department of Economics of our University.

Needless to say, this growth in numbers and in the range of research, coupled with the young age of the new hires, makes for a much more exciting work environment. In our weekly seminar series, both invited and internal speakers meet with a lively and challenging audience, and a number of joint research projects are being started by CSEF researchers, often cross-fertilizing their knowledge of different fields.

This growth was made possible by two factors. First, the Carisal Foundation has agreed to provide its remarkable support, joining forces with our department in hiring new researchers. Second, currently our department is part of three EU-funded research networks: the TMR network on "Saving, Pensions and Portfolio Choice", the TMR network on "The Industrial Organization of Banking and Financial Markets in Europe", and the RTN network on "Understanding Financial Architecture: Legal and Political Frameworks and Economic Efficiency". The latter just started operating, and held its first meeting in Frankfurt in November 2000.

In 2001 we hope to match the pace of growth of 2000. The Carisal Foundation plans to appoint three new Fellows, and the department plans new faculty appointments in economics, both at the junior and at the senior level.

How to contact us:

CSEF, Dipartimento di Scienze Economiche Università di Salerno 84084 Fisciano (SA) ITALY Tel. (+39) 089 - 96 3167 / 3168 Fax (+39) 089 - 96 3169 E-mail csef@unisa.it http://www.dise.unisa.it/ascient/csef.htm

Main Research Projects

Analysis of Household Savings and Portfolio Choice

The overall objective of the research is to improve the understanding of financial decision making by households, in particular with respect to savings, portfolio choice, and the provision for old age. The objective is motivated by the greying of the EU population and the ensuing concern for the future income position of the elderly, and by the goals of the financial sector (including banks and pension funds) to provide financial services to households that make their future decisions.

The research topics studied include the precautionary and bequest motives for saving, experimental work on time preference, risk aversion, and decision making about savings. The applied work includes the relation between private savings and pension provisions; portfolio choice and taxes; the wealth of the elderly; early retirement schemes and labor supply; intra-household allocation; liquidity constraints, and the demand of housing and durable goods.

CSEF is involved in an international team, that includes CentER (Tilburg University), Università Cà Foscari (Venezia), IFS (London), Universität Mannheim, DELTA-INRA (Paris), and a national team including University of Rome Tor Vergata, University of Padova and Bocconi University.

The Industrial Organisation and Financial Markets in Europe

This research project spans the related fields of banking, corporate finance and market microstructure, using the methods of game theory and information economics. The research is organised around three themes that are central to Europe during its current financial and monetary integration. The first theme is "excessive competition" and systemic risk in the banking sector. The second is the industrial organisation of securities markets and the relationship between share ownership structure and provision of liquidity in equity and bond markets. The third theme is the industrial organisation of credit markets and the effect of bankruptcy schemes on borrowers' incentives to repay.

This research is carried out with ECARES (Bruxelles), IDEI (Toulouse), CSIC (Barcelona) and FMG (London School of Economics), within the TMR network on "The Industrial Organization of Banking and Financial Markets in Europe".

Information Sharing in Credit Markets

Recent theoretical work has analyzed the effects of information sharing on the performance of credit markets and the banks' incentives to set up such arrangements. The main goal of this research project is to extend this evidence by studying if information sharing arrangements promote lending activity, improve loan pricing and reduce default rates.

CSEF is involved in joint research projects with the Inter-American Development Bank and the World Bank, as well as with CEMFI (Madrid), Bank of Italy, Bocconi University, University of Naples Federico II and University of Sassari.

Law, Finance and Politics

This project aims to improve our understanding of the interaction between legal frameworks and financial arrangements, with special attention to the effect of legal rules on the relationship between

ownership and control, and on creditor protection. The project will also link research on law and finance with political economy. Politics plays an important role in shaping the legal and financial systems, and these give rise to significant stakeholders with influence over the political process.

On these themes, CSEF cooperates with SITE (Stockholm), CFS (Frankfurt), CEMFI (Madrid), CEPR (London), ECARES (Brussels), IDEI (Toulouse), Oxford, Princeton and Yale, in the context of the RTN network on "Understanding Financial Architecture: Legal and Political Frameworks and Economic Efficiency".

Funding

In 2000 research projects at CSEF have been funded by Training and Mobility of Researchers Network Program (TMR), the Research Training Network Program (RTN), the Italian Ministry for Universities and Scientific Research (MURST), the Italian National Research Council (CNR), and the Banque de France.

Conferences and Seminars

Conference on "Financial Markets, Legal System and Judicial Enforcement"

This conference, held in Naples on 3 March 2000, was organized jointly with Università di Napoli Federico II, Università Commerciale "Luigi Bocconi" and Università di Sassari, with the financial support of the Italian Ministry for Universities and Scientific Research (MURST). The protection of investors afforded by corporate and bankruptcy law and its enforcement by courts are increasingly recognized as key prerequisites for enterprises to raise sufficient equity capital and credit. That law and finance are related is not a new insight, but only recently economists working in corporate finance started investigating if and to what the legal setting affects the capital structure of companies and the development of financial markets. The task of this workshop was to assess some of the results of this recent research, combining theoretical and empirical contributions.

Marco Celentani and Juan Ganuza presented a paper on "Corruption and Competition in Procurement," which focuses on the relation between corruption and degree of competition. The standard view in the literature is that corruption depends on the existence of rents that can be illegally appropriated. Raising the degree of competition in the economy would decrease such rents and thereby curtail corruption, it is argued. The authors question this view. They consider a procurement problem in which the agent has better information about the price and the quality of the procured good than the principal. Given his superior information, the agent is delegated the task of verifying procured quality, but the delegation of this activity introduces the possibility to misrepresent the information in exchange for a positive payment from the firms. Contrary to conventional wisdom, the authors find that a higher degree of competition may lead to higher equilibrium level of corruption.

While Celentani and Ganuza focus on corruption, the other two theoretical contributions presented in the workshop investigate the effect of creditor protection on credit market performance. Both consider a collateralized debt contract, but one focuses on the incentive problems of debtors and the other on that of creditors, and they attain different conclusions. In the paper "Legal Enforcement of Credit Contracts and the Level of Investment," Daniela Fabbri shows that effective enforcement of creditors' right to repossess the collateral of defaulting firms can mitigate the moral hazard problem of debtors. By reducing the borrower's opportunistic behavior, superior judicial efficiency can reduce credit rationing.

Contrary to this result, Michael Manove, Jorge Padilla and Marco Pagano suggest that restrictions on collateral requirement and protection of debtors in bankruptcy may increase credit market efficiency, in their paper "Collateral versus Project Screening: A Model of Lazy Banks". They achieve this result by focusing on the screening activity of the banking sector, in a model of a perfectly competitive credit market with asymmetric information. In this setting, the protection afforded by collateral can induce banks to perform an inefficiently low level of screening activity. This inefficiently low level of screening results in an excessively large amount of credit being provided to bad and risky projects.

The two empirical papers presented in the workshop confirmed the relevance of legal institutions for equity and capital market. Davide Lombardo and Pagano in the paper "Legal Determinants of the Return on Equity", document three main regularities for the equity market. First, they find that total stock market returns are positively correlated with overall measures of the quality of legal institutions, such as judicial efficiency and rule of law. Second dividend yields and earning-price ratios also correlate positively with judicial efficiency and rule of law, but negatively with shareholder rights' protection. Thirdly, the excess return on new issues is negatively associated with the quality of accounting standards.

Guiso, Sapienza and Zingales investigate on the relation between social capital and financial development in the paper "The Role of Social Capital in Financial Development". The notion of social capital they use mainly refer to trust, i.e. how much households and firms "trust" each other where they are involved in an economic relationship. Using micro-data, both on households and firms, and exploiting the difference in the level of social capital across Italy, they find that the degree of financial development is lower in those regions where the level of social capital is lower. They also control for the quality of legal enforcement, finding that the effect of trust is stronger where the quality of legal enforcement.

EuroConference on "The Design of Primary Equity Markets"

Jointly with CEPR, CSEF organised the EuroConference on *The Design of Primary Equity Markets*, with financial support provided by the NYSE and the EU Commission. The conference was held at the Hotel Palace in Capri on 15-17 June 2000.

The impressive growth of equity markets in the last decade has been largely due to the increased number of companies that listed their stock for the first time on public markets, via initial public offerings (IPOs). The number and frequency of IPOs has risen impressively in the United States, in Europe and in developing countries, as part of a shift away from private or bank finance and towards funding via public security markets. This process is commonly explained by the decreased cost and greater availability of equity finance associated with more integrated markets and faster information linkages among them.

Improvements in the design and performance of primary equity markets may also have contributed to this process. Among these are the diffusion of book-building techniques, better disclosure rules, greater competition among investment banks, and possibly competition among stock markets. The task of this conference was to assess these improvements and their implications. The insights that could be taken away from the papers presented fall broadly in two classes: those concerning the microeconomic aspects of IPOs, and those concerning the overall performance and impact of the primary equity market.

The microeconomics of initial equity offerings

It is well known that "IPO underpricing" is a key determinant of the cost of equity capital for companies that tap the stock market for the first time. Typically, IPO prices are below the level that they reach on the market a few days or weeks later, when more complete public information is available. The conference added three important insights to this much-researched topic. First, IPO underpricing is lower when also other companies go public, because each IPO generates beneficial information externalities for other companies that are about to go public. Second, designing the IPO procedure also matters: bookbuilding allows substantial cost savings, but these saving materialize only if underwriters are willing to let the issue price vary outside the range initially chosen in response to demand. The third insight concerns the motivation itself of IPOs: the decision to go public is affected by firms' ownership structure. When their shares are held by only one owner and when banks own shares, companies are more likely to prefer private rather than public sales of equity.

The first finding was presented by Benveniste, Wilhelm and Yu in their paper on "Evidence of Information Spillovers in the Production of Investment Banking Services". They highlighted various implications of information externalities in the IPO process: bunching by industry, implicit subsidies

from the leader to the followers, and lower underpricing when many companies go public. These predictions are consistent with U.S. evidence: the number of IPOs affects the proceeds revisions in the pre-offer period, and IPO underpricing is reduced by clustering and by firm-specific information that was not publicly available. Moreover, the information spillover is twice as large for information-sensitive industries as for other industries.

The second finding was reported by Jenkinson, Ljungqvist and Wilhelm in their paper "Has the Introduction of Bookbuilding Increased the Efficiency of International IPOs?" Using a large crosscountry data set, they show that bookbuilding has higher costs but also countervailing benefits when the IPO is marketed by U.S. banks and sold to U.S. investors. The authors attribute these benefits to the US underwriters' willingness to price outside the initial range. This may reflect the lack of legal or regulatory impediments and greater transparency and competition for issues marketed by U.S. banks to U.S. investors.

Cornelli and Goldreich confirm that non-U.S. banks are reluctant to respond to unexpectedly high demand by raising prices outside the initial range, thus undermining book-building. In their paper "Bookbuilding: How Informative is the Order Book?" they explore the actual order books for 64 international issues sold by a European investments bank, and report that there is a high percentage of issues priced at the top of the initial price range, with a substantial oversubscription at the issue price.

The discussion of the last two papers brought to the fore that underpricing depends not just on the sale method (bookbuilding versus other mechanisms) but also on the objective function of underwriters and their regulatory constraints. The real question then is whether underwriters have the "right" objective function, face tough competition and are not restricted by regulatory constraints. For the US underwriters, this seems to be the case, which helps explain why they dominate the IPO industry. By the same token, insufficient competition among bidders and collusion between investment bankers and bidders may explain the higher IPO underpricing when U.S. banks were not involved.

The conference also added new insights about the motives why companies go public. The identity of the initial owners of the company appears to play a role in this decision. Boehmer and Ljungqvist in their paper "The Choice of Outside Equity: Evidence on Privately-held Firms" analyze 266 German firms that have pre-announced their intention to go public, and show that firms that issue new shares are more likely to complete the IPO process. In contrast, other companies and in particular those with a majority owner or a shareholding bank tend to use the pre-announcement to signal their willingness to find new partners but eventually remain private. In "Why do Governments List Privatized Companies Abroad?", Bortolotti, Fantini and Scarpa point that when a company is being privatized, political and legal variables also play an important role in the decision to go public, and in the choice of the exchange. Examining 342 listings of privatized companies in 42 countries, the authors find that privatized companies in OECD countries tend to list in countries offering better legal protection of shareholders.

Overall performance and macroeconomic impact of the primary equity market

Assuming that market participants do as well as possible in designing the sale mechanisms of new stock issues, one is still left with two important questions. First, is it possible and worthwhile to try and encourage IPOs by fostering the venture capital industry and by setting up special markets such as the "New Markets" that have recently sprung up in Europe? Second, should the markets where these

new issues are traded be designed and regulated in any special way?

Michelacci and Suárez shed some light on the first issue with their theoretical paper on "Business Creation and the Stock Market", where they show that the "informed capital" of venture capitalists and the stock market play complementary roles: the stock market allows venture capitalists to recycle their scarce informed capital. In their model, new businesses require a special type of capitalists who can solve information and incentive problems, so as to postpone their IPO until their profitability prospects are clearer. The scarcity of this informed capital, therefore, acts as a constraint on the rate of business creation. The lower the listing costs of firms, the faster venture capitalists can unload the firms they have funded on the stock market and "recycle" their informed capital with new businesses.

This suggests that any policy that can reduce the listing costs of new businesses translates into faster recycling of informed capital and faster real growth. In this framework, the difference between the IPO market (and the rate of business creation) in Europe and in the U.S. could be attributed to higher listing costs and lower availability of venture capital in Europe.

However, even assuming that listing costs are higher in Europe than in the U.S., listing costs may not be a crucial variable in the decision to go public. In their paper "Vagabond Shoes Longing to Stray: Why Foreign Firms List in the United States", Blass and Yafeh show that high-tech, high growth, export-oriented Israeli companies flock in droves onto the Nasdaq market in the U.S., forgoing the substantial tax benefits to listing in Tel-Aviv – not even by cross-listing their shares in Israel after listing in the U.S. In fact – they argue – these companies list in the U.S. precisely because it is costlier than in Israel, in order to signal their superior quality. Only firms with very large growth and profit opportunities can face the larger costs of a U.S. IPO, in terms of lower private benefits of control, larger underpricing and underwriting fees, and forgone tax benefits in Israel.

A similar signaling story was told by Kukies to explain why the recent IPO boom in Germany was associated with the creation of the Neuer Markt (NM) in 1997. To list on the NM, firms must be first admitted to the traditional exchange of the Deutsche Börse, and besides must fulfill additional requirements, especially in terms of information dissemination and accounting rules. Therefore, the companies that went public on the NM could have gone public before, but did not. In his paper on "The Effects of Introducing a New Stock Exchange on the IPO process," Kukies argues that the NM's stringent information disclosure requirements provided a precommitment device that did not exist before. Listing on the NM acted as a signaling device for the most promising companies, just as listing on Nasdaq did for the best Israeli companies according to Blass and Yafeh.

Whatever the intrinsic merits of the requirements imposed by the Nasdaq and the NM, it should be realized that both the design of these markets and the listing choices of the companies across markets are endogenous. Increasingly, stock markets tend to compete for listings against each other, and will tend to differentiate their listing requirements and trading mechanisms so as to soften such competition, as shown by Foucault and Parlour in their paper "Competition for Listings." For instance, a possible equilibrium configuration is one in which one market displays low trading costs but high listing fees while another does the opposite. The first market will be attractive for large companies, which will be ready to pay the high listing fees in return for a more liquid market for their shares, while the second market will specialize in smaller companies – an example strikingly reminiscent of the differences between the NYSE and Nasdaq.

Forthcoming Conference on "Courts, Banks and Firms"

Jointly with Università di Napoli Federico II, Università Commerciale "Luigi Bocconi", and Università di

Sassari, CSEF is currently organizing the conference on *Courts, Banks and Firms*, with financial support provided by the Italian Ministry for Universities and Scientific Research (MURST), which will be held in Naples on 11 May 2001 at the "Istituto Universitario Suor Orsola Benincasa". The main purpose of this event is to provide a meeting point for judges and lawyers on one side and economists on the other to discuss the economic effects of judicial system efficiency and the determinants of the current malfunctioning of the Italian judicial system. The workshop will be made of two sessions. The morning session will be devoted to the presentation of four papers by economists, each followed by a brief discussion by lawyers. In the afternoon session, instead, judges and lawyers will talk about the performance of the judicial system in Italy, and answer questions from economists.

Seminars

In 2000 the Department of Economics of the University of Salerno hosted one or two research seminars per week, except for February and March that witnessed a peak due to the job market seminars. Many papers were presented by invited speakers, others were given by resident researchers of CSEF:

January

Asymmetries of Information in Centralized Order-Driven Markets Nicolas BOCCARD (CORE, University of Louvain) and Riccardo Calcagno (Tilburg University)

Stima indiretta Giorgio CALZOLARI (Università di Firenze)

February

Disability Insurance and Labor Supply Hielke BUDDELMEYER (New York University)

Household Characteristics and the Distribution of Income Conchita D'AMBROSIO (New York University)

Health Insurance and Consumer Welfare: the Case of Monopolistic Drug Markets Berthold WIGGER (University of Mannheim and CSEF)

The Fall and Rise of Earnings Inequality in Italy. A Semiparametric Analysis of the Role of Institutional and Market Forces Marco MANACORDA (University College London and University College Berkeley)

Comparison Utility and Precautionary Saving Patrick TOCHE (University of Oxford)

Organizational Design of R&D Activities Stefan AMBEC (Green, Universitè Laval, Canada) Enforceability and Risk-sharing in Financial Contracts: from the Sea Loan to the Commenda in late Medieval Venice Yadira GONZALEZ DE LARA (Stanford University)

Learning in OLG Model with Imperfect Competition Klaus ADAM (Istituto Universitario Europeo)

Hormone Beefs, Chloridric Chicken and International Trade: Can Scientific Uncertainty Be an Informational Barrier to Trade? Giovanni IMMORDINO (Università di Tolosa)

Optimal Unemployment Compensation with Utility Bounds Nicola PAVONI (Universitat Pompeu Fabra)

Loan Contracts without Committment Peter SIMMONS (University of York)

March

Artificial Intelligence Tools for Economic Analysis: A Tutorial Mario EBOLI (Seconda Università di Napoli)

The Computational Cost of Inference Mario EBOLI (Seconda Università di Napoli)

Capital Subsidies versus Employment Subsidies: A Trade-off Between Capital and Employment? Alberto PETRUCCI (LUISS and Università di Macerata) and E.S. Phelps (Columbia University)

Did Financial Shocks Disproportionately Hit Small Businesses in Asia? Evidence from Malaysia and the Republic of Korea Ilker Domaç (World Bank) and Giovanni FERRI (Università di Bari and World Bank)

Higher Education Provision and Finance Elena DEL REY (CORE, Université de Louvain)

Does Volatility Pay? Giovanni BARONE-ADESI (Università della Svizzera Italiana)

Does Limited Bankruptcy Cause People to Be Credit Constrained Charles Benedict GRANT (University College London)

April

Information spillovers and factor adjustment Luigi Guiso (Università di Sassari and Ente Luigi Einaudi) and Fabiano SCHIVARDI (Bank of Italy) The Cycle of Corporate Distress, Rescue and Dissolution: A Study of Small and Medium Size UK Companies Oren SUSSMAN (London Business School)

May

Dynamic Risksharing in the United States and Europe Federico ASDRUBALI (European University Institute)

Labour Supply and Incentive: an Empirical Application of Optimal Tax Theory F. Bourguignon (DELTA, Paris) and Amedeo SPADARO (DELTA, Paris, and Universitat de les Illes Balears)

Sorting and Long-Run Inequality

Raquel FERNANDEZ (New York University and London School of Economics)

Capital Market Imperfections and Bank's Loan Supply: Does the Structure of the Bank Sector Matter? Charlotte OSTEERGARD (Financial Group Market of the London School of Economics)

The Impact of Lobbying on the Allocation of Political Authority Sonia FALCONIERI (Ente Luigi Einaudi) and Moez Bennouri

Intertemporal Choice and Consumption Mobility Tullio JAPPELLI (CSEF, Università di Salerno and CEPR) and Luigi Pistaferri (Stanford University)

June

Bank intervention and information manipulation Aleix CALVERAS (Universitat de les Illes Balears and CSEF, University of Salerno)

Psychological Traits and Trading Strategies

Bruno Biais, D. Hilton, K. Mazurier and Sébastien POUGET (Université de Toulouse and CSEF, University of Salerno)

October

Labour Demand and Financial Market Imperfections Giovanni PICA (Universitat Pompeu Fabra and Università di Napoli Federico II)

Limit Order Book Transparency and Depth: Empirical Evidence from Sydney and New Zealand Futures Exchanges Alex FRINO (University of Sydney and Sydney Futures Exchange)

Corporate Finance and the New Economy Nicolas BOCCARD (CSEF Università di Salerno and CORE)

The Walrasian Tâtonnement to Economize on Cognitive Transaction Costs: An Experiment Sébastien POUGET (CSEF Università di Salerno and Université de Toulouse)

Promotion Probabilities vs. Exits

Edwin VAN GAMEREN (Social and Cultural Planning Office - Den Haag) and Maarten Lindeboom (Tinbergen Institute and Free University of Amsterdam)

November

Competitive Prices in Markets with Search and Information Frictions Klaus ADAM (European University Institute and CSEF)

Voluntary Lender-Responsibility Agreements in the Consumer Credit Market Elisabetta Jossa (Brunel University) and Giuliana PALUMBO (European University Institute)

Decentralizing Incentive Efficient Allocations of Economies with Adverse Selection Piero GOTTARDI (Università Cà Foscari, Venezia)

How to Take an Exam if you Must. Bargaining with a Deadline Hsueh-Ling HUYNH (Boston University)

December

Network Economies for the Internet Hans GÖTTINGER (CSEF Università di Salerno)

Asset Prices under Bounded Rationality and Noise Traders Roberto MONTE (Università di Tor Vergata), E. Barucci and M. Giuli

Early Retirement Vincenzo GALASSO (Universidad Carlos III, Madrid and Università Bocconi, Milano) **KLAUS ADAM** graduated with a degree in Economics from the University of Bonn in 1996 and, upon completion of a Ph.D. at the European University Institute, has been appointed a fellowship by the Fondazione Carisal of Salerno in September 2000. His paper on "Learning while Searching for the Best Alternative", drawn from a chapter of his thesis, is forthcoming in the *Journal of Economic Theory*. His research interests include the modelling of learning and adaptive expectations, the economics of information and uncertainty, and experimental economics, especially in the context of macroeconomic models. He is currently working (joint with Ramon Marimon) on the development of an innovative experimental software and pursues his research interests on the relation between learning and the business cycle. Recently, he started to work in financial economics, investigating the competition between banks and security markets, jointly with Philipp Schönbucher from the University of Bonn.

STEFAN AMBEC joined CSEF in July 2000 and is currently a TMR fellow. He holds a Master degree from the University of Toulouse and completed a Ph.D. at the University of Montreal in September 1999. His thesis applied game theory to different topics such as the organisation of R&D activities (joint with Michel Poitevin, University of Montreal), water management (joint with Yves Sprumont, University of Montreal) and informal risk-sharing in developing countries. Last year, as post-doctoral researcher at Laval University, Canada, he worked on the regulation of hydropower production with Joseph Doucet (University of Alberta). He is currently working on informal risk-sharing and voting, the financial structure and control of R&D alliances, and on a complete contract approach to ownership. His paper "Organizational Design of R&D Activities" has been presented at the Econometric Society World Congress 2000.

NICOLAS BOCCARD joined CSEF in May 2000 and is currently a TMR fellow. He had previously obtained a doctoral degree at ENSAE-CREST in Paris in 1995 and held a position as Research Fellow at CORE, Université de Louvain since then. In 2000 his research concentrated on corporate finance (the competition among financiers for the funding of start-ups), market microstructure (asymmetries of information in electronic quotation systems, with R. Calcagno Tilburg University), electricity (congestion management in the integrated European market and market power, with D. Benintendi CORE) and insurance (competition for customers when the latter can defraud, with P. Legros Ecares & CEPR). He also continued his research with Xavier Wauthy from CORE on differentiation (horizontal and vertical) and capacity commitment as means of relaxing price competition in duopoly settings. His work has led to a publication in *Economic Letters* in 2000 and in the *Journal of Urban Economics* (with Yves Zenou from the University of Southampton) and a forthcoming paper in the *International Journal of Industrial Organization*.

MARIA CONCETTA CHIURI is Assistant Professor in Public Finance at the University of Bari and is associated with CSEF since 1998. Her research is in the field of consumption theory and labour supply, with a special focus on intra-household allocation of time and resources. Recently she has published "Quality and Demand of Child Care and Female Labour Supply in Italy", *Labour*, January 2000, and "Individual Decisions and Household Demand for Consumption and Leisure", *Research in Economics*, November 2000. Last year she has been a consultant to the World Bank and has written "The Macroeconomic Impact of Bank Capital Requirements In Emerging Economies: Past Evidence

To Assess The Future" (with Giovanni Ferri and Giovanni Majnoni). The paper provides international evidence on the detrimental effect that the enforcement of bank capital asset requirements exerts on the supply of credit.

MARCELLO D'AMATO is Assistant Professor in Economics at the University of Salerno. In the last academic year he has been a visiting scholar at Department of Economics of Boston University. His current research focuses on Central Banking Institutions and on the political economy of social security. Last year he completed a research paper on the relationship between commitment of monetary policy and openness (with Riccardo Martina), published as *CSEF Working Paper* n. 47. He has also worked with Vincenzo Galasso on the paper "Aggregate Shocks and Social Security Design". Other areas of research include: regional growth (with B. Pistoresi), multidimensional screening models (with L. Brighi), legal systems, liquidation costs and credibility in collateralized debt contracts, and collusive behaviour in monitoring hierarchies (with A. Acconcia and R. Martina).

ELENA DEL REY joined CSEF in September 2000 after completing her Ph.D. at CORE, Université Catholique de Louvain (Belgium) and is currently a TMR fellow. She had previously obtained an MA in Economics from Tufts University (MA, USA) in 1996 and a Bachelor's Degree in Economics from the Autónoma University of Madrid in 1995. Her paper "Teaching versus Research: a Model of State University Competition" based on a chapter of her doctoral dissertation "Essays in Education and Social Stratification" is forthcoming in the *Journal of Urban Economics*. Her research focuses on macro as well as microeconomic aspects of educational finance. These include the determination of optimal public spending in education in presence of externalities and in relation to the distribution of income and opportunities and the design of incentive schemes required to implement the desired levels of quantity and quality of education in a competitive framework.

SERGIO DESTEFANIS is Associate Professor of Economics at the University of Salerno. He received his Ph.D. at the University of Cambridge. His research interests include wage and price determination, growth and development in dualistic economies and the quantitative analysis of productive processes. In 2000 he presented papers at several meetings in Italy and the US, and published (jointly with G.C. Porzio from University of Cassino) a paper on dynamic graphics and model validation in *Applied Stochastic Models and Data Analysis*. Currently, he has two papers under revision with the *Journal of Productivity Analysis*, examining the relationships between technical efficiency and ownership concentration (with V. Sena from the University of Naples Federico II). He has also written a paper on cross-country evidence about increasing returns (to be published in a volume on Verdoorn's Law edited by J. McCombie for McMillan).

DANIELA FABBRI graduated with a degree in Economics from the Bocconi University in Milan in 1994. After obtaining a Master degree in Economics at the same University in 1995, she started a Ph.D program at Pompeu Fabra University in Barcelona. She joined CSEF in September 1999. Her research interests include corporate finance, legal institutions and growth theory. She presented a paper on "Legal Enforcement of Credit Contracts and the Level of Investment" at the ASSET meeting in Lisbon in November 2000. She is currently working with Mario Padula on the paper "Judicial System and Household Debt: the Italian case". The paper studies, from an empirical point of view, the relationships between judicial costs and the allocation of credit to Italian households. **GIOVANNI IMMORDINO** received a Ph.D. in Economics at the University of Toulouse. In September 2000 he has been appointed a fellowship by the Fondazione Carisal of Salerno. His paper "Self-Protection, Information and the Precautionary Principle" is forthcoming in the *Geneva Papers on Risk and Insurance Theory*. He is the recipient of the *2000 Young Economist Award* assigned by the European Economic Association for the paper "Hormone beefs, chloridric chickens and international trade: can scientific uncertainty be an informational barrier to trade?" (with Giacomo Calzolari). His research focuses on microeconomics, economics of uncertainty and information. He is currently working on international trade and on the optimal design of central banks.

TULLIO JAPPELLI is a Professor of Economics at the University of Salerno and a Research Fellow of the Center for Economic Policy Research. His current research focuses on saving, portfolio choice and banking. With Luigi Pistaferri (Stanford University) he has published Risparmio e scelte intertemporali (Bologna, II Mulino, 2000), which surveys recent developments in the theory of intertemporal choice and the empirical evidence on saving in the Italian economy. In 2000 he has also published "Using subjective income expectations to test for the excess sensitivity of consumption to predicted income growth" (with Luigi Pistaferri), European Economic Review, February 2000; "Searching for non-Keynesians effects of fiscal policy (with Francesco Giavazzi and Marco Pagano), European Economic Review, June 2000; "The dynamics of household wealth accumulation in Italy (with Luigi Pistaferri), Fiscal Studies, June 2000. A joint paper with Orazio Attanasio (Intertemporal choice and the cross-sectional variance of marginal utility) is forthcoming in the Review of Economics and Statistics. A paper with Marco Pagano ("Information sharing in credit markets: an international comparison") is forthcoming in a volume edited by Pagano on Preventing Default: Incentives and Institutions (John Hopkins University Press). With Luigi Guiso and Michael Haliassos he is currently editing a volume on Household Portfolios for MIT Press. The book will provide a comprehensive account of the status of theoretical knowledge and methodological achievements in the analysis of household portfolios, as well as evidence based on consistent microeconomic data for several countries.

CHRISTIAN JULLIARD joined CSEF in September 1999 after completing a Master in Economics and Finance at the University of Naples Federico II (Italy). He had previously obtained a B.A. in International Economics and Business Studies from Istituto Universitario Navale (Naples, Italy) with a final dissertation "On the super-neutrality of money in models of economic growth". He is a doctoral student in Public Economics at the University of Salerno. Last Spring he has visited the Midi Pirenee School of Economics, University of Toulouse I (France). He is currently attending the Ph.D. program in Economics at Princeton University. His research focuses on applied macroeconomics and econometrics, household portfolio choice and growth theory.

ANNAMARIA MENICHINI is Assistant Professor in Economics at the University of Salerno. She joined the CSEF in October 1999. She obtained the MSc in Economics at the University of York in 1995 and the Italian Doctoral Degree at the Università di Napoli Federico II in 1997. In November 2000 she has submitted her Ph.D. dissertation at the University of York. She has worked on the problem of the determination of the optimal financial structure under asymmetric information and risk of default and on the design of the optimal contract in a multi-principal environment when auditing mechanisms can be random. Particular attention has been devoted to the role of commitment in this type of setting. Her most recent research interests focus on multiple auditing with uncoordinated principals, on delegation of monitoring in a three-layer hierarchy and on problems of two-sided adverse selection.

One paper from her Ph.D. dissertation has been presented at the 2000 Royal Economic Society Conference (RES/SES 2000 Conference) and at the 2000 European Economic Association Congress. A revised version of it has been accepted for publication in the Conference Issue of the *Scottish Journal of Political Economy*.

MARIO PADULA is Assistant Professor in Economics at the University of Salerno. He joined CSEF in October 1999. He obtained a Master in Economics from Università Commerciale Luigi Bocconi, where he also obtained his BA in economics in January 1995. In February 2000 he completed a Ph.D. in Economics at the Università di Napoli, Federico II. He is currently writing up the dissertation for the PH.D in Economics at University College London. His general area of research is applied consumption analysis, but his current focus is on the dynamic properties of expenditures on durable goods and on the aggregate features of microeconomic models with non-convexities. A review essay from his dissertation is under revision for publication in *Giornale degli Economisti-Annali di Economia*. He has also contributed a paper on "Household Saving in Italy" (with Agar Brugiavini, forthcoming in *Ricerche Economiche*) to a project on a European comparison of saving and pension arrangements.

MARCO PAGANO is a Professor of Economic Policy at the University of Salerno and Director of the Research Program in Financial Economics of the Center for Economic Policy Research. In 2000 his research concentrated on banking, corporate finance and asset pricing. In the area of banking, he expanded his research on the impact of information sharing on credit markets, producing two empirical papers with Tullio Jappelli and completing the paper on "Sharing Default Information as a Borrower Discipline Device" with Jorge Padilla (European Economic Review, December 2000). He also edited a volume on Preventing Default: Incentives and Institutions (John Hopkins University Press). In the area of corporate finance, he worked on the political economy of corporate governance with Paolo Volpin (London Business School). He also continued his research on the cross-listing of shares with Ailsa Röell (Princeton University) and Otto Randl and Josef Zechner (University of Vienna), producing a paper on "What Makes Stock Exchanges Succeed? Evidence from Cross-Listing Decisions" (forthcoming on the European Economic Review). Finally, in the area of asset pricing he investigated the relationship between legal institutions and asset returns jointly with Davide Lombardo (Stanford University). Their paper "Legal Determinants of the Return on Equity" was presented at the 2000 Western Finance Association meetings in Sun Valley, Idaho, while another paper on "Law and Equity Markets: A Simple Model" is forthcoming in Convergence and diversity of corporate governance regimes and capital markets, a book to be published by Oxford University Press.

SÉBASTIEN POUGET has been a TMR fellow at CSEF since October 1999. He is currently working toward the PhD in Financial Economics at Toulouse University. His dissertation deals with bounded rationality in financial markets. He uses experimental methods to study the limits on traders' cognition and the influence of market institutions on individual rationality. The paper "Microstructure, Incentives and the Discovery of Equilibrium in Experimental Markets" (with Bruno Biais from Toulouse University) was presented at the NBER Market Microstructure Conference last May. The paper "Psychological Traits and Trading Strategies" (with Bruno Biais, Denis Hilton and Karine Mazurier) was presented at a TMR workshop at the London School of Economics in March.

PEGHE BRAILA, PhD by the Center of Operations Research and Econometrics (CORE) at the Université Catholique de Louvain (UCL), Belgium, has been a visiting researcher at CSEF from October 1999 until August 2000. She is mainly interested in the economics of financial markets, financial macroeconomics and monetary economics. Her work focuses on general equilibrium with incomplete markets and on the effects of asymmetric information for monetary economies. While at CSEF she completed "Asset Market Structure and Growth" (with Alessandro Turrini, CSEF Working Paper n. 45) and "Money and Credit in a Production Economy" (with Francesco Magris, CSEF Working Paper n. 46). Last year she presented a paper at the ASSET Meeting Conference in Tel Aviv and attended the meetings of the Financial Group organised by the CEPR at University Autonoma, Barcelona and at the LSE, London. In the Spring term she taught Economic Analysis at the Faculty of Political Science of the University of Salerno. She is currently an assistant research professor at the Institute of Economics of the University of Copenhagen, Denmark.

Aleix CALVERAS PhD by Universitat Autònoma de Barcelona, has been at CSEF from March through September 2000. His main area of research is in banking, particularly banking regulation and the interbank market. On this theme, he has studied for the European Commission the Spanish deposit insurance scheme within a larger project on European deposit insurance mechanisms present throughout Europe. A second line of research is industrial economics, in particular issues of quality provision in the tourism industry.

CHARLES BENEDICT GRANT is currently a Ph.D. student at the University College London. Grant has been at CSEF in April and May 2000. His main research areas are consumption analysis, liquidity constraints, the analysis of household debt and applied econometrics. While at CSEF, he has started a project with Padula on consumption inequality.

CHARLOTTE OSTERGAARD, Ph.D. from Brown University and currently at the Norwegian School of Management, has been at CSEF as a Visiting Fellow in May and June 2000. Her primary research areas are applied banking and consumption analysis. While at CSEF she has worked on the impact of liquidity constraints on banks' loan supply and is currently working on the integration of regional bank loan markets. Her research also includes work on the permanent income hypothesis and the complete market hypothesis.

GIULIANA PALUMBO has been a post-doctoral research fellow at CSEF from July 1999 until July 2000. During this period she has worked on two different projects. The first analyses the industrial organization and contractual design aspects of consumer credit supply across the EU. In particular, the paper "Voluntary Lender-Responsibility Agreements in the Consumer Credit Market" (with Elisabetta lossa, Brunel University) analyzes the optimal link between the sale and the credit contract when the possibility of incomplete performance of the sale contract is taken into account. The paper has been presented in different seminars as well as at the Annual Meeting of the European Economic Association held in Bolzano in September 2000. The second project is on the economics of comparative legal and judicial systems. Some preliminary results are contained in the paper "Rule-Making and Optimal Delegation of Information Acquisition".

OTTO RANDL, currently working on his PhD at the University of Vienna, Austria, has been a resident researcher at CSEF in February 2000 and participates in ongoing projects between the University of Vienna and CSEF. He does research in banking and corporate finance, particularly on international cross-listings of equity. He has presented a paper at the doctoral tutorial of the European Finance Association's annual meeting in London. The paper "What Makes Stock Exchanges Succeed? Evidence from Cross-Listing Decisions" (with M. Pagano, A. Röell, and J. Zechner) is forthcoming in the *European Economic Review*.

STÉPHANE STRAUB has been visiting CSEF for short periods in 1998, 99 and 2000. He is currently working toward a Ph.D. at Toulouse under the supervision of Jean-Jacques Laffont. His research applies tools from development economics and information and incentive economics to study corruption, the quality of institutions and international transfers of technology. Previously he has been working for ten years in Latin America; among others, he has been an entrepreneur, an advisor to the government of Paraguay and an independent consultant for international NGOs and multilateral institutions like the Inter-American Development Bank.

ALEX STOMPER, PhD from the University of Vienna, has been a researcher at CSEF from February to April 2000. During this period he has been worked on ongoing projects in the area of the industrial organization of banking, and particularly on the determinants of banks' decisions to specialize in lending to borrowers in certain industries. The question is of great relevance for the credit risk these banks face and, ultimately, for bank regulation. In addition, he has started a new project on the theory of the fee structure of stock exchanges.

BERTHOLD U. WIGGER, PhD from University of Göttingen, Habilitation from University of Mannheim, has been a researcher at CSEF from November 1999 through March 2000. His work is on public sector economics, especially on public pension policies and reform. A major focus of the research has been the normative and positive impact of intergenerational transfers from a macroeconomic point of view. While at CSEF, he has revised the following papers "Pareto-Improving Intergenerational Transfers" (CSEF Working Paper n. 37, forthcoming in *Oxford Economic Papers*), "Growth and Social Security: The Role of Human Capital" (with A. Kemnitz, CSEF Working Paper no. 33, forthcoming in the *European Journal of Political Economy* and "Gifts, Bequests, and Growth" (CSEF Working Paper n. 31, forthcoming in the *Journal of Macroeconomics*), and written "Trade Union Objectives and Economic Growth (with A. Irmen, CSEF Working Paper n. 34).

CSEF Working Papers

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1 Tullio Jappelli (CSEF, University of Salerno and CEPR) and Marco Pagano (CSEF, University of Salerno and CEPR)

The Determinants of Savings: Lessons from Italy

- 2 Luigi Guiso (University of Sassari, Ente "Luigi Einaudi" and CEPR) and Tullio Jappelli (CSEF, University of Salerno and CEPR) Background Uncertainty and the demand for insurance against insurable risks, published in Journal of Risk and Uncertainty
- **3** Orazio Attanasio (University College London, IFS and NBER), Luigi Guiso (University of Sassari, Ente Luigi Einaudi and CEPR) and Tullio Jappelli (CSEF, University of Salerno and CEPR) *The Demand for Money, Financial Innovation and the Welfare Cost of Inflation: An Analysis with Houselholds' Data*
- 4 Marco Pagano (CSEF, University of Salerno and CEPR) The Changing Microstructure of European Equity Markets, published in The European Securities Markets: The Investment Services Directive and Beyond, edited by Guido Ferrarini, Kluwer Law International, 1998
- 5 Luigi Pistaferri (University College London and CSEF, University of Salerno) Recommendations in the Italian Labour Market: An Empirical Analysis
- 6 Orazio Attanasio (University College London, IFS and NBER) and Tullio Jappelli (CSEF, University of Salerno and CEPR) Intertemporal Choice and the Cross Sectional Variance of Marginal Utility
- 7 Luigi Pistaferri (University College London and CSEF, University of Salerno) Superior Information, Income Shocks and the Permanent Income Hypothesis
- 8 Luigi Guiso (University of Sassari, Ente Luigi Einaudi and CEPR), Tullio Jappelli (CSEF, University of Salerno and CEPR) and Luigi Pistaferri (University College London and CSEF, University of Salerno) What Determines Earnings and Employment Risk?
- 9 Tullio Jappelli (CSEF, University of Salerno and CEPR) and Franco Modigliani (Sloan School of Management, MIT) The Age-Saving Profile And the Life-Cycle Hypothesis
- **10 Michael Manove** (Boston University), **A. Jorge Padilla** (CEMFI and CEPR), and **Marco Pagano** (CSEF, University of Salerno and CEPR) *Collateral vs. Project Screening: A Model of Lazy Banks*

11 Michael Haliassos (University of Cyprus and IMOP - Athens) and Christis Hassapis (University of Cyprus)

Borrowing Constraints, Portfolio Choice, and Precautionary Motives: Theoretical Predictions and Empirical Complications

- 12 Tullio Jappelli (CSEF, University of Salerno and CEPR) and Luigi Pistaferri (University College London and CSEF, University of Salerno) Using Subjective Income Expectations to Test for Excess Sensitivity of Consumption to Predicted Income Growth
- 13 Tullio Jappelli (CSEF, University of Salerno and CEPR) and Marco Pagano (CSEF, University of Salerno and CEPR) The Welfare Effects of Liquidity Constraints

Published in *Oxford Economics Papers*.

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- **14 Tullio Jappelli** (CSEF, University of Salerno and CEPR) The Age-Wealth Profile and The Life-Cycle Hypothesis: a Cohort Analysis with a Time Series of Cross-Sections of Italian Households
- **15 Maria Concetta Chiuri** (CSEF, University of Salerno) Intra-Household Allocation of Time and Resources: Empirical Evidence on a Sample of Italian Households with Young Children
- 16 Francesco Giavazzi (IGIER, Bocconi University, NBER and CEPR), Tullio Jappelli (CSEF, University of Salerno and CEPR) and Marco Pagano (CSEF, University of Salerno and CEPR) Searching for Non-Keynesian Effects of Fiscal Policy
- **17** Luigi Guiso (University of Sassari, Ente Luigi Einaudi and CEPR) and Tullio Jappelli (CSEF, University of Salerno and CEPR) Private Transfers, Borrowing Constraints and the Timing of Homeownership
- **18 Giacinta Cestone** (GREMAQ, Université de Toulouse and CSEF, University of Salerno) *Corporate Financing and Product Market Competition: An Overview*
- **19 Tullio Jappelli** (CSEF, University of Salerno and CEPR) and **Luigi Pistaferri** (University College London and CSEF, University of Salerno) *Consumption Insurance or Consumption Mobility?*
- **20 Thierry Tressel** (DELTA, Paris and CSEF, University of Salerno) Financial Intermediation and Growth: Long Run Consequences of Capital Market Imperfections
- **21 A. Jorge Padilla** (CEMFI and CEPR), and **Marco Pagano** (CSEF, University of Salerno and CEPR) *Sharing Default Information as a Borrower Discipline Device*
- 22 Tullio Jappelli (CSEF, University of Salerno and CEPR) and Marco Pagano (CSEF, University of Salerno and CEPR) Information Sharing, Lending and Defaults: Cross-Country Evidence

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- 24 Marco Pagano (CSEF, University of Salerno and CEPR) and Davide Lombardo (Stanford University) Legal Determinants of the return on Equity
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- 26 Maria Concetta Chiuri (CSEF, University of Salerno) Individual Decisions and Household Demand for Consumption And Leisure
- 27 Tullio Jappelli (CSEF, University of Salerno and CEPR) and Luigi Pistaferri (Stanford University) The Dynamics of Household Wealth Accumulation in Italy
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- **29 Marco Pagano** (CSEF, University of Salerno and CEPR) and **Paolo Volpin** (Harvard University) *The Political Economy of Corporate Governance*
- **30 Mario Padula** (University College London and CSEF, University of Salerno) *Euler Equations and Durable Goods*

2000

31 Berthold U. Wigger (University of Mannheim and CSEF, University of Salerno)

Gifts, Bequests and Growth

A familiar result in the theory of private intergenerational transfers is that competitive equilibria with gifts from children to their parents are dynamically inefficient whereas they are dynamically efficient with bequests from parents to their children. This note demonstrates that if growth is endogenous, both gift and bequest economies are dynamically efficient, but gift economies grow more rapidly.

32 Heidrun C. Hoppe (Universität Hamburg and CSEF) and Ulrich Lehmann-Grube (Universität Hamburg)

Spatial Competition in Credit Markets

Using Hotelling's two-stage model of spatial competition, we develop a lending model where the equilibrium outcome may be characterized by maximal differentiation - in contrast to Hotelling's model where firms have an incentive to reduce differentiation, as long as a pure-strategy price equilibrium exists. The difference is due to the specificities of banks' activities: banks perform independent tests to assess the credit-worthiness of their loan applicants, and thereby create a nongeographic customer heterogeneity. If banks are sufficiently pessimistic about the credit-worthiness of firms, they try to minimize the risk of default by moving away from the market center.

33 Alexander Kemnitz (University of Mannheim) and Berthold U. Wigger (University of Mannheim and

CSEF, University of Salerno)

Growth and Social Security: The Role of Human Capital

This paper studies the growth and efficiency effects of pay-as-you-go financed social security when human capital is the engine of growth. Employing a variant of the Lucas (1988) model with overlapping generations, it is shown that a properly designed unfunded social security system leads to higher output growth than a fully funded one. Furthermore, the economy with unfunded social security is efficient while the other one is not. These results stand in sharp contrast to those that obtain in models where economic growth is driven by physical capital accumulation.

34 Andreas Irmen (University of Mannheim) and Berthold U. Wigger (University of Mannheim and CSEF, University of Salerno)

Trade Union Objectives and Economic Growth

A trade union whose purpose is to raise wages above the competitive level may foster economic growth if it succeeds in shifting income away from the owners of capital to the workers and if the workers' marginal propensity to save exceeds the one of capitalists. We make this point in an overlapping generations framework with unionized labor. Considering a monopoly union which cares for wages and employment, we determine a range of trade union objectives and characterize the aggregate technology so that the union's policy spurs per capita income growth and increases welfare of all generations that adhere to the union.

35 Tullio Jappelli and Marco Pagano (CSEF, Università di Salerno, and CEPR)

Information Sharing in Credit Markets: The European Experience

The paper describes the operation of credit bureaus and public credit registers in Europe and extract potential lessons for upgrading credit registers in other countries. The evidence that we report is based on questionnaires directed to private credit bureaus and central banks, on direct interviews and on official sources. The European experience highlights a set of important issues. First, European privacy protection laws affect greatly the amount and type of information shared between lenders. Second, credit bureaus tend to originate from local lenders. Third, in Europe as elsewhere there are powerful forces pushing towards consolidation of the credit bureaus industry. While this process reflects the "natural monopoly" feature of the industry, its pace has been accelerated by technological factors and, especially within Europe, by the increasing international integration of capital markets. Three annexes complete the paper, reporting detailed descriptions of private credit bureaus activity in European countries, the main features of European public credit registers, and privacy protection restrictions to the activity of credit bureaus and public credit registers in Europe.

36 Tullio Jappelli and Marco Pagano (CSEF, Università di Salerno, and CEPR)

Information Sharing in Credit Markets: A Survey

Information sharing about borrowers' characteristics and their indebtedness can have important effects on credit markets activity. First, it improves the banks' knowledge of applicants' characteristics and permits a more accurate prediction of their repayment probabilities. Second, it reduces the informational rents that banks could otherwise extract from their customers. Third, it can operate as a borrower discipline device. Finally, it eliminates borrowers' incentive to become over-indebted by drawing credit simultaneously from

many banks without any of them realizing. Understanding the effects of information sharing also helps to shed light on some key issues in the design of a credit information system, such as the relationship between public and private mechanisms, the dosage between black and white information sharing, and the "memory" of the system. Merging the insights from theoretical models with the lessons of experience, one can avoid serious pitfalls in the design of credit information systems.

37 Berthold U. Wigger (University of Mannheim)

Pareto-improving intergenerational transfers

In the presence of endogenous growth intergenerational transfer from the young to the old reduce per capita income growth and harm future generations. On the other hand, competitive equilibria are inefficient if externalities sustain long-run growth. This paper shows that if individuals retire in the last period of their life, the inefficiency of the market economy can be removed by an investment subsidy without making the current or future generations worse off only if coupled with intergenerational transfers from the young to the old.

38 Mario Padula (University College London and CSEF, University of Salerno) Excess Smoothness and Durable Goods: Evidence from Subjective Expectations Data

This paper derives and estimates a model where durable and non-durable consumption are allowed to be non-separable in utility and individuals face a convex adjustment cost whenever they want to purchase a new durable good. Subjective expectations data allow to identify and estimate the marginal propensity to consume out of permanent shocks, which is a key parameter for the understanding of the excess smoothness puzzle and for policy purposes.

39 Bruno Biais (IDEI at Toulouse University), Denis Hilton (Social Psychology Department at Toulouse University), Karine Mazurier (Social Psychology Department at Toulouse University) and Sébastien Pouget (Toulouse University and CSEF, University of Salerno)

Psychological Traits and Trading Strategies

This paper analyzes experimentally if psychological traits and cognitive biases affect trading behaviour and performance. Based on the answers of 67 subjects to a psychological questionnaire we measured their degree of overconfidence, impulsiveness and self-monitoring, and their availability, representativeness and confirmation biases. The 67 subjects also participated in an experimental financial market, in the spirit of Plott and Sunder (1988). We find that impulsive subjects tend to place more orders but do not incur larger losses. We also find that overconfident subjects and subjects prone to the confirmation and representativeness biases have a greater tendency to place unprofitable orders. This negative impact of cognitive biases on trading performance is stronger when subjects have acquired some experience of the game. This suggests that biased subjects engage in improper learning.

40 Charles Grant, Bankruptcy (University College London)

Credit Constraints, and Insurance: Some Empirics

Bankruptcy acts as insurance if the decision to default is negatively correlated with income shocks. However, whether bankruptcy provides insurance is dependent on the punishment for default. Such rules can instead cause the consumer to be credit constrained. If debts are not fully enforceable, then a rational lender may limit how much debt any borrower will be allowed to hold. This limit will be higher if the punishment for defaulting on the debt is increased. The US provides a natural test of the theory since rules about which assets may be kept by the debtor, the state exemptions, when filing for bankruptcy differ dramatically across the different states. This paper shows that increasing the level of these exemptions causes less debt to be held by consumers, and offers an explanation for the differing ability of consumers to smooth consumption.

41 Annamaria Menichini (University of York and CSEF, Università di Salerno)

On the Role of Bargaining Power under No Commitment to Audit

This paper addresses the issue of the optimal contract design under costly state verification and no commitment to auditing when the contract offer comes from the uninformed party. Contrary to similar frameworks and to cases where the informed party retains the bargaining power, we find that the optimal contract is characterised neither by truth telling nor by mixed strategy equilibria. Depending on endogenous revenues and observation cost, a pure strategy equilibrium with either deterministic or zero auditing occurs. However we show that the introduction of a third party into the contract is crucial to ameliorate the incentive problem and involve a mixed strategy Nash equilibrium.

42 Giuliana Palumbo (European University Institute and CSEF, Università di Salerno)

Decision Rules and Optimal Delegation of Information Acquisition

The paper analyzes the relationship between decision rules and information acquisition in decision-making processes. The setting under consideration is one where information acquisition and decision making are assigned to different agents and the decision-maker's preferences are not observable. The paper argues that the choice of the optimal organizational structure at the information acquisition stage depends on the degree of discretion granted to the decision-maker. High discretion ensures more flexibility but requires that information acquisition is assigned to the parties directly involved in the decision. Since they have conflicting interests, the parties provide a check against abusive decisions although at the cost of information manipulation. Low discretion introduces rigidity but allows the delegation of information acquisition to an unbiased agent who ensures truthful reports. Which of these two "optimal combinations" is preferable is then shown to depend on the probability of finding information when an agent searches. Our analysis sheds light on the stylized fact that Civil Law systems are generally associated with inquisitorial procedures whereas Common Law systems are combined with adversarial procedures.

43 Luigi Guiso (University of Sassari, Ente Luigi Einaudi for Monetary, Banking and Financial Studies, and CEPR) and Tullio Jappelli (CSEF, Università di Salerno, and CEPR)

Household Portfolios in Italy

We provide a detailed account of the portfolio of Italian households and its evolution, using repeated crosssectional and panel data drawn from the 1989-98 Bank of Italy Survey of Household Income and Wealth. We offer an in-depth description of the lifetime pattern of asset holdings and their composition, the degree of asset diversification, and the propensity to invest in risky assets. The data also allow us to address some more fundamental issues on the determinants of household portfolios. We look at portfolio mobility and elaborate on the relevance of entry and exit costs. We also provide new evidence on the effect of income risk and information acquisition on portfolio choice.

44 Maria Concetta Chiuri (Università di Bari and CSEF, Università di Salerno) and Tullio Jappelli (CSEF,

Università di Salerno, and CEPR)

Financial Markets Imperfections and Homeownership: An International Comparison

We explore the determinants of the international pattern of homeownership using the Luxembourg Income Study (LIS), a collection of microeconomic data on fourteen OECD countries. In most of these countries the cross-section is repeated over time. This allows us to construct a truly unique international dataset on over 400,000 households. The dataset also includes selected demographic variables (carefully matched between the different surveys). After controlling for individual-country effects, cohort effects and calendar time effects, we find strong evidence that different down payment ratios affect the age-profile of housing tenure, particularly for the young.

45 Pighe Braila (CSEF, Università di Salerno, and CORE, UCL Belgium) and **Alessandro Turrini** (Università di Bergamo and Centro Luca Dagliano , Università Luigi Bocconi, Italy)

Asset Market Structure and Growth

In this paper we illustrate the possible normative relevance of the links between human capital and financial assets via an example related to growth. Human capital investments occur in a risky environment, in that they are subject to aggregate uncertainty. Agents are heterogenous in their income streams, and this generates different risk attitudes and the scope for trading in financial assets. In this environment, human capital is a non-marketable asset that interacts with the existing financial structure in transferring wealth over time. When the financial structure is complete, growth is indeterminate because individual allocations between human capital and a tradable asset are indeterminate. When the financial structure is incomplete, the growth rate depends on the payoff structure of the assets. An issue of optimality for the structure of asset returns is raised.

46 Pighe Braila (CSEF, Università di Salerno, and CORE, UCL Belgium) and **Francesco Magris** (Università di Trieste and University of Cambridge, UK)

Money and Credit in a Production Economy

In this paper we combine liquidity constrained lenders and borrowers in a market for investment projects that is characterized by incomplete information. The assumption of different probability distributions of the investment projects creates an adverse selection problem which gives rise to credit rationing in the loan market. Monetary policy has real effects, interacts with both the degree of liquidity and the degree of credit rationing, and alters the aggregate level of capital stock and its marginal productivity.

47 Marcello D'Amato (CSEF, Università di Salerno) and Riccardo Martina (Università di Napoli Federico II)

Credibility and Commitment of Monetary Policy in Open Economies

In this paper we study the delegation of monetary policy to independent central bankers in a two country world with monetary spillovers. The paper shows that under imperfect commitment and private information of the Central Bankers about their objectives the optimal degree of commitment depends on the correlation structure of the shock hitting the economies. When the correlation of the shocks across countries is negative, as when the variance to output depends mainly on shocks to the terms of trade, there exist strategic complementarity in the optimal degree of commitment. When the correlation of shocks is positive (common technological or demand shocks) there exist strategic substitutability. These result may provide rationale for the simultaneous increasing attention to the institutional solution to the credibility problem in

monetary policy in most advanced countries in the last decades.

48 Luigi Guiso (Ente Einaudi, University of Sassari, and CEPR), Michael Haliassos (University of Cyprus, Hermes, and IMOP), and Tullio Jappelli (University of Salerno, CSEF, and CEPR)

Household Portfolios: An International Comparison

This paper presents an overview of the main findings of an international project on Household Portfolios coordinated by the authors. Contributions to the project deal with the state of the art in analytical, computational, and econometric methods of analysis of household portfolio choice, identify stylized facts and trends observed in five major countries, and discuss issues relating to the portfolios of two important population groups, namely the elderly and the rich. In this paper, we integrate the main findings of the project, compare portfolio behavior across countries, and contrast theoretical predictions to empirical findings. This allows us to identify a number of stylized facts and portfolio puzzles that future theoretical and empirical research should attempt to analyze and resolve.

49 Hans W. Gottinger (University of Maastricht and CSEF, University of Salerno)

Environmental Regulation with Optimal Monitoring and Enforcement

We derive a set of optimal environmental regulations in the presence of asymmetric information about pollution abatement costs, where compliance may have to be induced through appropriate monitoring and enforcement measures. The regulator commits to monitoring of compliance with incentive compatible environmental regulations. The regulator can reveal regulations to achieve the objective of choosing the given abatement level, by proposing a menu of regulatory contracts that specify abatement levels.

50 Marco Pagano (CSEF, University of Salerno, and CEPR), Otto Randl (University of Vienna), Ailsa A. Röell (Princeton University and CEPR), Josef Zechner (University of Vienna and CEPR)

What Makes Stock Exchanges Succeed? Evidence from Cross-Listing Decisions

Despite the increasing integration of capital markets, geography has not yet become irrelevant to finance. Between 1986 and 1997, European public companies have increasingly listed abroad, especially in the U.S. We relate the cross-listing decisions to the characteristics of the destination exchanges (and countries) relative to those of the home exchange (and country). European companies appear more likely to cross-list in more liquid and larger markets, and in markets where several companies from their industry are already cross-listed. They are also more likely to cross-list in countries with better investor protection, and more efficient courts and bureaucracy, but not with more stringent accounting standards.