

Journal of **APPLIED** **ECONOMETRICS** **NEWSLETTER**

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From the Editor

This year the IAAE editorial meeting took place virtually on June 21, 2021 during the annual IAAE conference, sponsored by the *Journal of Applied Econometrics/Wiley*. The 2021 annual IAAE conference took place virtually on June 22-25, 2021 in Rotterdam due to the pandemic. It was organized by the IAAE directors together with program chairs Fabio Canova (BI Norwegian Business School) and Jason Abrevaya (University of Texas Austin), local organizers Dick van Dijk and Philip Hans Franses (both Erasmus University Rotterdam) and hosted by the Econometric Institute at Erasmus School of Economics in Rotterdam. For more information, see <https://appliedeconometrics.org/>. The conference was really excellent: we received more than one thousand submissions! The IAAE invited lecture was delivered by Frank Diebold and the Gibbs lecture by Jaap Abbring; the program also featured invited presentations by Wouter den Haan, Yuichi Kitamura, Juan Rubio Ramirez, Enrique Sentana and Herman van Dijk. Next year, the IAAE conference is planned to take place in King's College London, U.K., on June 21-24, 2022. I look forward to seeing you there!

We have other excellent events coming up. The IAAE will continue its Webinar series, to be held every other Wednesday via Zoom. The schedule is provided below and it is also available at: <https://appliedeconometrics.org/>. As always, this is a great opportunity for IAAE members to get together and catch up on the latest research in the safety of your own house.

We also encourage IAAE members to send their applications for funding to organize seminars or workshops using IAAE Webinar platform; the list of sponsored conferences is provided below. If you would like to put together workshops or seminars around a topic or field, please send an email to applied.econometrics.iaae@gmail.com.

The IAAE is going to elect new Fellows soon, and we are currently receiving nominations from IAAE members. This year we also have two IAAE Directors' positions to be filled. The IAAE will soon send an email requesting your input and nominations for the two IAAE Director positions. We would like to thank Professor Ed Vytlačil and Professor Hashem Pesaran for all the work they have done as Directors of the IAAE.

Also, note that again this year the IAAE will sponsor two annual sessions at the 2021 ASSA Meetings!

The two IAAE-invited ASSA sessions are: “Machine Learning in Finance and Macroeconomics” and “Climate and Environmental Policy Evaluation”. Watch out for the next JAE Newsletter for more information on the forthcoming ASSA sessions.

Finally, I am very happy to report that we are starting a new series of interviews with the people who have helped build and develop applied econometrics into the exciting field that it is today! For this reason, the interview series is titled: “Interview with Applied Econometrics”. We are fortunate to kick-off this event with the first interview with Hashem Pesaran right here below. Hashem Pesaran is not only an excellent applied econometrician, but also the very person that started the Journal of Applied Econometrics and the International Association for Applied Econometrics! His vision and leadership have shaped the field of applied econometrics into what it is today. We are deeply indebted to him for starting the International Association for Applied Econometrics in 2011 and for serving as one of the Founding Directors of the IAAE and the Chair of the Board of Directors. Even though Professor Pesaran decided to step down as a Director, he will remain a key Advisor to the IAAE Board. Thank you, Hashem!

Stay safe and take care,



[Barbara Rossi](#), Editor

P.S. As always, keep in mind that the IAAE welcomes applications for funding conferences and workshops in econometrics (consult the [terms and conditions of the IAAE Conference Sponsorship Grant](#)). Applications should be submitted *at least six months* before the conference takes place to applied.econometrics.iaae@gmail.com. Those interested in hosting the IAAE conference in the future are welcome to apply by sending a formal application to applied.econometrics.iaae@gmail.com.

Journal of Applied Econometrics Editorial Board



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Interview with Applied Econometrics

Interview conducted on January 15, 2020

by Barbara Rossi (Univ. Pompeu Fabra, ICREA and Barcelona GSE)
and Gergely Ganics (Central Bank of Hungary and Corvinus University of Budapest)



Dr. M. Hashem Pesaran is the John Elliot Distinguished Chair in Economics and Professor of Economics at USC Dornsife, and Director of the Center for Applied Financial Economics. He was the Director of the USC Dornsife Institute of New Economic Thinking from August 2014 through June 2018. He is also an Emeritus Professor of Economics at Cambridge University and a Lifetime Fellow of Trinity College, Cambridge. Previously, he was Head of the Economic Research Department of the Central Bank of Iran (1974-76) and Under-Secretary in the Ministry of Education (1976-78), Iran. He has also been a Professor of Economics and Director of the Applied Econometrics Program at UCLA (1989-93); a Visiting Professor at the Institute of Advanced Studies in Vienna; and a Visiting Professor at the University of Pennsylvania.

Dr. Pesaran is a Fellow of the British Academy, the Econometric Society and the Journal of Econometrics. He was awarded Honorary Doctorates by the University of Salford in 1993, the University of Goethe, Frankfurt in 2008, the University of Maastricht in 2013 and the University of Economics in Prague in 2016. In September 2013 he was named as Thomson Reuters Citation Laureate in Economics. More recently he was named by Thomson Reuters as one of the World's Most Influential Scientific Minds for 2014 and 2015.

He received the George Sell Prize (1990) and the Royal Economic Society Prize (1992), the Best Paper Award of Econometric Reviews (2004-2005), Best Paper Award of the International Journal of Forecasting (2007), and the Econometric Theory Award (2008).

As the Founding Editor of the Journal of Applied Econometrics, Dr. Pesaran established a journal which has since become a well-respected outlet for first-class publications in applied econometrics. Our readers also know Dr. Pesaran as Founding Member and Director of the International Association for Applied Econometrics.

BR: It is a pleasure to have the opportunity to talk to you, Hashem. We would firstly like to thank you for your time. We are planning to start a new section devoted to interviews with leaders in econometrics in the Newsletter of the *Journal of Applied Econometrics (JAE)*, so we immediately thought of you, as the Founder of the Journal and one of the leaders in the field.

HP: It is a pleasure to talk to you, as the current Editor of the *JAE*, establishing the journal further. Thank you so much for your work as well.

BR: During your long and fruitful career, you have produced several important academic works and at the same time you started a new Journal, the *JAE*, and a new Association as well, the *International Association for Applied Econometrics*, which is a big success. We would like to begin by learning more about the *Journal* and the *Association*. Why did you decide to start a new journal?

HP: This is quite an interesting story. I did my PhD in Cambridge under the mentorship of David Champenowne focusing on time series econometrics, and spent one year as a visiting student working with Zvi Griliches at Harvard, where I was exposed to new theoretical developments on distributed lag models and model selection. When I returned to Iran in 1973, and later as the Head of the Research Department of the Central Bank of Iran, I was exposed to many applied problems, which helped shift my focus from purely theoretical issues to more applied practical problems. As a result upon my return to Cambridge in late 1978 (just before the Iranian Revolution in February 1979), I started working in more applied areas such as evaluation of rational expectations (“The Limits to Rational Expectations”, Blackwell, 1987), empirical efficacy of Keynesian and Monetarist paradigms, and development of software programs to de-mystify complicated econometric techniques for applied researchers (which led to Microfit). So it was the conjunction of a number of events which led me to think that, in order to make applied econometrics viable as a part of policy discussion and in public debate, it was necessary to make applied research socially accountable. I thought that a necessary condition to achieve this aim would be to insist on replicability of research so that its validity can be checked. At the time, very few economists cared about this issue. As I emphasized in the editorial statement that I wrote for the first issue of the *Journal of Applied Econometrics*, my primary reason for starting a new journal was to place replication and replicability at the core of applied research (Pesaran, 1986). But it took some time before we started a Replication Section with Badi Baltagi as the first editor in the *Journal*. At the time most colleagues that I talked to maintained that “it is the author’s responsibility, the journal is not responsible for that”. But, as you know, it is now quite common for mainstream journals to demand authors to provide data and codes for replication of their research.

Around that time, Arnold Zellner was pushing to establish the *Journal of Business and Economic Statistics*, and Peter Phillips was about to start his new journal, *Econometric Theory* to be published by Cambridge University Press. I was aware of these developments, which made the establishment of a third econometrics journal even more difficult and challenging. But the selling point of the *Journal of Applied Econometrics* – which distinguished it from other journals – was its emphasis on rigorous applied work which is replicable and socially accountable. That view was not easy to get established through the profession. Even unsolicited letters were sent to *Wiley* against the founding of *JAE*, arguing that there were

already enough journals. I had just been appointed an Associate Editor of *Econometrica* when Angus Deaton became the Co-Editor at the time, with the mission of making *Econometrica* more applied. I had known Angus from the time he was PhD student in Cambridge as well as a co-author of a paper which we published in *Econometrica* in 1978. When he heard about my idea of establishing a new journal, Angus tried to persuade me not to go ahead with the project. I recall him telling me that “Hashem, we don’t need a new journal, I am there, and the *Econometric Society* is determined to make *Econometrica* more applied.” But I knew that such a large body as the *Econometric Society* may not be able to pull this off, although I was optimistic that they would do it eventually. I was able to convince *Wiley* to recognize founding the new journal as an opportunity and they were very forthcoming. Despite all the objections, I think the credit goes to *Wiley* for trusting my judgement.

GG: Can we say that to a large extent the profession was influenced by the *JAE*’s decision to make replicability such a central part of the mission of the *Journal*?

HP: I think that is true, although many other factors have been at work, in particular great advances made in data processing and data storage which none of us had expected at the time. But the success of *JAE* in the area of replication encouraged other publishers and journals to consider it as well. For example, a few years ago I was invited to present my ideas on replication to a group of publishers in London – not only in economics but in many other fields from social sciences to archaeology, and even hard sciences. Many publishers were reluctant to get involved. They thought it would be very costly for them to develop and support replication and as a result they were reluctant to be seen as policing every paper they published. However, I explained that it is ultimately the responsibility of authors to provide evidence to convince readers that their work is replicable and can therefore be checked and evaluated easily. I argued that the onus would be on the authors; since the journal would be acting as an intermediary, and I think that is why the model works. In the case of the *JAE*, the cost of managing the replication section is minute relative to the total revenue of the *Journal*. A further thought on the issue of publication is that a published article is intended to be durable (publicly available for years if not for ever) and immutable (cannot be altered). The issue of accountability becomes blurred if it is possible to change everything any minute you want to, as in the case of a manuscript. It should be recognized that durability and accountability can only be provided by publishing in reputable journals that are expected to last for a long time into the future.

BR: Maybe we can move on to the *International Association for Applied Econometrics*, which is your other bigger project, as I see it. Perhaps you could start by telling us why you decided to start a new association.

HP: The founding of IAAE was very closely related to the contract I signed with *Wiley* when *JAE* was formed. I convinced *Wiley* to allocate 10% of the net profit of the *Journal* into a research fund, which would be used for the promotion of applied econometrics, and therefore also promote the *JAE*. They were not very optimistic that the *JAE* would make much money, and so it was agreed that the research fund would receive either 10% of the profit or 2,500 pounds if the profit was below that. As the *Journal* started to become successful 10% of the profit became quite a significant sum. As some readers may remember, the *Journal of Applied Econometrics* started having its own conference at its annual editorial meetings. We also supported many other international conferences which were not directly related to the *JAE*, but which promoted econometrics. So that research fund effectively acted like an association, but it was not an association.

Peter Phillips, together with a few other colleagues, was very eager to create a new foundation that covered

econometrics, theory and applied, and prepared draft articles of association he had in mind, which I found very attractive and promising. But we could not get the different, competing publishers of *Econometric Theory*, the *Journal of Applied Econometrics*, and the *Journal of Econometrics* together to unite forces and create an association which would encompass all these three journals. Then, before stepping down from the *JAE* as Editor, I realized it was necessary to do something with the research fund, as managing its expanding activities could pose too great a burden for a new Editor to take over. I decided for the continued success of the *JAE*, and in order to make the research fund useful for the society of econometricians at large, we would need to create an association. *Wiley* allowed me to move what was left of the research fund into the *Association* which we formed with Charity status in UK. So, establishing the *IAAE* actually took something like 10 years of planning and implementation!

I am personally hopeful that more and more Fellows and Members of the *Association* will help to propel it to a new level: by organizing new activities, to have new chapters, regional conferences, workshops, and training workshops for junior people. I have always emphasized the importance of promoting junior researchers, giving them more opportunities and exposing them to senior academics. I remember, as a young researcher, it was great to go to a conference and to meet senior econometricians there and get to know them. I think that it is very important that invited speakers not just go, give their talk and leave, but a senior member should be also involved in talking to junior researchers, and attend their presentations, and provide them with constructive comments as appropriate.

BR: Another initiative that the *IAAE* started under your leadership along these lines is the new *IAAE*-sponsored sessions at the *ASSA*. They have been a big hit in the past couple of years. This year you organized the session “Advances in Panel Data”, and I understand that it was also very successful. Could you tell us a bit more about the session at the *ASSA*, how you think they are going to develop, and if you have any other activities in mind?

HP: As a matter of fact, I think this initiative came from you, so you should take the credit for this. We had great speakers, for example Professors Cheng Hsiao and Stephane Bonhomme were there. In order to maintain the success of such sessions, they should be developed not along the lines of any individual’s particular interest but more broadly in line with the interest of the general body of the profession. When running a journal or an association, one should not relate it to one’s own research, but rather to what is important to *others*. The success of anything depends upon how it relates to other people’s research interests, and what these people want to learn about as they go forward with their own research. As you know, econometrics and data sciences are progressing quite fast because of the availability of large data sets as well as the new techniques which are being developed, and it is important that *JAE* and *IAAE* respond and reflect these developments.

I think the way to make the *Association* relevant is to organize sessions, invited lectures, or workshops which expand on these new developments and help researchers to understand them and adopt them to help their own research. This will, in turn, have a positive feedback on publications, and the *JAE* will benefit from it as well. As in asset pricing, you need to pick the right assets, but that does not mean you always get it right: you need to diversify your portfolio. One needs therefore to identify new areas, but not forget that old areas are also important, in order to somehow move both sides of the profession forward.

BR: We have already touched a little bit on the importance of junior researchers: they have always been at the center of the *Journal*, at the center of your view and at the center of the *Association*. Many junior researchers will be reading this interview so perhaps you can share some advice for them?

HP: I feel that they are under huge pressure. It has become more and more difficult nowadays for junior researchers to get a suitable academic position. In my time, I did not even go on the job market. I gave a talk at LSE, and I got job offers from Oxford, Cambridge and LSE. Although I had to go back to Iran, I was very pleased to get the job offers – but I had not applied for a position.

First, I have always had the idea that we need to have more post-doctoral positions for economists, because there is a very large number of able researchers but there are not enough slots for them. The fact that they cannot get to the top universities does not mean they are not good enough, and it is important that we provide new research positions to avoid loss of social capital.

Second, we need training and related activities because not all junior researchers are able to access the best researchers while they are doing their PhD. Nowadays we often arrange poster sessions: in physics and natural sciences these sessions have been very successful, but unfortunately in economics they are considered quite negatively. If you invite senior people to do a poster session, they will probably turn you down. But without some senior researchers agreeing to present poster sessions, juniors will not get the feedback that presenting in a poster session is fine, and that it is something you need to do if you cannot get your research accepted for presentation at conferences. We need, therefore, to have more opportunities for junior researchers to interact with other, more senior, researchers. I think it is remarkable how sometimes just a brief conversation or connection can redirect a junior researcher's work along the right path.

BR: Maybe we can turn to asking a bit more about your own research. For example, how do you get research ideas? What motivates you through the ups and downs of the research process? When and how in the end do you know that the paper is ready for circulation and submission?

HP: It is a tough question because my experience does not necessarily translate to others. The most important point to bear in mind is the reason behind the research itself. It should not just be motivated by having a publication and a new entry in one's cv. People often say: "My aim is to publish in this journal." My view is that you should focus on the question that you are interested in answering. It may be that what you are doing is only a small component of answering that question, but it does not matter: you should be able to answer that question. The nature of the question in my view is critical in one's research. It should also relate to topics that people will be interested in. I am not saying that all research we carry out should be directly related to society's current or future challenges, but our research should somehow be related to it, even in a roundabout way. We are economists, and seems reasonable to expect that our research, even if highly mathematical and abstract, should in some form and at some stage ought to help in solution of economic problems. So, the first question is: why are you doing the research, and what is the (ultimate) purpose of it?

During my time at the Central Bank of Iran, the research I was doing was not very quantitative, but the problems that I had to address were quite quantitative. Six years later, when I returned to academia, that experience was very important in helping me to identify research topics which I pursued. For example, my relatively recent interest in panel data econometrics originated when I was in Iran because we were looking at price elasticity. You may recall that the price of oil quadrupled in the 1970's, and important question face Iran, as a major oil exporter was the possible outcome of such prices rises for energy demand. We needed to identify the price elasticity of demand for energy. When we did time series analysis, we could not find any effect of price changes on demand, because the real price of oil had hardly changed during the 1960's. Later I came across the work of Robert Pindyck on energy demand who used cross sectional differences in

taxation of energy across OCED countries to estimate price elasticities. I realized that, if you do not have enough variation in the time dimension, it might be possible to exploit variations in the cross-section dimension. In this way it became clear to me that you need to combine time series with panel data techniques. In short, understanding the main aspects of a question and researching the potential ways to solve it, should lead to the right approach. That is why I started working on panel data econometrics, but it took me some time (10 years) before I was ready to publish papers on panels. In order to contribute to a new area, it requires a deep understanding of the issues involved and a reasonable mastery of the relevant literatures. As I often tell my students: When you are climbing a mountain, it may take a long time to climb, but until you get to the peak you do not see what is on the other side. Another piece of advice: do not give up hope, always persevere, always work towards your objective, but be ready to adapt and adjust to new ideas and insights.

GG: If I understand correctly, you are saying that maybe sometimes it can be very helpful to distance yourself a little bit from the research issues you have been dealing with for years, and be in a new environment (as you did in Iran and also at the hedge fund). Is that how you encounter new questions and develop new tools to answer those questions?

HP: Exactly. Ask yourself how your research, be it narrowly focused, relates to solving the bigger problems. I remember Joan Robinson, a famous Cambridge economist who in my view should have won a Nobel Prize for her work on capital accumulation, asking when I was a first year PhD student “What is your project?” The question was not “What is it that you are working on?” but “What is the project, What is the aim of your research?” I think it is important to ask that question, but obviously you need to narrow it down to be able to contribute. And that is the “climbing the mountain part”. Sometimes it is a good idea to take a few years off and, if you can, go to some research institution or somewhere similar. However, I think you should do it very carefully, because moving away from academic life and coming back to it is not easy. Things move very quickly when you are away from academia: when you are in it, you do not observe the speed, because you are moving *with* it; but when you are away from it, it is quite fast. So, it can be risky if you do not know objectively why you are moving away and whether can you come back to academia. For a young researcher, I think being in contact with leading figures in their area of interest is of the utmost importance.

BR: Maybe we can talk a little bit more about your role as an editor. Over the years you have been a successful editor and you've handled literally thousands of submissions, so maybe you can tell us what are the most common mistakes that you saw in submitted papers. I am sure that junior researchers reading this interview will benefit a great deal from your insight.

HP: I gave a talk on this some years ago at the Econometric Society World Congress in Shanghai. I think the most important thing when submitting a paper is to make sure that it is *sufficiently polished*. Do not submit papers prematurely, just hoping for the best. If you are aware of your paper's shortcoming, you must assume that all intelligent reviewers assigned to your paper will also notice these shortcomings, and more. I am not saying you can always complete everything, but you need to do *your best* so that your paper is in good shape and can be evaluated in a meaningful way.

You need to be realistic about the nature and scope of your contribution – it is clearly important that your paper makes a contribution. The fact that you have obtained a new result and you think it is interesting does not mean that it is interesting to others or it has not been known before. You need to convince your readers of the relevance and the novelty of your contribution.

Remember also that you may have a paper which the referees misunderstand, so if you get a negative report despite having done your best, do not be dismayed. Go back to the reports in a week's time, because initially you may get upset so you may not read the reports carefully. Just go back to the reports and then decide what aspects you need to take on and which parts could be explained away or ignored. For my part I remember the referee reports I received from David Hendry, as the Editor of *Review of Economic Studies*, on my model selection paper (Pesaran, 1974). One of the referees simply stated that "This paper must be wrong", with an example illustrating his/her claim. I was fortunate that David did not reject the paper outright and gave me the opportunity to respond. At first, I was clearly dismayed to receive such a negative report. But it did not take me long to identify an error in the referee's derivations! Referees do make mistakes, but in my experience this is rare, and in general they provide a most valuable service, and my recommendation is to consider the referee reports as an asset rather than as a source of irritation! Academic journal publication is a complicated process, and publishing in econometrics nowadays can take two to three years. It should not, but it does, and therefore you need to be patient.

BR: We are reaching the end of the interview and we would like to ask your impressions on what the future holds for the field. What do you think the hot topics in econometrics are going to be in the years ahead?

HP: As a time series econometrician, you are well aware that the future is difficult if not impossible to predict with any degree of accuracy. But the evidence from the past decade points to major transformations in methods in econometrics. Some methods are already known, such as penalized regression, machine learning, but I think they are based on very strong assumptions which I do not believe satisfy most econometric applications of interest.

Over the past decade, there have been significant advances in the area of high-dimensional statistics and computing, and I believe this trend would continue. But these developments would become increasingly adapted to economic problems and challenges that we are facing. Most statistical advances so far have focused on independent observations generated from stable models. In economic applications we need to allow for the fact that economic data are persistent, cross-sectionally correlated, and often subject to structural breaks. None of these issues have really been addressed in the machine learning or penalized regression literature. I am currently working on some of these issues, building on my recent work with two of my ex PhD students (Chudik, Kapetanios and Pesaran, 2018). There are important research opportunities in the analysis of high-dimensional parameter spaces while at the same time allowing for less restrictive assumptions which are more suited to economic applications.

Another question is: How to identify the causal factors given that there are so many highly correlated variables that could be used as proxies? We know that correlation does not mean causality, but without experimental data we can only observe correlations. So how do we go from correlation to causality? Under certain conditions I believe it is possible to identify causal (or pseudo causal) structures from high-dimensional correlations – but that requires knowing how to eliminate the pervasive effects of common factors – which pose the primary challenge to identification of causal links in network or spatial models. In a recent paper we try to identify local linkages in US house price changes by means of de-factoring and pair-wise correlation analysis of de-factored data (Bailey, Holly and Pesaran, 2016). The method seems to work well, but clearly requires further developments and extensions if it is to be applicable more widely.

Forecasting under structural breaks with many covariates is another challenge which could present important research opportunities. It is difficult to justify use of cross-validation techniques if the

underlying data generating process is subject to change. How do we identify cause in such complicated, interrelated economic system that we observe?

There are also many new large data sets that are becomingly publicly available whose analyses present the challenges of their own. I am sure that a lot of young people are up to these challenges. They are becoming more technically trained, and I am really impressed with the talent we have. This gives me hope that these and many other related problems can be addressed; that we can provide some solution to them, even if it is not totally satisfactory.

BR and GG: Wonderful! We thank you so much for giving us your valuable time and sharing your insights with the readers of the *JAE* Newsletter.

HP: Thank you both very much for the opportunity!

Our readers might also be interested to read Allan Timmermann's interview with Dr. Pesaran, published in *Econometric Theory* (Timmermann, 2019).

References

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IAAE Webinar Series

The IAAE has a Webinar series that is widely attended with 150 to 800 participants every other Wednesday via Zoom Webinar. More information on the Webinars can be obtained at the IAAE website: <http://appliedeconometrics.org/>.

IAAE - INTERNATIONAL ASSOCIATION FOR APPLIED ECONOMETRICS

WEBINAR 2021 – First Semester

IAAE Webinars are held via Zoom on Wednesdays from 9am to 10am PT

January 27, Wed	Prof. James Stock Harvard University	“Measuring Real Activity using a Weekly Economic Index” (with <i>Karel Mertens and Daniel Lewis</i>) Recording
February 10, Wed	Dr. Jan Ditzen Free University Bozen-Bolzano	“Spatial and Spatio-temporal Error Correction, Networks and Common Correlated Effects” (with <i>A. Bhattacharjee and Sean Holly</i>) Slides Recording
February 24, Wed	Prof. James Hamilton University of California San Diego	“Measuring Labor-Force Participation and the Incidence and Duration of Unemployment” (with <i>Hie Joo Ahn</i>) Slides Paper Recording
March 10, Wed	Raffaella Giacomini University College London	“Identification and Inference under Narrative Restrictions” (with <i>Toru Kitagawa and Matthew Read</i>) Slides Recording
April 28, Wed	Prof. Herman van Dijk Erasmus University Rotterdam	“Societal Challenges and Research Opportunities for 21-st Century Econometricians, A personal view” Slides Recording
May 5, Wed	Prof. Yacine Ait-Sahalia Princeton University	“When Uncertainty and Volatility Are Disconnected: Implications for Asset Pricing and Portfolio Performance” Recording
May 12, Wed	Prof. Chris Sims Princeton University	“Robustness of Identification through Heteroskedasticity in Structural VARs” Slides Recording
May 26, Wed	Prof. Jonathan Wright Johns Hopkins University	“The Phillips Curve: Heterogeneity across Space and Time” Slides Recording
June 9, Wed	Prof. Marcelle Chauvet University of California Riverside	“Sectoral and Aggregate Economic Impacts of COVID: Evidence from a Dynamic Bi-Factor Markov Switching Model”

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Student's Awards

The 2021 IAAE Annual Conference attracted excellent papers competing for the Student's Award. This year's winners of the Best Paper Awards are

Josef Ruzicka

(Universidad Carlos III de Madrid)

for the paper

"Quantile Local Projections: Identification, Smooth Estimation, and Inference"

and

Alejandro Sanchez Becerra

(University of Pennsylvania)

for the paper

"Spillovers, Homophily, and Selection into Treatment: The Network Propensity Score"

The following students received Honorable Mention:

Cecilia Diaz Campo

(University of Western Ontario)

for the paper

"Dynamic Moral Hazard in Nonlinear Health Insurance Contracts"

and

Balint Tatar

(Goethe University Frankfurt)

for the paper

"Bayesian Estimation of DSGE Models with Hamiltonian Monte Carlo"

Let me congratulate the four of them, and thank all students for participating!

Barbara Rossi, Editor

Abstracts of Forthcoming Articles

Unobserved Components with Stochastic Volatility: Simulation-based Estimation and Signal Extraction by Mengheng Li and Siem Jan Koopman

The unobserved components time series model with stochastic volatility has gained much interest in econometrics, especially for the purpose of modelling and forecasting inflation. We present a feasible simulated maximum likelihood method for parameter estimation from a classical perspective. The method can also be used for evaluating the marginal likelihood function in a Bayesian analysis. We show that our simulation-based method is computationally feasible, for both univariate and multivariate models. We assess the performance of the method in a Monte Carlo study. In an empirical study, we analyse U.S. headline inflation using different univariate and multivariate model specifications.

Measurement of Factor Strength: Theory and Practice by Natalia Bailey, George Kapetanios and M. Hashem Pesaran

This paper proposes an estimator of factor strength and establishes its consistency and asymptotic distribution. The estimator is based on the number of statistically significant factor loadings, taking multiple testing into account. Both cases of observed, and unobserved factors are considered. The small sample properties of the proposed estimator are investigated using Monte Carlo experiments. It is shown that the proposed estimation and inference procedures perform well, and have excellent power properties, especially when the factor strength is sufficiently high. Empirical applications to factor models for asset returns show that out of 146 factors recently considered in the literature, only the market factor is truly strong, while all other factors are at best semi-strong, with their strength varying considerably over time. Similarly, we only find evidence of semi-strong factors using a large number of U.S. macroeconomic indicators.

No Arbitrage Priors, Drifting Volatilities, and the Term Structure of Interest Rates by Andrea Carriero, Todd E. Clark and Massimiliano Marcellino

We use a Bayesian vector autoregression with stochastic volatility to forecast government bond yields. We form the conjugate prior from a no-arbitrage affine term structure model. The model improves on the accuracy of point and density forecasts from a no-change random walk and an affine term structure model with stochastic volatility. Our proposed approach may succeed by relaxing the no-arbitrage affine term structure model's requirements that yields obey a factor structure and that the factors follow a Markov process. In the term structure model, its cross-equation no-arbitrage restrictions on the factor loadings appear to play a marginal role in forecasting gains.

Estimating household consumption insurance by Arpita Chatterjee, James Morley and Aarti Singh

Blundell, Pistaferri, and Preston (*American Economic Review*, 2008, 98(5), 1887–1921) report an estimate of household consumption insurance with respect to permanent income shocks of 36%. In replicating findings for their model and data, we find that this estimate is distorted by a code error and is not robust to weighting scheme for generalized method of moments (GMM) or consideration of quasi maximum likelihood estimation (QMLE), which produces a significantly higher estimate of

consumption insurance at 55%. For sub-groups by age and education, the differences between estimates across methods are even more pronounced, and QMLE provides new insights into heterogeneity across households compared to the original study. Monte Carlo experiments using non-normal shocks suggest that consumption insurance estimates for the model are more accurate for QMLE than GMM, including when correcting for bias and especially given a smaller sample such as is only available when looking at sub-groups.

[Is euro area lowflation here to stay? Insights from a time-varying parameter model with survey data](#) by Arnoud Stevens and Joris Wauters

We build a time-varying parameter model that jointly explains the dynamics of euro area inflation and inflation expectations. Our goal is to explain the weak inflation during the post-financial crisis economic recovery of 2013–2019. We find that the inclusion of survey data leads to a more muted decline of trend inflation in recent years and more economic slack. Moreover, the impact of economic slack and import prices on inflation has recently strengthened, and survey respondents updated their beliefs more actively over the financial crisis period. Our model compares well against restricted specifications in terms of forecast performance and marginal likelihood.

[Focused Bayesian prediction](#) by Ruben Loaiza-Maya, Gael M. Martin and David T. Frazier

We propose a new method for conducting Bayesian prediction that delivers accurate predictions without correctly specifying the unknown true data generating process. A prior is defined over a class of plausible predictive models. After observing data, we update the prior to a posterior over these models, via a criterion that captures a user-specified measure of predictive accuracy. Under regularity, this update yields posterior concentration onto the element of the predictive class that maximizes the expectation of the accuracy measure. In a series of simulation experiments and empirical examples, we find notable gains in predictive accuracy relative to conventional likelihood-based prediction.

[Semiparametric Estimation and Variable Selection for Single-Index Copula Models](#) by Bingduo Yang, Christian M. Hafner, Guannan Liu and Wei Long

A copula with a flexibly dependence structure can capture complexity and heterogeneity in economic and financial time series. Based on the recently proposed single-index copula, we propose a simultaneous variable selection and estimation procedure. This method allows for choosing the most relevant state variables by using a penalized estimation with large sample properties derived. Simulation results demonstrate the good performance of the method in selecting relevant state variables and estimating unknown index coefficients and dependence parameters. We apply the proposed procedure to four states' housing markets in US and identify six macroeconomic factors that drive their dependence structure.

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