I. Personal Data

Mariano Massimiliano (Max) Croce Professor of Finance, Bocconi University CEPR Research Fellow (2017 – present) IGIER Research Fellow (2018 – present) Baffi Carefin Research Fellow (2022 – present) NBER Research Associate (2018 - 2019)

Email Address: mmc287@gmail.com

Webpage: https://sites.google.com/view/mmcroce/home

II. Education

Sept. 2002 - May 2007

Ph.D. in Economics, New York University, New York.
Thesis advisors: T.J. Sargent, S. Ludvigson, M. Lettau

Master in Economics, L. Bocconi University, Milan
Bachelor in Economics, L. Bocconi University, Milan.
Thesis Advisor: F. Giavazzi.
Final Grade: 110 out of 110, summa cum laude

III. Research and Impact

Non Refereed Journal Publications

- [1] "The Short- and Long-Run Benefits of Financial Integration" with R. Colacito. 2010 American Economic Review (P&P), Volume 100(2)
- [2] "International Robust Disagreement" with R. Colacito. 2012 American Economic Review (P&P), Volume 102(3)

Refereed Journal Publications

- "Long Run Risks and the Real Exchange Rate" with R. Colacito. 2011 Journal of Political Economy, Volume 119(1).
- [4] "The Market Price of Fiscal Uncertainty" with T. Nguyen, and L. Schmid. 2012 Journal of Monetary Economics, *Lead Article*, Volume 59:5.
- [5] "Fiscal Policies and Asset Prices" with H. Kung, T. Nguyen and L. Schmid. 2012 Review of Financial Studies, *Lead Article*, Volume 25(9).
- [6] "Toward a Quantitative General Equilibrium Asset Pricing Model with Intangible Capital", with H. Ai and K. Li.
 - 2013 Review of Financial Studies, Volume 26(2).
- [7] "International Asset Pricing with Recursive Preferences" with R. Colacito. 2013 Journal of Finance, Volume 68:6.
- [8] "Long-Run Productivity Risk: A New Hope for Production-Based Asset Pricing?" 2014 Journal of Monetary Economics, Volume 66.
- [9] "Investor Information, Long-Run Risk, and the Term Structure of Equity" with M. Lettau and S.C. Ludvigson
 - 2015 Review of Financial Studies, Volume 28(3).

- [10] "Government Debt and the Returns to Innovation" with T. Nguyen, S. Raymond, and L. Schmid 2019 Journal of Financial Economics, Volume 132, Issue 3.
- [11] "Currency Risk Factors in a Recursive Multi-Country Economy" with R. Colacito, F. Gavazzoni, and R. Ready
 2018 Journal of Finance, 73:6
- [12] "News Shocks and Production-Based Term Structure of Equity Returns" with H. Ai, A. Diercks, and K. Li
 - 2018 Review of Financial Studies, *Lead Article (Editor's Choice)*, Volume 31(7).
- [13] "Recursive allocations and wealth distribution with multiple goods" with R. Colacito and Z. Liu 2018 Quantitative Economics, Volume 10, Issue 1.
- [14] "BKK the EZ Way" with R. Colacito, S. Ho and P. Howard 2018 American Economic Review, Vol. 108, Issue 11.
- [15] "Persistent Government Debt and Aggregate Risk Distribution" with T. Nguyen, and S. Raymond 2021 Journal of Financial Economics, *Lead Article* Vol. 140, Issue 2.
- [16] "Growth Risks, Asset Prices, and Welfare"2021 Economics Letters, May 2021, Volume 202.
- [17] "Volatility Risk Pass-Through" with R. Colacito, Y. Liu, and I. Shaliastovich 2021 Review of Financial Studies, Volume 35, Issue 5, 2022
 - IF2018 Best paper Award (sponsored by NBIM)
- [18] "The Leading Premium" with T. Marchuk, and C. Schlag 2022 Review of Financial Studies, Volume 36, Issue 8, 2023
- [19] "When the Markets get CO.V.I.D.: COntagion, Viruses, and Information Diffusion" with Maria Jose Arteaga-Garavito, P. Farroni and I. Wolfskeil 2023 Journal of Financial Economics, forthcoming
- [20] "Concealed Carry" with S. Andrews, R. Colacito and F. Gavazzoni. 2023 Journal of Financial Economics, forthcoming
 - Winner of the `Best paper Award at the VSFX 2021' (10,000EUR)

Completed Articles

- [21] "Uncertainty-Induced Reallocations and the Macroeconomy" with R. Bansal, W. Liao, and S. Rosen (*R&R*)
- [22] "Volatility (Dis)Connect in International Markets", with R. Colacito, Y. Liu, and I. Shaliastovich (R&R)
- [23] "SONOMA: a Small Open ecoNOmy for MAcrofinance", with Jahan-Parvar, and S. Rosen (R&R)
- [24] "International Climate News", with M. J. Arteaga-Garvito, R. Colacito and B. Yang
- [25] "A Tax Plan for Endogenous Innovation" with T. Karantounias and S. Raymond

Work in Progress

- [25] "International Entropy Sharing" with R. Colacito
- [26] "Global Entropy" with T. Nguyen, and L. Schmid

Not for publication

[--] "Welfare Costs in the Long Run"

Citations

Total Google-Scholar Citations: 2546 (4/2024) [link]

Google h-index: 17; Google i10-index: 21; Papers with more than 100 citations:

- [1] "Long Run Risks and the Real Exchange Rate" (434);
- [2] "Long-Run Productivity Risk" (413);
- [3] "Investor Information, Long-Run Risk, and the Term Structure of Dividends" (271);
- [4] "International Asset Pricing with Recursive Preferences" (262);
- [5] "Fiscal Policies and Asset Prices" (179);
- [6] "Toward a Quantitative General Equilibrium Asset Pricing Model with Intangible Capital" (144)
- [7] "Currency Risk Factors in a Recursive Multi-Country Economy" (143);
- [8] "The Market Price of Fiscal Uncertainty" (109);

Research Awards

2024 Bocconi Research Award: Teaching Reduction

Bocconi Excellence in Research Awards

2023 PRIN 2022 ESBL34 (241,530 Eur)

Bocconi Research Award: Teaching Reduction

Bocconi Excellence in Research Awards

2022 Bocconi Excellence in Research Awards

2021 Bocconi Excellence in Research Awards

2021 VSFX Best paper Award (10,000 EUR)

2021 Bocconi Research Award: Teaching Reduction

Bocconi Excellence in Research Awards

2020 Bocconi Research Award: Teaching Reduction

Bocconi Excellence in Research Awards

2019 Bocconi Excellence in Research Awards

2018 IF2018 Best paper Award (sponsored by NBIM)

IV. Teaching

Teaching Experience

Execu	. 	
HYPCH	nvo	NIKA

2018 – Present Capital Markets – Bocconi (Mumbai, India) **2017 – 2017** Global Economics – ISB (Mohali, India)

MBA

2018 – Present Introduction to Finance and Investment - Bocconi (Mumbai, India)

Introduction to Finance and Investment - Bocconi (SDA, Milan)

2009 –2017 Global Economics (CORE MBA) - Kenan-Flagler BS, UNC 2012 – 2017 Global Economics (CORE MBA) - ISB (Mohali, India)

2016 (Spring) Macroeconomics (CORE MBA) - Wharton, UPenn

PhD

2018 – Present Advanced Asset Pricing (Methods in Macro-Finance) - Bocconi

2018 – Present Finance 3 (Empirical Asset Pricing, CORE) – Bocconi

2012 – 2018 Methods in Macro-Finance (PhD) - Kenan-Flagler BS, UNC

BSBA

2019 – Present Financial Econometrics (CORE BSc), Bocconi

2013 Economics of Global Business (CORE BSBA), STERN-NYU

Macroeconomics (CORE BSBA) - Wharton, UPenn 2011

2008 - 09Corporate Finance (CORE BSBA) - Kenan-Flagler BS, UNC

Other

Fall 2004 - 05 Macroeconomics I (CORE PhD) - NYU (TA for Tom J. Sargent)

Summer 2003 - 05 Macroeconomics (CORE BSBA) - NYU

2001-2002 Advanced Macroeconomics and International Monetary Macroeconomics, L.

Bocconi Univ., Milan (TA)

Teaching Awards and Nominations

2019 Bocconi Teaching Award in the PhD Program

2017 Weatherspoon Award for Excellence in PhD Teaching (Nominated)

2016 Core Faculty Champion in Sustainability Award (Nominated)

2016 First-year Day MBA Students (Gag) Award

2015 Weatherspoon Award for Excellence in MBA Teaching (Nominated)

2015 Teaching All Stars

2015 First-year Day MBA Students (Gag) Award

2013 Faculty Mentoring Awards sponsored by the Carolina Women's Leadership Council (Nominated)

2013 First-year Day MBA Students (Gag) Award "Get Out Of Jail Free"

2012 First-year Day MBA Students (Gag) Award "Most Interesting Professor to Travel with"

Teaching Ratings

Intro to Corp. Fin. and Inv., Day MBA, Core 100 students, average ratings: 9.2 on a scale 1--10 (92%) SDA, Bocconi

Intro to Corp. Fin. and Inv., Day MBA, Core 120 students, average ratings:

SDA Asia Center, Bocconi 8.9 on a scale 1--10 (89%)

Global Capital Markets, Executive MBA, Core

SDA Asia Center, Bocconi

14 students, average ratings: 8.5 on a scale 1--10 (85%)

Global Economics, Day MBA, Core

Kenan-Flagler B.S., UNC (average 2014--17)

280 students, average ratings: 4.3 on a scale 0--4 (88%)

Global Economics, Day MBA, Core

Wharton, UPenn 2016

170 students, average ratings:

2.9 on a scale 0--4 (78%)

Global Economics, Day MBA, Core

ISB (average 2013—2017) Global Economics, BSBA, Core

STERN, NYU 2013

180 students, average ratings: 6.6 on a scale 1--7 (94%) 102 students, average ratings: 6.0 on a scale 1--7 (85%)

Global Economics, BSBA, Core

Wharton, UPenn 2010

140 students, average ratings: 3.1 on a scale 0--4 (82%)

Intro to Fin. Ectrics, Core

200 students, average ratings:

V. Professional Experience

Co-Editor of Economics Letters
Director, PhD Program in Economics and Finance, Bocconi University
Finance Curriculum Coordinator, Bocconi PhD Program.
Finance Department, Bocconi University, Full Professor of Finance
CEPR Research Fellow
Economics Department, Duke University, Term Graduate Faculty Member
Adjunct Professor of Finance and Economics, UNC
NBER Research Associate (terminated when moved outside of the USA)
Kenan-Flagler Business School, UNC: Associate Professor of Finance (with tenure)
Kenan-Flagler Business School, UNC: Assistant Professor of Finance
Economics Department, UNC: Courtesy Appointment
FED Board (Washington-DC): Graduate Research Program
European Central Bank (Frankfurt): Graduate Research Program

Visiting Positions

2018 (Spring)	Bocconi University, Visiting Professor of Finance	
2017 (Spring)	Duke University, Arthur Gosnell Visiting Professor	
2016 (Spring)	Wharton School of Business, UPenn, Visiting Associate Professor of Finance	
2015 (Spring)	IGM Chicago Booth Visiting Fellow	
2014 (Fall)	SAFE Senior Visitor, Goethe University Frankfurt	
2013 (Spring)	STERN-NYU, Visiting Assistant Professor of Economics	
2012 – 2017	Indian School of Business, Mohali Campus, Visiting Faculty (Summer)	
2010 - 2011	Wharton School of Business, UPenn, Visiting Assistant Professor of Finance	

VI. Professional Service

PhD Supervision

Current: Daniil Parfenov (Bocconi Finance, placed at TBA)

Nicolas Alfonso Guinez Trevino (Bocconi Finance, placed at TBA)

Ruben Fernandez Fuertes (Bocconi Finance, placed at TBA)

Martina Bianchi (Bocconi Finance, placed at TBA) Felix Gerding (Bocconi Finance, placed at TBA)

Maria Jose Arteaga-Garavito (Bocconi Finance, placed at TBA) Alireza Aghaee Shahrbabaki (Bocconi Finance, placed at TBA)

Giuliano Graziani (Bocconi Finance, placed at TBA)

Fabio Girardi (Bocconi, Econ, second placement at Vienna Univ.)

Paolo Farroni (Bocconi Finance, placed at BdI)

2022 Isabella Wolfskeil (Bocconi Finance, placed at Federal Reserve Board-DC)

Biao Yang (Bocconi Finance, placed at SJTU)

	Sergio Cappellini (Bocconi Econ, placed at U. Pavia)
2019	Steve Raymond (UNC Econ, co-founder of Split Technologies)
	Zhao Liu (Duke Econ, placed at Warwick Business School);
	Wenxi Liao (Duke Finance, placed at BlackRock);
	Fabio Girardi (Bocconi, Econ, placed at Goethe Univ., House of Finance (post-doc))
	Yulong Sun (Bocconi, Finance, placed at USTC)
2018	Sam Rosen (UNC Finance, placed at Fox School, Temple University);
	- Winner of the MFM Dissertation Fellowship 2017 (Becker Friedman Institute) [link]
	- Winner of the The Lovick P. Corn Dissertation Fellowship, UNC
2017	Hasan Sadik Arik (Duke Econ, FSRM at Ernst & Young)
	Tatyana Marchuk (Goethe Finance, placed at BI);
2016	Philip Howard (UNC Finance, visiting Wake Forest Univ.);
2015	Anthony Diercks (UNC Econ, placed at Federal Reserve Board-DC).
2014	Thien Nguyen (Wharton Finance, placed at OSU Finance).
2013	Kai Li (Duke Univ. Econ, placed at HKUST);
	Steven Ho (UNC Finance, placed at Tsinghua PBCSF, now at Columbia University in NY.

Master and Bachelor Students Supervision

2024/25	Iona Mantu (BSc);
2023/24	Martina Barni (MSc, Bocconi IGIER); Frare Lucca (BSc); Mannocci Galeotti Lodovica
	(Bsc), Del Re Lodovico (BSc), Durakoglugil Anil (Bsc), Tommaso Roccavilla (Bsc),
	Matteo Cremonesi (MSc).
2022/23	Simone Boldrini (MSc, Bocconi IGIER, selected as RA at the ECB); Geat Carlo (MSc,
	Bocconi IGIER, admitted at U Chicago Booth pre-doc); Foi Gabriele (BSc); Shi David
	(BSc);
2021/22	Giacomo Bezzi (MSc, Bocconi IGIER), admitted at the Swiss Finance Institute PhD program
	in Finance (Lugano campus);
2020/21	Giulio Durazzu (BSc); Gerardo Luca (BSc); Bertoni Oliviero (MSc); Longoni Andrea
	(BSc); Geat Carlo (BSc); Damla US (BSc); Caylan Kaan (BSc); Kurgan Dmitriy (BSc);
	Cucinotta Pietro (BSc); Da Ros Lorenzo (BSc); Faradji Vincent (BSc);
2019/20	Nicola Mauro (BSc); Maria Engleson (MSc);
	Antonio Giribaldi (MSc, Bocconi IGIER), admitted at the UPF Econ PhD program.
2018/19	Stefano Pastore (MSc, Bocconi IGIER), admitted at the STERN Finance PhD program.

Other Activities

Member Adam Smith Conference, academic committee (2023-24)

6th Young Scholars Finance Consortium, Texas A&M University

WFA Associate Program Chair (2019—present)

Macro Finance Society (2012--present)

WFA Program Committee (2010--2018)

Cavalcade Program Committee (2010--present)

EFA Program Committee (2012--present)

Mitsui Finance Symposium on Asset Pricing (2018—present)

Oxford-Said Macro-Finance Conference Program Committee (2020—present)

Organizer 2024 Economics Letters Summer PhD School [link]

2024 PRIN-2022 Conference, Bocconi University, Rome Campus [link]

2024 Bocconi Finance Conference-Asset Pricing [link] Finance Seminar Series, Bocconi University (2019 -- 2020)

Finance Seminar Series, Kenan-Flagler Business School (2008 – 2009)

Duke-UNC AP Conference 2016 [pdf] Duke-UNC AP Conference 2018 [pdf]

Macro-Finance Society Meeting (Oct. 2015 – Jan 2017)

Session MFA 2022

Chair Finance Cavalcade 2014

EFA 2020; 2021

Bocconi FinTech Lab 2022 ans 2023

Coordinator Co-Lead Coordinator for Finance, EEA 2021 & 2022

EFA Local Scientific Committee Members 2021

Lectures 2013 Lecture on Global Business "EU: A Modern Greek Tragedy" [pdf]

2012 Decosimo Lecture Series on Global Business "Euro Zone: in Search of Fiscal

Discipline" [pdf]

Referee Services Journal of Political Economy; American Economic Review; Quarterly Journal of Economics; Economics; Review of Economic Studies; American Economic Journals: Macroeconomics; Journal of Monetary Economics; Journal of International Economics; Quantitative Economics; Journal of European Economic Association; Journal of Money, Credit and Banking; Journal of Economic Dynamics and Control; European Economic Review; Economic Letters; ECB WP Series; Review of Economic Dynamics; The Review of Economics and Statistics; International Economic Review; The B.E. Journal of Macroeconomics; Journal of Banking and Finance; Empirical Economics.

Journal of Finance; Journal of Financial Economics; Review of Financial Studies; Review of Asset Pricing Studies; Journal of Financial and Quantitative Analysis; Management Science; Journal of Business and Economic Statistics; Finance Research Letters; International Review of Finance; International Finance; Quantitative Finance; JEF.

Academic Bocconi, Committee for the selection of PhD Candidates (2019--present)

Committees Bocconi, Finance Recruiting Committee (2019--present)

Bocconi, Committee for Appointments and Promotions (2019/2020)

Kenan-Flagler Business School, Global Curriculum Advisory Board (01/2017—09/2018)

Discussions

Conference		Title of the Paper	
[47]	AFA 2024	"Large Firms, Common Ownership, and Incentives to Decarbonize and Innovate" by V. V. Acharya, R. Engle and O. Wang	
[46]	UNSW 2023	"Inflation Surprises and Equity Returns" by de Rubio Cruz et al	
[45]	FinTech Bocconi 2023	"CBDC and Banks: Disintermediating fast and slow" by Bidder et al	
[44]	CCA 2023	"Beyond the VIX" by Ulrich and Zimmer	
[43]	ASAP 2023	"International Capital Markets and Wealth Transfers" by M. Dahlquist, C. Heyerdahl-Larsen, A. Pavlova, and J. Pénasse	
[42]	AFA 2023	`Markup Shocks and Asset Prices' by Alexandre Corhay; Jun Li and Jincheng Tong	

Funds' by Agostino International Financial Rates and Macroeconomic Ing Output Ratio? The Dogs S. Van Nieuwerburgh Ices' by Jiang, Richmond, Icier in the Long Run?' by ICO SAFETY' By Nasir,
International Financial Rates and Macroeconomic Rates and Rates an
Rates and Macroeconomic ng Output Ratio? The Dogs S. Van Nieuwerburgh ces' by Jiang, Richmond, tier in the Long Run?' by
ng Output Ratio? The Dogs S. Van Nieuwerburgh ces' by Jiang, Richmond, tier in the Long Run?' by
ng Output Ratio? The Dogs S. Van Nieuwerburgh ces' by Jiang, Richmond, tier in the Long Run?' by
ng Output Ratio? The Dogs S. Van Nieuwerburgh ces' by Jiang, Richmond, tier in the Long Run?' by
Output Ratio? The Dogs S. Van Nieuwerburgh ces' by Jiang, Richmond, tier in the Long Run?' by
S. Van Nieuwerburgh ces' by Jiang, Richmond, tier in the Long Run?' by
ces' by Jiang, Richmond, tier in the Long Run?' by
cier in the Long Run?' by
cier in the Long Run?' by
O SAFETY' By Nasir,
O SIMEIT By Itush,
eneous Agents:
dongap and Jules Tinang
and Business Cycles'
Kung
ecific Information'
ximilian Bredendiek
' by by Z. Jiang, H.
olan
es" by Zhengyang Jiang
sk Premium," by X.
erndt, Duffie and Zhu
ohen Terry, Toni Whited
3,
emia" by Buraschi, Piatti
enna by Barasem, Franci
ernational
th X. Liu
ny" by Markus
Xiong
tivity" by E. McGrattan
* *
Hou, H. Kung and L.
P. 119
Financial Errors with
nd Raman Uppal
ler, Stathopoulos, and
and Measurement" by
•
Oil Market" by Steffen

[16]	Oregon Dynamic	"Optimal Taxation with Persistent Idiosyncratic Investment Risk"
	Expectations 2015	by David Evans
[15]	CEPR AP meeting	"Asset Pricing with Countercyclical Household Consumption
	2015	Risk" by G. Constantinides and A. Gosh
[14]	UBC Winter Conference	"Real and Nominal Equilibrium Yield Curves with Endogenous
	2015	Inflation: A Quantitative Assessment" by A. Hsu, E. Li., F.
		Palomino
[13]	BU/BOS FED Conference	"Aggregate implications of corporate debt choices" by Nicolas
	2014	Crouzet
[12]	HHEI Conference (UMN)	"Setting Carbon Budgets in the Face of Parameter and Model
	2014	Uncertainty Based on the Cumulative Climate Response: A
		Robustness Approach" by Anderson, Brock, Hansen and Sanstad
[11]	Finance Cavalcade	"Short-run and Long-run Consumption Risks, Dividend Processes
	2014	and Asset Returns" by H. H. Zhang and J. Li
[10]	Eurofidai Paris	"Investor Attention and Stock Market Volatility" by D. Andrei,
	2013	and M. Hasler
[09]	CFEA	"Operating Inflexibility, Profitability and Capital Structure" by Z.
	2013	Chen, J. Harford, and A. Kamara
[08]	CEPR AP meeting	"Commodity Trade and the Carry Trade: A Tale of two Countries"
	2013	by R. Ready, N. Roussanov, and C. Ward
[07]	Macro-Finance @ LBS	"Innovation, Growth and Asset Prices",
	2012	by H Kung and L. Schmid
[06]	Duke-UNC Conference	"The Share of Systematic Variation in Bilateral Exchange Rate",
	2012	by Adrien Verdelhan
[05]	CEPR AP meeting	"Uncertainty about Government Policy and Stock Prices" by L.
	2011	Pastor and P. Veronesi
[04]	Carlson (UMN)	"G10 Swap and Exchange Rates" by J. Graveline and S. Joslin
	2011	
[03]	CEPR AP meeting	"Can Rare Event Explain the Equity Premium Puzzle?" by
	2008	Christian Julliard and A. Gosh
[02]	Duke-UNC Conference	"The Empirical Importance of Background Risk", Darius Palia,
	2008	Yaxuan Qi, and Yangru Wu
[01]	EFA	"Long-Run Risk through Consumption Smoothing", G.
	2007	Kaltembrunner and L. Lochstoer

Invitations to Conferences and Seminars (includes presentations at conferences by co-authors)

2021-today: see on line table [here] 2006-2019 (pre-Covid). Summary:

Since the beginning of my academic career in 2007, I have focused on disseminating my research as much as possible through publications, conferences, and discussions of related research. As of the end of 2019, my articles have been invited to 153 conferences. I have personally presented 81 times. I have been invited to give 59 seminars. Below, I highlight a subset of both finance and economics conferences that I have attended. For each conference, I report the years in which my papers were on the program and the total number of papers invited (Tot. Num.):

Conference	Invitation Years	Tot. Num
American Economic Association	'10; '11; '12; '13; '14; '15; '16; '17; '18	13
American Finance Association	'09; '11; '13; '15; '16	6
Univ. of Chicago (BOOTH)	'12; '13; '14; '17	4
$ESSFM^1$	'12; '13; '14; '17	4
Finance Cavalcade	'11; '12; '13; '17	5
NBER Meetings	'06; '11; '13; '15; '18	7
Society of Economic Dynamics	'05; '06;'08;'09;'10;'12;'13;'14;'16;'17	15
SITE (Stanford Univ.)	'17	3
Western Finance Association	'07; '09; 11; '12; '13; '17	12

¹ European Summer Symposium in Financial Markets, organized with CEPR in Gerzenzee.

VII. Other Awards and Fellowships

Jan. 2006 - May 2006	CVSTAR fellowship, NYU
Jan. 2005 - May 2005	CVSTAR fellowship, NYU
Sept. 2002 - July 2007	N.Y.U. fellowship for doctoral students
Sept. 2001 - July 2002	Fellowship for the didactics, L. Bocconi University, Milan
Sept 2001 - July 2002	Fondazione Invernizzi Fellowship
Sept. 1999 - July 2001	Scholarship recipient for students top classified in Lombardia Region (Italy), sponsored by R.U.I. Foundation and Torrescalla College, Milan
Sept. 1997-July 1999	CA.RI.P.LO. Foundation scholarship recipient, Milan
Sept. 1997	Best classified in the '97 "Falcone e Borsellino" scholarship, first among the college students of Trapani province