

SELECTION OF ONE ASSOCIATE PROFESSORS FOR THE ACADEMIC RECRUITMENT FIELD 13/A2 “ECONOMIC POLICY” AT THE ACADEMIC CLASS OF SOCIAL SCIENCES - INSTITUTE OF ECONOMICS, PURSUANT TO ART. 24, SUBSECTION 5, OF ITALIAN LAW 240/2010, ISSUED BY RECTOR DECREE NO. 562 DATED 5/08/2022.

The Committee for the evaluation of Dr. Francesco Lamperti, tenure-track – probationary, assistant professor, in the third year of his temporary contract pursuant to Italian Law no. 240/2010, art. 24 paragraph 3 letter B, in order to promote her to Associate Professor in the Academic Recruitment Field 13/A2 “Economic Policy” at the Academic Class of Social Sciences and Institute of Economics, nominated by the Rector by decree No. 637 dated 21/09/2022, consists of:

- Prof. Giovanni Comandè, Professor of the Academic Recruitment Field 12/E2 Comparative Law at the School member of the Recruitment Committee;
- Prof. Tatiana Filatova, Professor of Computational Economics at the Technical University of Delft;
- Prof. Cars Hommes, Professor of Economic Dynamics at the University of Amsterdam;
- Prof. Andrea Mina, Professor of the Academic Recruitment Field 13/A2 “Economic Policy” at the School, designated expert by the Institute of Economics;
- Prof. Mariacristina Piva, Professor of the Academic Recruitment Field 13/A2 “Economic Policy” at the University Cattolica of Piacenza;
- Prof. Elena Verdolini, Professor of the Group of Academic Recruitment Fields 13/A “Economics” at the University of Brescia.

The Committee convened on 5th December, 2022, at 15.00, via teleconference.

Prof. Prof. Giovanni Comandè participated via teleconference from Scuola Superiore Sant’Anna;

Prof. Tatiana Filatova participated via teleconference from the Technical University of Delft;

Prof. Cars Hommes participated via teleconference from Ottawa, Canada;

Prof. Andrea Mina participated via teleconference from Scuola Superiore Sant’Anna;

Prof. Mariacristina Piva participated via teleconference from the University Cattolica of Piacenza;

Prof. Elena Verdolini participated via teleconference from the University of Brescia,

as authorized by the Rector.

Pursuant to art. 5 paragraph 2 of Legislative Decree no. 1172/1948, each member declared that they have no kinship or affinity up to the fourth grade with any of the other members and the candidate, that there are no reasons for abstention in relation to art. 51 of c.p.c. and that he is not

in any situation, actual or potential, of conflict of interests with the candidates (as per art. 6 bis of the Legislative Decree No 241/1990).

Prof. Elena Verdolini was nominated as President and Prof. Andrea Mina as Secretary.

The Committee then reviewed the Call and especially his article 4 and agreed that the candidate shall be assessed according to the parameters established by Ministerial Decree 344/2011, in relation to the compliance of the scientific profile with the "general criteria of qualification for teaching and research required for access to professoral positions at the School" established by the School's Commission for Recruitment and set out in article 1 of the Call.

The members of the Committee stated that the Personnel Office of the School has provided them with an electronic copy of the documentation submitted by the candidate containing: application, curriculum, publications with a declaration in lieu of an affidavit certifying compliance with the original, and a list of all the documents accompanying the application and that they have examined it and made their individual assessments, which are reported in Annex 1 of these minutes.

The Committee then collectively examined the publications, curriculum and teaching activities of the candidate, confronted their individual assessments and reviewed the collegiate assessment annex sub 2 attached to the minutes of which it is an integral part.

Then after a full discussion, on the basis of a majority vote (where necessary the President casts the deciding vote), the Committee declared that Dr. Lamperti is qualified to be appointed as associate professor.

Prof. Comandé (Member of the Recruitment Committee) testified that the evaluation of the candidate, the presentation of the individual assessments, the ensuing discussion and, in general, the whole procedure occurred in full compliance with the rules established by Scuola Sant'Anna and its recruitment committee.

Given the conclusion of the selection procedure for one position of Associate Professor in the Academic Recruitment 13/A2 "Economic Policy" at the Academic Class of Social Sciences and Institute of Economics pursuant to art. 24, subsection 5 of Italian law 240/2010, the President declared the work closed.

These minutes, and the attached declarations of the Committee's members connected via teleconference will be given to the Personnel Office in order for these proceedings to be verified, with a decree by the Rector.

The session closed at 15.50.

Read, approved and signed,

The Committee

ATTACHMENT 1

INDIVIDUAL ASSESSMENTS

PROF. TATIANA FILATOVA

With this letter I provide my individual assessment on the profile of Dr. Francesco Lamperti who is being considered for a promotion to the level of Associate Professor in the Academic Recruitment Field 13/A2 "Economic Policy". In what follows, I reflect on his performance in accordance with a set of the following criteria.

Research Activity skills: Dr Lamperti's publication record is outstanding in quality. His own research articles and those of his students are accepted in the top venues (Nature Climate Change, PNAS). His articles make a novel methodological contribution through the development of computational economic approaches, and address one of the most urgent societal problems of our days: climate change economics. All presented papers are of high quality. His H index and productivity are visible; he has also received prizes for his research performance. According to the provided metrics, Dr. Lamperti is ranked as one of the top young scholars in Italy across various dimensions; among top 10% globally; he performs double-well compared to the peers in his home institution.

Teaching Activity skills: Dr. Lamperti's teaching experience is maturing from 2014. Since then, he has lectured multiple courses on various aspects of economics. His teaching seems to operate mainly at the MSc and PhD levels. From the submitted documents it is not clear how many PhD students he has supervised so far, and how many of them have graduated successfully. However, his publication record indicates that he mentors students.

Participation in research projects: Dr. Lamperti has contributed to building a research portfolio funded by more than €1,000,000 in the last 5 years, and led two projects as (co-) PI. This is really substantial for his career stage. The projects he co-leads and participates in are funded by the EU, among others. He is regularly invited to give talks, including those at high level like at the European Commission and at the final roundtable of the "OECD Expert Workshop on Economic Modelling of Climate and Related Tipping Points" together with a Nobel Prize winner & the FED's Deputy Director.

Publishing activity: Dr. Lamperti is an active reviewer for various economic and climate change related journals, signaling his strong reputation as an expert in the field. I could not find reported evidence on the editorial roles. However, he has served multiple times as a supervisor in the publishing teams with his students, indicating his emerging role as a leader. He has taken a leadership role in scientific associations, serving as part of the Summer school organizational teams.

In summary, I recommend Dr. Francesco Lamperti for the promotion to the position of an Associate Professor.

PROF. CARS HOMMES (UNIVERSITY OF AMSTERDAM)

This report evaluates Dr. Francesco Lamperti's tenure track achievements and whether he satisfies the criteria to be promoted to tenured associate professor. The report uses the criteria as explained in the letter by the Rector.

1. Research Activity skills.

Dr. Lamperti is an expert in the economics of climate change and the methodology of agent-based modelling. He has published (at least) 12 papers in international journals. These include some of the top journals in the field such as Nature Climate Change, PNAS, Journal of Financial Stability, Journal of Economic Dynamics & Control, Ecological Economics and Journal of Evolutionary Economics. His research has high impact as e.g. measured by more than 1600 citations and a h-index 16 in Google Scholar. Hence, the scientific quality as well as the impact of Dr. Lamperti's work are very high given his age.

2. Teaching Activity skills.

According to the self-evaluation Dr. Lamperti has developed and taught courses in the area of climate economics and sustainability both at the Master of Science and Doctoral level at Sant'Anna School of Advanced Studies, Pisa. He has also supported students and young researchers as an inspiring mentor to support the writing of their theses.

3. Participation in research projects and dissemination of results.

Dr. Lamperti has been successful in participating in international European research projects, such as the H2020 GROWINPRO project. He has contributed to build a research grant portfolio of more than €1,000,000 in the last 5 years, funded by a variety of public and private institutions. He has led projects both as PI and as co-PI. He has also actively disseminated the scientific results to society and to policymakers (e.g. via interviews to blogs, newspapers and TV news programs) and participating to public debates.

4. Publishing activity.

Since 2020, Dr. Lamperti is Associate Editor of Industrial and Corporate Change (Macro and Development), which signals his expertise and recognition in the field. In summary, Dr Lamperti is an exceptionally talented young researcher in the field of economics of climate change, specialized in the increasingly important area of agent-based modelling. He has published in some of the top journals and his research already has very high impact; he is a potential leader in the field. Based on his achievements, I recommend Dr. Lamperti strongly for tenure as an associate professor.

PROF. ANDREA MINA

Dr Lamperti submits a curriculum that is excellent in all its dimensions. The **Research Activity** of the candidate is of outstanding quality. From a thematic viewpoint, it can be articulated in a first cluster of works on the economics of climate change, and a second cluster, closely connected to the first, focused on the technical development and calibration of agent-based modelling. Both streams of research expand and contribute to evolutionary approaches to macroeconomics and the economics of innovation. The first one, in particular, has also direct implications for economic policy, and is extremely relevant from the perspective of a key societal challenge of today.

The quality of this body of work is reflected in the quality of the **Publishing Activity** of the candidate, which is excellent. Among the 12 papers submitted for evaluation, for each cluster of research activity Dr Lamperti has published in top field specialist and generalist journals. These include, among others, *Nature Climate Change*, *PNAS*, *Ecological Economics*, and the *Journal of Economic Dynamics and Control*. The candidate's publication track record is overall rich and continuous through time. At the time of evaluation, this includes more than 20 scientific articles. The self-evaluation submitted by the candidate also provides indications of an excellent pipeline of new work, which promises high research productivity for the foreseeable future.

The application includes evidence of a broad range of **Teaching Activities**. These include modules and courses in macroeconomics, financial/monetary economics, climate change economics, at undergraduate, MSc and PhD levels. These are complemented by supervision and mentoring activities, again at different levels (undergrad and postgrad) and across a range of topics and tasks, as illustrated in the Curriculum Vitae ('Allegato B'). This is highly satisfactory.

Finally, Dr Lamperti shows an outstanding track-record of success in the financing of research projects. The evidence on **Participation in research projects**, as well as the **dissemination of results** and third mission activities of the candidate, is impressive. He has been Principal Investigator and Co-principal in a variety of proposals and funded projects. He has been invited to contribute to several international conferences, policy-oriented workshops, and broader dissemination activities in newspapers, magazines, radio and television. He has also served as Associate Editor of the journal of *Industrial and Corporate Change*, an important mark of recognition from the academic community, as well invited policy Expert on topical issues (e.g. the COVID-19 Task Force, 'Economic Impacts' Group of the Italian Ministry for Technological Innovation and Digital Transition), which clearly signals the relevance of Dr. Lamperti's research and expertise. For a scholar of a relatively young age, to the best of my knowledge, these results are rarely found in comparable cohorts of scientists in the national and international arena.

In conclusion, my assessment is that Dr Lamberti fully meets all the requirements for the appointment to the Associate Professor role.

PROF. MARIACRISTINA PIVA

Dr. Lamperti's research and teaching activity has been intense and absolutely high-level. In particular, with respect to specific areas of activity, my evaluation is as follows:

- Research Activity Skills: With an interdisciplinary approach, Dr. Lamperti has shown great capacity to contribute to the advancement of the research frontier in three main research areas: economics of climate change, macroeconomics, agent-modelling in the assessment of climate risks for socio-economic activities. The research outlet is on average in very well-known and well-ranked journals. The 12 Scopus H-index and more than 1.500 Google Scholar citations (as reported in the candidate self-evaluation report), testifying the scientific maturity and visibility of the candidate, can be considered significant achievements fully coherent with the position of Associate professor.

- Teaching Activity Skills: Dr. Lamperti has significantly contributed – in the last three academic years - to the portfolio of courses offered by Sant'Anna at the Master and PhD level, consolidating

the macroeconomic area and enhancing the climate economics and sustainability fields. He has successfully supported students and young researchers offering mentoring and supervision in writing their theses. More in detail, Dr. Lamperti declares he is actually officially supervising 2 PhD students.

- Participation in Research Projects: Dr Lamperti has developed a solid and eclectic experience in fundraising, consortia-building, project management and research leadership both at the international and national level. Some projects worth mentioning. He is co-investigator and responsible for the modelling activities for the EEIST “Economics of Innovation and System Transition” (2020-2023), financed by the The Secretary of State for UK BEIS. He is also member of the Sant’Anna unit of the H2020 Growinpro project (2019-2022), with responsibility of various deliverables. Moreover, he was PI for the BUILDING “Building a macro-financial integrated assessment model for ordered transitions and fiscal monetary policy interactions” (may2021-june2022) financed by INSPIRE/ClimateWorks Foundation. In addition, the candidate is also involved in third mission and dissemination activities to the civil society by means of interviews to local and national newspapers, magazines, blogs, news TV channels and radios.

- Publishing activity: Dr Lamperti serves as Associate Editor for Industrial and Corporate Change (Macro and Development track) (appointed in 2020). This role is an unquestionable recognition of his research seniority and maturity.

All in all, my personal evaluation of Dr. Lamperti is that he is qualified to be appointed as Associate professor.

PROF. ELENA VERDOLINI

The aim on this report is to evaluate the performance of the candidate, Francesco Lamperti, over the course of his contract as Assistant Professor in Economics at Sant'Anna School of Advanced Studies. To this end, I provide my evaluation of the candidate with respect to the specific criteria outlined in the call for the upgrade of his academic position to Associate Professor.

Research activity

Over the last three years, Francesco Lamperti has solidified his national and international academic standing in the field of economics and climatic dynamics through the publication of several academic papers. His work on the impacts of climate change, which is explored using both theoretical and quantitative approaches, has been published in top ranking economic journals. Over the course of his contract as Assistant Professor, Francesco Lamperti has published an impressive number of publication, totaling 21 articles between 2019 and 2022. Among these, the publications submitted as part of the evaluation procedure are of outstanding quality and editorial collocation. Particularly noteworthy in this respect are in my opinion the three publications in PNAS (in the course of 3 years!), one in Nature Climate Change and two in Technological Forecasting and Social Change. The rest of the publications presented are in excellent journals. I particularly appreciate the contribution published in Macroeconomic Dynamics, in which I believe Francesco and his co-authors address a limitation of the current theory regarding the use of market-based regulation as opposed to command-and-control approaches in the context of promoting climate change mitigation.

In comparison with the average scholar in the field of Economic Policy, Francesco has outstanding bibliometric indicators: H-index of 12 according to Scopus and of 16 according to Google Scholar (i10-index=24). These statistics, together with the long list of presentations and invited presentations, as well as the research prizes he has been awarded, testify the important contributions he has made to the field, and their impact on the community. In this respect, particularly notable is the fact that his research has informed the IPCC latest Assessment Report, which is considered the most important scientific assessment of climate-related sciences and which informs and guides policy making in the context of the UN Framework Convention on Climate Change. Importantly, Francesco also has a large number of contributions in the pipes, which, based on his track record, are more than likely to reach publications in the near future.

Lastly, in my opinion the documentation presented shows Francesco's main strength as a researcher: versatility. He can write a theoretical paper, master a simulation exercise, but he is also well-versed in empirical applications.

All together, the evidence I have reviewed regarding Francesco's publication record and research activities clearly indicates that he has outperformed his peers in terms of academic productivity and impact, he has reached scientific maturity, he has a nationally- and internationally-recognized standing more than in line with his profile as a young scholar, and he has produced results which pushed the frontiers of available knowledge.

My evaluation of Francesco Lamperti's research activities over the period of his contract as Assistant Professor is: **OUTSTANDING**.

Teaching activity

During this three-year contract as an Assistant Professor, Francesco has been very involved in teaching at the Master's and Phd Level, and in supervising students both at the undergraduate and graduate level in their own research work. His engagement with students is not only limited to academic advice and guidance in thesis writing, but includes also the organization of seminars for students, and engagement in academic evaluation committees. In my opinion, what is particularly noteworthy in Francesco's engagement with students is the fact that two of the students he supervised are first authors in articles published in outstanding outlets. This to me is a clear indication that while contributing to top-quality research articles, Francesco strives to support and promote his pupils and to build solid bases for their academic career. This is a *modus operandi* that greatly benefits the students and more broadly academia, as it contributes to raising the next generation of excellent scholars. Francesco's commitment in this respect should thus be recognised.

My evaluation of Francesco Lamperti's teaching activities and student mentoring and supervision over the period of his contract as Assistant Professor is: **EXCELLENT**.

Engagement in national and international projects and his fundraising activity

Over the last five years, Francesco has been very active in project work and proposals, to an extent that is much higher than the average of his peers. He has contributed to build a research portfolio of more than €1,000,000 financed from both public and private institutions. In these projects, he has developed strong project management and fundraising skills. The list of internationally-funded projects he is active in include the H2020 GROWINPRO, the EEIST project funded by the UK Department of Business, Energy and Industrial Strategy, a project funded by the Argentinian

Department for Business and Finance, and two projects sponsored by JRC, among others. Importantly, Francesco was not only a team member in these projects, but also led several of them as a (co-)PI. The type of projects he has been involved in range from predominantly academic to projects with more practical applications and policy-making relevance. In addition to this already acquired experience, Francesco has a number of project proposals in the pipes. This testifies his commitment to fundraising activities.

My evaluation of Francesco Lamperti's engagement in national and international research project and his fundraising activities over the period of his contract as Assistant Professor is: **OUTSTANDING.**

Engagement in dissemination and communication outside of academia

Over the evaluation period, Francesco has been deeply involved in the School's activities, both for what regards students and teaching aspects, and for what regards other administrative aspects. Importantly, his track record in public engagement is outstanding. His research has been featured in a number of non-academic outlets, including newspapers. He has been involved in a large number of policy-focused events targeting policy makers and dissemination events for the general public, including events specifically targeting the next generation of academics. Based on the documentation I have been provided, it is apparent that Francesco is committed not only to perform excellent research, but also to influence the public discourse and policy making around the key topic of the energy transition.

My evaluation of Francesco Lamperti's engagement in dissemination activities and communication outside of academia is over the period of his contract as Assistant Professor is: **OUTSTANDING.**

Engagement in editorial activities

Since 2020 Francesco is an Associate Editor of Industrial and Corporate Change (Macro and Development). This is in my opinion a clear indicator that he is recognized by the international academic community as a solid and accomplished scholar, worthy of being given the role of evaluating other's research products.

My evaluation of his engagement in editorial activities over the period of his contract as Assistant Professor is: **EXCELLENT.**

OVERALL EVALUATION: My overall evaluation of Francesco Lamperti's overall performance over the period of his contract as Assistant Professor is: **OUTSTANDING.** I believe he fully satisfies, and in fact exceeds, the level of scientific and academic performance required to confirm his appointment as Associated Professor at the Sant'Anna School of Advanced Studies. Given his track record to date, I confidently believe that he will be a solid asset as member of the School's faculty, and more in general for the Italian and international academic community.

ATTACHMENT 2

COLLEGIATE ASSESSMENT

Dr. Lamperti submits an application of excellent quality, which has been carefully evaluated by the Committee in all its dimensions.

RESEARCH ACTIVITY

Dr. Lamperti's publication record is outstanding. The candidate has made significant contributions, both theoretical and empirical, on the economics of climate change, macroeconomics, and agent-based modelling. His publications have appeared in top field specialist and generalist journals. These include Nature Climate Change, PNAS, Ecological Economics, Journal of Financial Stability, and the Journal of Economic Dynamics and Control. The candidate's research productivity is high, and the flow of outputs is continuous through time. There is clear evidence of strong impact as indicated by the number of citations and H-index. These signal a very high degree of scientific maturity, as well as visibility in the academic community, especially taking into account the candidate's young academic age.

TEACHING ACTIVITY

Dr. Lamperti has contributed to a variety of teaching activities in several fields, including macroeconomics, financial/monetary economics, and climate change economics. He has developed relevant teaching experience at the undergraduate, MSc and PhD levels. These are complemented by supervision and mentoring activities, again at different levels (undergrad and postgrad) and across a range of topics and tasks, as illustrated in the Curriculum Vitae ('Allegato B'). The teaching track record appears to be very diverse, including mentoring and co-publications with students, leading to an excellent evaluation of it.

PARTICIPATION IN RESEARCH PROJECTS

Dr. Lamperti shows substantial experience (beyond his academic age) in fundraising, consortia-building, project management and research leadership both at the international and national level. Among the most notable achievements are: his role as co-investigator in the EEIST "Economics of Innovation and System Transition" project, financed by The Secretary of State for UK BEIS; his role in the H2020 Growinpro project (2019-2022), with responsibility of various deliverables; the PI role in project BUILDING "Building a macro-financial integrated assessment model for ordered transitions and fiscal monetary policy interactions", financed by INSPIRE/ClimateWorks Foundation. Both in terms of quality of projects and volume of funding, the evidence is impressive and the overall performance outstanding.

PUBLISHING ACTIVITY

Dr. Lamperti was appointed in 2020 to the position of Associate Editor for the journal Industrial and Corporate Change (Macro and Development track). He has also served as reviewer for various economic and climate change journals. These are all clear signals of strong reputation of an expert in the field. The candidate's engagement with high-impact third mission activities is also deep and relevant. He has been an active contributor to policy fora (e.g. the COVID-19 Task Force, 'Economic Impacts' Group of the Italian Ministry for Technological Innovation and Digital Transition; the "OECD Expert Workshop on Economic Modelling of Climate and Related Tipping Points"). Moreover, he has engaged in broader dissemination activities by means of interviews in local and

national newspapers, magazines, blogs, television and radio. Also in this dimension, the performance is outstanding.

The conclusion of the Committee is that Dr. Lamperti meets in full all the criteria and is qualified for the tenured position of Associate Professor.