ADDRESS FOR THE ACADEMIC YEAR OPENING CEREMONY 2019-2020 A YEAR OF OPENNESS AND AWARENESS

From a political, social and economic point of view, the year 2019 has been another particularly complex one. Posterity will likely recall it as the year of the start of a second cold war involving the United States and China; the year in which Brexit manifested all its contradictions; a year of continued turbulence on the geopolitical front, from Latin America to the Middle East and Asia; a year of negative bank interest rates; the year in which, with deep-fake and other technological innovations, the convergence of artificial intelligence and social media showed its darker side; the year that, in July, registered the highest climatic temperature in the world's modern history.¹

In contrast to what this list of facts may seem to imply, we actually like to see 2019 as a turning point. A year in which *Sapiens*² has realized that it is not possible to trivialize the complexity characterizing the contemporary world and, on the other hand, how important it is to provide consistent solutions, or equally complex ones, for this increasing complexity. To put it another way, we like to read 2019 as *the year of openness to and awareness of complexity*.

In recent years it has indeed appeared to some that the world's growing complexity could be drastically simplified. That is, in the face of extremely complex problems, simple answers and solutions have been proposed, in certain cases disarmingly facile with respect to the questions that they try to answer. Faced with the Western world's struggle to grow economically, a political response, that of closing the borders, has been offered. In the face of a United Kingdom that wants more margins of autonomy in Europe, a "No-deal" Brexit. In the face of a single currency which, at the level of individual nations, struggles to sustain growth, a return to local currencies. In general, in the face of complexity that calls for ever deeper and broader competencies (complex ones, precisely), the answer has appeared to some to lie in the naivety of the *ignorantia* — understood in Latin as "of him who knows not." A simplification that may be induced by the sign of the times: the digital world's binary logic that pervades our surroundings with its social media and seems to force us to state our opinion with a yes or a no, a thumbs up or a thumbs down when approaching any topic, be it the most commonplace or the most complex.³ Without, however, considering the quality of the information or the competence with which we express that opinion.

In the calendar year that we are about to conclude, though, it seems that more and more often people are again ascribing a proper weight to the complexity of the world around us. And this is extremely positive news. Sovereignism in certain of the main European countries leaves room for governments with a European focus; the British people look to be preparing for a third election in four years, a fact which shows that exit from Europe cannot be trivialized with a simple "No-deal." 2019 is the year in which talk of leaving the single currency has stopped and, instead, there is discussion as to how to make the euro compatible with sustainable growth in the various countries. The year seeing the first signs of a changed attitude at European level on the subject of immigration. The year in which Europe has been acknowledged

¹ The January-September period is the second warmest since the temperature of the globe has been recorded since 1880. *National Oceanic and Atmospheric Administration data*.

² We employ the Darwinist expression made famous by the anthropologist Yuval Harari to describe human beings in the 21st century. *Sapiens: A Brief History of Humankind* 2016.

³ D. Manca, G. Verona, "Nell'epoca dei social media la logica del voto è binaria", Corriere della Sera, 27 Maggio 2019.

to have made a step in the right direction in attempting to regulate the digital environment through the General Data Protection Regulation (GDPR).⁴

This greater awareness also concerns the issues with which this University deals most, and to which Bocconi has actively contributed since its founding in 1902, namely the world of Economics and the Social Sciences.

Economics is indeed by nature a complex science. Since it began to take shape in the late eighteenth century with the work of Adam Smith, it has addressed the study of choices made in order to adapt scarce means to human needs. Unlike other sciences, economics lacks the ability to conduct experiments in the laboratory, and uses an instrumentation that has become reliable only in the course of recent decades, thanks to methodological developments in applied mathematics and statistics. Even if, in the future, the "big data" analytics deriving from the ongoing digital revolution allows social scientists to measure the phenomena they investigate with ever greater accuracy and with ever broader samplings, up to now economics has fed on data that are at once imperfect and of scarce availability. Although questions have always been asked as to the complexity of the framework in which it operates, over the years economics has developed an "egocentric" image, one focused on the individual, the so-called *homo oeconomicus*, driven by a rationality that is not only limited but often also opportunistic as well.

Only recently does it seem to have acquired a growing awareness of its means and its impact. For instance, towards the end of last year, the bestowal of the Nobel Prize to William Nordhaus for his work into understanding how economic instruments might make a positive contribution to world climate policy, amounted literally to a breath of fresh air for economic studies. And again, this year's choice by the Swedish academy has definitively drawn what we like to think of as a new course for the social sciences. Indeed, the Nobel Prize for Economics was awarded on October 14 to professors Abhijit Banerjee, Esther Duflo and Michael Kremer for their seminal work on the fight against poverty. As we know, these three economists have opened up to study an important avenue of research, the effectiveness of concrete actions to combat hunger and poverty in disadvantaged areas and in developing countries, through the use of experiments carried out on samples from the local population. 9

But there is more to it, since the same thing seems to apply not only at a macroeconomic level but also at a more "micro" level. We have always wondered about the purposes which should drive economic institutions and, in particular, the basic channel of the economy: business. While everyone agrees on the idea that in order to exist a company must produce value, there is less agreement as to how the value produced should be measured.

For many years it was considered that the goal was to produce value for the ownership interest, i.e. the shareholders. This interpretation translates into an understanding of value as profit, or the difference between income and expenses. Probably the main cultural achievement of the twentieth century, which experienced so many battles in which a concept of simple, laissez-faire capitalism was often juxtaposed with another concept enriched by the complexity of

⁴ An interview with Tim Cook: https://www.cnbc.com/2019/04/23/apple-ceo-says-europe-is-leading-us-with-tech-regulation.html.

⁵ A. Smith 1776. An Inquiry into the nature and causes of the wealth of Nations. W. Strahan and T. Cadell, London.

⁶ H. Simon, 1951, Administrative behavior: A story of decision processes in business organization. Simon and Schuster.

⁷ O.Williamson, 1975. Markets and hierarchies, analysis and antitrust implications: a study in the economics of internal organization, New York, Free Press.

⁸ See W.D.Nordhaus. A question of balance: Weighing the options on global warming policies. Yale University press.

⁹ For example, as a result of one of their studies, more than 5 million Indian children have benefited from school programs of corrective tutoring. This new awareness opens the future to new horizons for macroeconomics. A. Banerjee, E.Duflo 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, PublicAffairs

organized labor struggles, struggles for consumers' rights and, over the past twenty years, struggles against increased globalization, ¹⁰ consists in its having led to a broadening of the scope of interpretation and to an understanding that the business cannot belong only to shareholders interested in profit. Nor must the business serve the sole interest of the managers who run it, who may be encouraged predominantly to achieve growth for its own sake. The company addresses itself, overall, to those who have an interest in it, those who work for it or who, thanks to it, obtain a benefit (the "stakeholders"). In the words of Rebecca Henderson of Harvard Business School: "Capitalism remains the best system, but in recent years it has clearly exhibited many flaws which call for correction." And, in the last twenty years, this achievement has led to the development of an entire literature dedicated to sustainability and social responsibility – Corporate Social Responsibility literature.

In recent years we have suddenly experienced, at the microeconomic level as well, a renaissance of the notion of entrepreneurial and managerial ethics, and a return to the values of ethics and sustainability.¹³ The main driver for this has been that the same crises have forced us to recognize the need to overcome the deadlock between theory and practice. We like to point out that an important, propelling role has been played by Gen Z (those born after 1997), which is beginning to express different perspectives on the future of the economy and society. The most representative case in media terms is that of Greta Thunberg and the "Fridays for Future" protests. Like Greta, many of the young people who populate our classrooms also ask themselves questions every day about what is right or wrong when it comes to economics.

And in this wave of awareness, two moments have probably been crucial in demonstrating that in 2019 a beacon has been lighted. First, the letter addressed to CEOs by Larry Fink, founder and CEO of BlackRock, strongly urging them to find a "purpose" for their businesses that will go beyond mere profit. Certain observers have pointed out that a third of BlackRock's assets and a large portion of the products and services offered by the addressees' companies deal with Gen Z. But, irrespective of the motivation, given the resonance that the message has had, one may hope that even the world of finance will start to see business as an integral part of society – just as, for that matter, great entrepreneurs of the past have done, beginning with our own incomparable Adriano Olivetti. It is no accident that the initials ESG (for "Environmental, Social, Governance") designating investments in funds are becoming ever more common, and a reference for long-term yields.

Secondly, last August's manifesto of the "Business Roundtable," which saw 181 CEOs of multinationals formalize, in a pact, the theme of sustainability. The document states that businesses "play a vital role in the economy" and that the companies whose CEOs attend the Business Roundtable are committed to offering value to their customers, investing in employees, fostering "diversity and inclusion, dignity and respect," dealing fairly and ethically with suppliers, supporting the communities in which they work and, lastly, generating long-term value for shareholders. The corporate world has, for that matter, been dealing with issues of responsibility for some time; among them are the 2,500 companies, including some in Italy, certified by the B Corporation Movement (B standing for "Benefit"), created for the

¹⁰ N.Klein. No Logo. BUR.

¹¹ R.M. Henderson 2020 Reimagining capitalism in a world on fire. Harvard University Press.

¹² H.Wang. N.Tong., R.Takeuchi. G.George, 2016 "Corporate Social Responsibility: an overview and new research directions". *Academy of Management Journal* Vol. 59, No. 2, 534–544.

¹³ In this regard, we also like to remember, with the Nobel Prize winner Jean Tirole, that Economics is born as a branch of Moral Philosophy, from which it follows that ethics and the common good are fundamental parts of the economy itself and the economy must inform keeping in mind the founding pillars of the collective consciousness.

¹⁴ https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

 $^{^{15}\} https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans$

purpose of combining profit with values and ethics.¹⁶

This type of attention leads to an opening up that was unimaginable just a few years ago, but it also brings to the surface new "paradoxes" of complexity, whose solution will be fundamental to success in finalizing modern, concrete answers.¹⁷ For example, how will firms be able to pay workers more while keeping prices down so as to ensure access to the global market's products and services? How can the sustainability of manufacturing processes be guaranteed without compromising the work conducted within companies by substantially – if not entirely – reorganizing their production chains?

And among the many paradoxes, there is one that seems particularly salient for the future of society, and of the sciences that study it: how to succeed in implementing artificial intelligence in a sustainable manner? For example, how to ensure the efficiency brought about by the advent of artificial intelligence without losing sight of either the ethics of decision making or the work ethic?

The advent of artificial intelligence indeed amounts to one of the main challenges for economics and the social sciences taken as a whole, both from the theoretical point of view and from that of policymakers and managers. The prejudice impeding the diffusion of the digital transformation and, with it, of artificial intelligence is rooted in the fear of job losses, skepticism towards increasingly invasive technology, with the related impacts on privacy, and the alienation of whole generations. And its pervasiveness leads one to go even further: for example, it is enough to imagine the impact of cryptocurrencies and, more recently, of the Libra project, on the instruments of regulation and monetary policy traditionally used by countries over the last century.¹⁸

As may be seen from these issues, the focal point of the paradoxes is linked to the expenses and investments required, for example, to make companies greener, to develop employee welfare so that it will be consistent with new needs, to establish a "giving back" policy as regards the region of operations, to place the digital energy of big data and artificial intelligence at the service of the world. These are investments which might not be altogether consistent with a corporate strategy that sees profit as the main benchmark for gauging the performance and merits of its governance. There is one thing, however, at the root of both the paradoxes and the prejudices: the lack of a new culture, of an awareness capable of seeing the advantages where most people today see disadvantages.

In the face of the change that technological evolution, climate change and inequality are imposing, Universities must break from the tradition that would keep disciplinary areas closed in on themselves, and instead take the route of integrating different knowledge, developing the skills for continuous learning and critical thinking. That drive is the only force truly capable of overcoming the obsolescence of skills in a world travelling at the speed of light; that route is all the more decisive in a reality dominated by big data and information overload. Only by making new managers and citizens literate in the new languages (digital, artificial intelligence) and in the new needs (those to which the company purpose aims to respond) will we be able to overcome the challenges we face. The challenge of knowledge integration will be won by opening up to complexity, absorbing its influence and knocking down barriers.

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¹⁶ "Certified B Corporations are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose. B Corps are accelerating a global culture shift to redefine success in business and build a more inclusive and sustainable economy." https://bcorporation.eu/about-b-corps

¹⁷ S.Kaplan, 2019. The 360 degree corporation. From stakeholder trade-offs to transformation. Stanford University Press, Stanford CA.

¹⁸ Martin Wolf, "The threat and promise of digital money" Financial Times, October 22 2019.

At Bocconi, following the motto we coined: "Knowledge that matters" — which became a work of contemporary art by artist Lorenzo Petrantoni outside the Röntgen building in October — our ambition is to contribute to these changes and these cultural, methodological and application—related innovations in order to provide viable answers for the future of students, researchers and citizens.

We can take on this challenge to be a driving force for change again this year, relying on a solid tradition and the results that Bocconi has achieved in all its areas of expertise in terms of research production, quality of teaching and impact on the world of work. In this regard, we mention only three indicators: international rankings, where we are fourth in Europe and sixteenth worldwide in Social Sciences and Management according to QS; the ability to attract research funding in which we rank first in Italy with 35 ERC grants hosted, while we are second on par with the London School of Economics and Political Science with 27 ERCs total in panels 1 and 3; and the employment rate of our graduates, 95.2% of whom are employed one year after graduation, with 27.5% employed abroad.

A UNIVERSITY OPEN TO THE CHALLENGES OF ARTIFICIAL INTELLIGENCE

Starting from its tradition in Economics and Management, consistently with the aforementioned evolution of the social sciences field, Bocconi has progressively opened up to the Legal Sciences and Political Science. In addition, a growing awareness of the challenge posed by artificial intelligence in the field of social sciences has led us over the years to invest in the field of data and computer science. We have done so in keeping with our usual strategy: start from human capital and research to arrive at the launch phase for educational products.

In the course of the year we have launched ARTLAB (Artificial Intelligence Lab), led by the physicist Professor Riccardo Zecchina, with the goal of studying the algorithms of artificial intelligence at both theoretical and applied level, and Data and Marketing Insight led by Professor Dirk Hovy, computer scientist and an expert in Natural Language Processing, aiming to study the impact of big data in the vast field of marketing.

For three years now we have been enriching the programs hosted by our University with post docs, researchers and professors of Applied Mathematics, Theoretical Physics, Computer and Data Science. The receptor of this change has been the Department of Decision Sciences, historically inhabited by established and internationally renowned mathematicians and statisticians, who have acted as a magnet for this new type of skill, also essential for the future of the social sciences.

In the 2016 academic year, we launched the Bachelor of Science in Economics, Management and Computer Science, then in 2018 the Master of Science in Data Science and Business Analytics. This year, in tandem with Politecnico di Milano, we have launched a Master of Science in Cyber Risk Strategy and Governance. The program, conducted in English, is unique on the international scene in achieving the coveted combination of "Human and Technology." The response from employers has been extraordinary, and I thank NTT Data, Cisco, Replay, Vodafone, Intesa Sanpaolo and KPMG for their funding of scholarships.

On the strength of what we have achieved in the last few years, we have decided to offer, as of next academic year, a new Bachelor of Science program. Its twin objectives are to train new, young experts in artificial intelligence and further infuse the knowledge produced and disseminated by our experts in economics, management and political and legal sciences. The

program, whose provisional title is Mathematical and Computing Sciences for Artificial Intelligence, is part of the important project of MIUR experiments for the new category in "Information technologies and sciences, physics and mathematics for artificial intelligence" and will be directed by Professor Riccardo Zecchina. Offered in conjunction with this program will be an extension of the PhD in Statistics, renamed PhD in Statistics and Computer Science, dedicated to the preparation of doctorates in Computer Science, directed by Professor Antonio Lijoi.

A UNIVERSITY OPEN TO THE CHALLENGES OF INNOVATION

Among the high-impact objectives we set for ourselves is the acceleration of startups and support of entrepreneurship. As announced a year ago at the opening of last academic year, thanks to the appointment of a Dean for Innovation we have decided to dedicate more resources to the theme of entrepreneurship, which in these years of digital transformation has become crucial. So we have launched B4i, Bocconi for Innovation: the new hub will support the best ideas in innovation to be launched in the entrepreneurial system, allowing them to face the increasingly strong and competitive challenge of growth.

90% of Italian startups are still active after 5 years.¹⁹ At first glance this would seem positive, but concern arises from the fact that this piece of data masks a lack of sufficient innovation due to lack of support in the crucial acceleration stage. Europe, traditionally at the forefront, has been overtaken by China and the United States in their attempts to develop and commercialize new technologies and new business models.²⁰ Indeed, the 2019 scale-up ranking has Italy 11th in Europe, suggesting that the gap between Italy and the three leading ecosystems – the United Kingdom, Germany and France – is now so wide that that trio seems to be playing in a league apart. Thus, instead of celebrating our 90% survival rate, we should reflect on what it may mean. Such a high rate of success actually shows that we are not aggressive enough in pursuing new, disruptive ideas, or in "falling down quickly to get back up quickly" and start again. It almost seems that Italian startups prefer to "die slowly" in the pursuit of incremental ideas and innovations.

Although behind, Italy is not standing still: it is seeking to catch up in terms of capital raised, number of hubs, incubators and events, and assuredly the Lombardy Region and Milan represent the outstanding success in what has thus far been done by the national system, above all as regards technology transfer. In light of our competencies, not only in the field of algorithm production but also and especially in the strategic, economic, financial and commercial component, we want to provide support in guiding the acceleration of startups, a stimulus for Italian corporate entrepreneurship.

B4i will act as a pre-accelerator, accelerator and promoter of corporate entrepreneurship. The three areas where the accelerator's work will take shape, and for which the startups will be selected, are:

- Digital-tech, entrepreneurial ideas characterized by particularly interesting innovations and technologies, coordinated by Professor of Practice Massimo Della Ragione.
- Made-in-Italy, ideas relating to manufacturing, fashion, food and various other ramifications, coordinated by Professor Gabriella Lojacono.

¹⁹ C. Calenda, 2017, Annual report to parliament on the implementation and impact of legislation in support of innovative startups and SMEs.

²⁰ K. Lee 2019, AI superpowers: China Silicon Valley, and the New World Order, HMH, New York.

• Sustainability, coordinated by Professor Stefano Pogutz.

The acceleration stage, lasting four months, includes 20 hosted startups to which the hub will offer mentorship, assistance in forming contacts with investors and support in the various stages of development, as well as a direct Bocconi funding grant for each startup. Corporate entrepreneurship will help companies in achieving innovation and business development by encouraging the creation of bridges between themselves and startups. The new Bocconi University hub from its inception can already count on important partnerships with, for example, HenkelX, the Italian Institute of Technology, Politecnico di Milano and the Università degli Studi di Milano.

A UNIVERSITY OPEN TO HUMAN CAPITAL

Bocconi's evolution in terms of fields of study has been accompanied by a development and inclusion of human capital, the true value of any organization. The Bocconi community is thus open to men and women who have brought a wealth of skills, cultures, languages and experiences.

In 2019 Bocconi has 14,952 students of 99 different nationalities. Today around 60% of the degree programs are conducted entirely in English, and an average of 38% of those enrolled are international students. This year 12,144 managers from 75 countries have attended post-experience courses in the classrooms of our business school, SDA Bocconi, which also hosts courses given in various parts of the globe including new venues in Angola, Saudi Arabia, Egypt, the United Arab Emirates and Qatar. Thanks to the development in 2019 of on-demand courses according to the "Netflix model," our School of Management's international exposure and its impact on executive training are taking another step forward, focusing on educational innovation and the most advanced technologies.

With reference to faculty, at 1 November 2019, there are 365 people on the Bocconi teaching staff, 31.5% of whom are women and 19.2% are from abroad. Diversity in primary academic roles remains a central objective for the years ahead. For example: in order to increase the proportion of women Full Professors, the University has undertaken to recruit, through each department, eight colleagues on the international market, the first of whom, Professor Catherine De Vries, a leading international expert in political and social sciences, will take up her post in January 2020. In October this year, for the first time, and as the sole European University, Bocconi participated in the United States legal job market at the Association of American Law Schools in Washington, DC.

Below are the new entries, whom we announce with their respective Universities of origin. Among the Full Professors joining us:

- Catherine De Vries, Free University, Amsterdam
- Luca Trevisan, University of California at Berkeley

Assistant Professors:

- Tracy Anderson, Wharton School of the University of Pennsylvania
- Christoph Feinauer, Pierre et Marie Curie, Paris
- Mattia Fochesato, University of Basel
- Luisa Gagliardi, University of Geneva
- Marlene Jugl, Hertie School of Governance, Berlin

- Sandeep Pillai, University of Maryland
- Giuseppe Primerano, Tor Vergata University, Rome
- Josef Sigurdsson, Stockholm University and Central Bank of Iceland
- Moon Sungkyun, Singapore Management University
- Xiaoxi Wu, University of Lancaster
- Giacomo Zanella, Warwick University

For reasons of growing importance of teaching activities and of service to students, the following colleagues are also joining our teaching staff in the roles of Professor of Practice, Adjunct Professor or Lecturer:

- Massimo Della Ragione, Goldman Sachs
- Pieralberto Guarniero, University of Warwick
- Marina Santacroce, Politecnico di Torino
- Hector Solaz, Free University Amsterdam
- Elisa Tacconi, Bocconi University

The challenges to attracting talented people, their inclusion and development, both regarding students and professors, are overcome in part thanks to the commitment of our donors who believe and support a Bocconi that is open to interdisciplinary "contamination" and committed to rewarding merit and conducting impactful research.

In addition to maintaining a system of tuition fees differentiated in line with household income, in 2019 €30 million have been granted in scholarships and total or partial exemptions to support students in the various programs. For this I wish to thank the individual and corporate donors who support Bocconi's "Within Our Reach" campaign which, by the end of next year, will have enabled us to raise €120 million, unimaginable just a few years ago. Special thanks go to the Bocconi Alumni Community and the Campaign Board, who were involved in many of these activities aimed at engaging the over 120,000 alumni living in 166 countries of the world, to the more than 800 individual donors who have supported Bocconi in 2019, as well as the over 100 partner companies and supporters funding scholarships and applied research projects. Among these acts of funding I particularly wish to highlight those for the Endowed Chairs in furtherance of teaching and research. In particular, four new Chairs have been instituted this year, for which I sincerely thank the donor companies:

- Algebris Chair in Long-Term Investment and Absolute Return assigned to Professor Stefano Caselli;
- Intesa Sanpaolo Chair in Economics of Financial Regulation assigned to Professor Donato Masciandaro;
- KPMG Chair in Accounting assigned to Professor Annalisa Prencipe;
- Luxottica Chair in Chinese Market and Business Development assigned to Professor Fabrizio Perretti.

A UNIVERSITY OPEN TO SCIENTIFIC RESEARCH

Bocconi pursues its exploration of the complexity of the social sciences on a daily basis by means of scientific research. The vastness of the topics under analysis testifies to the innovative role that Bocconi has in the field of social sciences. This is due to both the scientific method adopted, increasingly linked to big data analysis and artificial intelligence applications, and a focus on the challenges that the increasingly global world poses to society. Research is increasingly impactful, as shown by several indicators. Last year, thanks to the efforts of our

teaching staff, we solidified our mean pattern of citations with an increase of 17% (from 15,515 in 2017 to 17,932 in 2018), and an H-Index growing to 13.52 (5.48 ten years ago). This year the number of professors occupying posts of editor or associate editor of internationally renowned journals has also increased, from 24 to 32.²¹

Another important indicator is public research funding, regarding which Bocconi holds more than one record.

As concerns PRIN tenders, 15 projects have been won, of which 4 as Principal Investigators, the rest as consortium member. 11 of these 15 projects are funded within the SH1 panel, representing for Bocconi an involvement of over 42% of the 26 projects in the Economics, Finance and Management sector assigned by PRIN.²²

With regard to European Research Council Grants (ERC), we hold the Italian record, with 35 ERCs hosted. Thanks to these projects Bocconi is currently third in all of Europe in the Economy, Management and Finance sector (SH1) and fourth in that of Environment and Demography (SH3) in number of grants obtained. Two new grants have been won since last year. Professor Salvatore Nunnari's project POPULIZATION (Behavioral Foundations of Populism and Polarization) uses the tools of behavioral economics to cast light on the support for populism in Europe, dealing with both the supply side (politicians) and the demand side (voters). Anne-Marie Jeannet's DESPO project (Deindustrializing Societies and the Political Consequences) analyzes the social and political effects of de-industrialization. Extensive data and innovative methodology will enable her to observe the long-term consequences over the period 1965–2005.

We are pleased to cite two other hosted grants that confirm the broadening dimensions of economic studies, as mentioned in the introduction:

- the RISICO project, directed by Professor Valentina Bosetti, which proposes to study the impact of climate change on the productivity of capital and labor, and the related consequences on the financial system.
- The project "Aspirations, Social Norms and Development (ASNODEV)," directed by Professor Eliana La Ferrara, Romeo and Enrica Invernizzi Foundation Chair in Development Economics, which studies the relation between individual aspirations and performance of subjects living in disadvantaged contexts, and the policies needed to improve them.

Starting this year, the Romeo and Enrica Invernizzi Foundation has also funded SDA Bocconi School of Management's AGRI lab. Through the gathering and analysis of data along primary sector production lines, it aims to contribute to scientific training, research and dissemination required to overcome the challenges of the agribusiness sector. The goal is to strengthen knowledge and skills in the areas of business management, innovation and sustainability. One of its first initiatives was a Massive Open Online Course that will be distributed on the Coursera platform, expanding our MOOC offer to 11. The support of Equita will enable us to establish an important laboratory on Capital Markets in order to understand their functioning in years of particular regulatory and management complexity.

The investment in research, in particular research on subjects of Corporate Social Responsibility, has over the years allowed us to develop skills and also to launch specific courses and programs. Besides the work performed on environmental issues in the various

 $^{^{21}}$ These are the so-called range A + journals of the Bocconi "faculty manual" which reflects the top journals of the international benchmark schools.

²² Naturally, the projects with financing reserved for Southern Italian universities are not considered.

degree programs, our Master in Green Management, Energy and Corporate Social Responsibility (MaGER) is for the third straight year in first place in the category Masters in Sustainable Development and Environmental Management. It is directed by Professor of Practice Matteo Di Castelnuovo and geared towards students and young professionals interested in building a career in sustainability issues.²³

A UNIVERSITY OPEN TO INTERNATIONAL NETWORKS

The growing complexity of knowledge linked to scientific research and university education calls for recourse to alliances and consortia that increasingly represent a model of international competition.

Bocconi is historically open to international networks, including CEMS – The Global Alliance in Management Education (of which Bocconi is founder); PIM – Partnership in International Management (of which Bocconi has assumed the chairmanship for the three-year period 2018–2021); and Themis – the International Legal Network of Excellence. This year has seen the creation of new international alliances:

- Bocconi has participated, together with other European Universities of great prestige in the social sciences, in the establishment of a consortium for the European Commission's first competitive tender for the "European Universities" project.²⁴ The consortium, named CIVICA, was a winner along with 16 others, and will see our University committed over the next three years to developing 9 different projects that include student mobility, production of research and promotion of the significance of the social sciences for community wellbeing;²⁵
- U7+, founded by Sciences Po of Paris, which constitutes an alliance of 48 Universities worldwide, with the intention of obtaining recognition as global actors capable of developing knowledge and discussion of the principal items on policy makers' agendas;
- GNAM (Global Network for Advanced Management), a network founded by Yale
 University to promote innovation in the framework of management and to support
 student mobility between the world's top 30 business schools, among them SDA
 Bocconi;
- ALEUESS, a network founded by the University of Mannheim, with the objective of developing cooperation between the twelve leading European universities in the field of social sciences;
- APELIA, a network founded in 2019 with the aim of fostering cooperation in the field of legal studies.

This active presence in the leading networks has contributed to a significant development of international mobility opportunities for students. Between 2016 and 2019, the number of the University's partner schools grew from 259 to 281, offering a total amount of 2,185 exchanges. The network of partner schools — by extension and level — places us in a unique position on the world scene, that of ensuring extensive coverage of the most prestigious schools, from North America to Asia.

The Double Degree programs, which represent a more intense form of cooperation and ensure

²⁴ Sciences Po, European University Institute, Central European University, Stockholm School of Economics, Hertie School of Governance, London School of Economics and Political Science, National University of Political Studies and Public Administration.

²³ The ranking that maps Master programs in sustainability is Eduniversal.

²⁵ The common themes of the consortium will focus on four topics: "Democracy in the 21st century", "The revisitation of Europe", "The impact of big data on social sciences" and "The transition of society in a context of crisis". This highly visible and complex initiative may represent a factor of change in the European educational system, according to the challenges that the new European Commission is preparing to outline for the coming years.

an increased exposure for students, have this year reached a total of 33 partner schools with 185 opportunities for students. Among the new programs instituted are agreements of great prestige and reputation, as concerns not only the programs per se but also the significant impact for Bocconi's overall positioning. Of particular importance are:

- Two agreements regarding the MSc in Politics and Policy Analysis, that will be developed through cooperation with Sciences Po in Paris and the London School of Economics and Political Science.
- An equally prestigious accord has been reached with Yale School of Management and IIM Bangalore in the area of management.
- Added to these, for the first time, is a Double Degree program at the Bachelor level, which foresees an agreement with the Guanghua School of Management of Peking University.
- At the School of Law, a completely innovative Double Degree format has been developed involving Fordham Law School, Indiana School of Law and Maastricht University Faculty of Law. Fifth-year Bocconi students participate in an LLM program of the partner university and the students of the Partner universities coming, for example, from a JD program participate in a Bocconi LLM program: either Law of Internet Technology or European Business and Social Law which will launch in 2020 under Program Director Maria Lillà Montagnani.

A CAMPUS OPEN TO MILAN, ITALY, EUROPE AND THE WORLD

A growing awareness of the challenges that we are set to experience had led us, as long as fifteen years ago, to imagine the creation of a full-fledged University campus in the center of Milan. A campus that would keep pace with a city transforming into an ecosystem, an international attractor of skills and knowledge that goes well beyond the boundaries of the worlds of fashion, design and finance that have given it such international renown.

The new 35,000 square meter campus is located south of the historic building at Via Sarfatti 25. Once added to the existing Bocconi campus, all offices, classrooms and services will permanently be gathered in a single area within our community, which naturally includes City zone 5 and its residents. In particular, the new complex comprises the most recent student residence, which has now been active for a year, together with the new home of SDA Bocconi School of Management, and a sports center, which will be open to the public, making clear Bocconi's openness to the city of Milan.

Designed by Sanaa architectural firm in Tokyo (Kazuyo Sejima, Ryue Nishizawa), which won the 2012 international competition, the new campus will allow neighboring residents to reclaim the area, the former Centrale del Latte site, as an integral part of a system of green spaces adjacent to Ravizza Park. The new Campus is particularly sensitive to the needs of environmental sustainability. Some of the results that will be achieved are energy self-sufficiency on an annual basis, complete elimination of harmful emissions, a built-in system of combined natural/artificial air conditioning and water management with a focus on recovery of the local groundwater. ²⁶ The SDA Bocconi headquarters is also characterized by an intensive

²⁶ Many system and construction solutions adopted are innovative, including:

⁻ for all façades a "mesh" is used, an anodized aluminum metal surface that has the function of protecting the external glass walls and simultaneously containing energy consumption

⁻ solutions to regulate the internal microclimate of buildings and achieve maximum energy savings, they are made with a ring heat pump system that connects the new buildings to those in via Sarfatti and via Gobbi

⁻ new central heat pump with water withdrawal and return to and from the Ticinello

⁻ installation of the latest generation of high efficiency photovoltaic panels on the roofs. As a result of the set of technologies adopted, all the buildings of the new Campus will obtain LEED certification, the strictest certification of environmental sustainability.

use of so-called IoT (Internet of Things), technologies that make the teaching experience and interaction with spaces highly innovative and engaging.

We are particularly appreciative of the generosity of the Ferrero family, who wished to name SDA Bocconi's main auditorium in memory of Michele Ferrero, an unforgettable figure who honored the spirit and creativity of Italian entrepreneurship throughout the world. We are also delighted to announce Vitale & Associati's decision to fund an executive classroom in the new building in memory of Guido Roberto Vitale, who passed away at the beginning of this year.

We will host two particularly prestigious events on the new campus already in 2020: from 13 to 14 February, the annual EFMD Conference for Deans and Directors General, with the participation of more than 350 business schools, for dialogue on issues of sustainability and impact; and from 17 to 21 August, the World Congress of the Econometric Society, with more than 1,500 representatives from around the world.

CONCLUSIONS AND ACKNOWLEDGEMENTS

I shall close by observing that in a world in which complexity prevails, meeting the challenge of integrating knowledge and skills development is the key route, and the principle of openness is the natural portal to embark on it. Bocconi, with extraordinary help from its students, teaching faculty, staff, advisors, counselors, alumni and partner institutions, is making every effort to pursue that route in keeping with the tradition that, since its inception, has consistently blended passion for learning, professionalism and innovation.

I would therefore like to acknowledge the Bocconi community that has always been open to new stimuli and is able to focus them on daily innovations under the leadership of the University Board chaired by Professor Mario Monti, the vision of the International Advisory Council, whose Vice Chairman is Professor Francesco Giavazzi, and the strategic direction of the Istituto Javotte Bocconi, chaired by Professor Angelo Provasoli.

I would also like to acknowledge and emphasize the commitment of:

- the Executive Committee, particularly Vittorio Colao, Enrico Cucchiani, Diego Piacentini and Professor Andrea Sironi, Vice President of Bocconi;
- the managers and staff led by Riccardo Taranto, Managing Director;
- the Academic Council, that this month was joined by Professor Andrea Fosfuri as Dean of the PhD School and the Heads of Department who are part of it. I would like to take this opportunity to welcome the four newly elected members: Professor Peter Francis Pope (Department of Accounting), Professor Fulvio Ortu (Department of Finance), Professor Gaia Rubera (Department of Marketing) and Professor Pierpaolo Battigalli (Department of Decision Sciences).

With that, I declare the academic year 2019-2020, the 117th year of our beloved University, open.