

MANAGING RISK AND DECISION  
MAKING IN TIMES OF ECONOMIC  
DISTRESS, PART A

# CONTEMPORARY STUDIES IN ECONOMICS AND FINANCIAL ANALYSIS

Series Editor: Simon Grima

- Volume 90: Privatization in Transition Economies: The Ongoing Story *Edited by Ira W. Lieberman and Daniel J. Kopf*
- Volume 91: Personal Injury and Wrongful Death Damages Calculations: Transatlantic Dialogue *Edited by John O. Ward and Robert J. Thornton*
- Volume 92: Moving Beyond Storytelling: Emerging Research in Microfinance *Edited by Todd A. Watkins and Karen Hicks*
- Volume 93: The Impact of the Global Financial Crisis on Emerging Financial Markets *Edited by Jonathan A. Batten and Peter G. Szilagyi*
- Volume 94: Derivative Securities Pricing and Modelling *Edited by Jonathan A. Batten and Niklas F. Wagner*
- Volume 95: The Developing Role of Islamic Banking and Finance: From Local to Global Perspectives *Edited by Fouad Beseiso*
- Volume 96: Risk Management Post Financial Crisis: A Period of Monetary Easing *Edited by Jonathan A. Batten and Niklas F. Wagner*
- Volume 97: Contemporary Issues in Bank Financial Management *Edited by Simon Grima and Frank Bezzina*
- Volume 98: Contemporary Issues in Finance: Current Challenges from Across Europe *Edited by Simon Grima, Frank Bezzina, Inna Románova and Ramona Rupeika-Apoga*
- Volume 99: Governance and Regulations' Contemporary Issues *Edited by Simon Grima and Pierpaolo Marano*
- Volume 100: Contemporary Issues in Business and Financial Management in Eastern Europe *Edited by Simon Grima and Eleftherios Thalassinos*
- Volume 101: Contemporary Issues in Behavioral Finance *Edited by Simon Grima, Ercan Özen, Hakan Boz, Jonathan Spiteri and Eleftherios Thalassinos*
- Volume 102: Contemporary Issues in Audit Management and Forensic Accounting *Edited by Simon Grima, Engin Boztepe and Peter J. Baldacchino*
- Volume 103: Global Street Economy and Micro Entrepreneurship *Edited by Simon Grima, Osman Sirkeci and Kamuran Elbeyoğlu*
- Volume 104: Contemporary Issues in Business, Economics and Finance *Edited by Simon Grima, Ercan Ozen and Hakan Boz*
- Volume 105: Contemporary Issues in Public Sector Accounting and Auditing *Edited by Simon Grima and Engin Boztepe*
- Volume 106: Contemporary Issues in Social Science *Edited by Simon Grima, Ercan Ozen and Hakan Boz*
- Volume 107: A New Social Street Economy: An Effect of the COVID-19 Pandemic *Edited by Simon Grima, Osman Sirkeci and Kamuran Elbeyoğlu*

CONTEMPORARY STUDIES IN ECONOMIC AND  
FINANCIAL ANALYSIS VOLUME 108

**MANAGING RISK AND  
DECISION MAKING IN  
TIMES OF ECONOMIC  
DISTRESS, PART A**

EDITED BY

**SIMON GRIMA**

*University of Malta, Malta*

**ERCAN ÖZEN**

*University of Uşak, Turkey*

and

**INNA ROMĀNOVA**

*University of Latvia, Latvia*



United Kingdom – North America – Japan  
India – Malaysia – China

Emerald Publishing Limited  
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2022

Editorial matter and selection © 2022 Simon Grima, Ercan Özen and Inna Romānova.  
Published under exclusive licence by Emerald Publishing Limited.

Individual chapters © 2022 Emerald Publishing Limited.

**Reprints and permissions service**

Contact: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

**British Library Cataloguing in Publication Data**

A catalogue record for this book is available from the British Library

ISBN: 978-1-80117-427-5 (Print)

ISBN: 978-1-80117-426-8 (Online)

ISBN: 978-1-80117-428-2 (Epub)

ISSN: 1569-3759 (Series)



ISOQAR certified  
Management System,  
awarded to Emerald  
for adherence to  
Environmental  
standard  
ISO 14001:2004.

Certificate Number 1985  
ISO 14001



INVESTOR IN PEOPLE

# CONTENTS

<i>About the Contributors</i>	vii
<b>Chapter 1 Designing Curriculum about Governance and Sustainability in Higher Education: A Case Study</b> <i>Clinton Cassar</i>	1
<b>Chapter 2 Sources of Economic Policy Uncertainty in Nigeria: Implications for Africa</b> <i>Peterson K. Ozili</i>	37
<b>Chapter 3 Multi-dimensional Modelling for Mapping Project Trade-offs in Construction: A Maltese Perspective</b> <i>George Dimech, Rebecca Dalli Gonzi and Alan Wild</i>	51
<b>Chapter 4 Supply Chain Management Reshaped with Industry 4.0: A Review</b> <i>Salih Serkan Kaleli and Mehmet Baygin</i>	69
<b>Chapter 5 Consumer Complaints and Complaint Management in the Tourism Sector</b> <i>Müjde Aksoy and Özer Yılmaz</i>	95
<b>Chapter 6 A Review of the Models Used by the Universities of the Republic of Kosovo</b> <i>Hamdi Hoti, Mërgim H. Hoti, Armend Salihu and Edisona Kurhasku</i>	113
<b>Chapter 7 Regulation and Protection of Competition in Kosova: Control of Enterprise Concentration</b> <i>Gani Asllani and Simon Grima</i>	127
<b>Chapter 8 Effects of COVID-19 Pandemic on Tourists' Travel Behaviour and Patterns</b> <i>Esat Saçkes</i>	137
<b>Chapter 9 Destination Choice Behaviour and Tourists' Travel Behaviour and Patterns</b> <i>Arzu Gürdoğan</i>	151

<b>Chapter 10 Sustainability Accounting</b> <i>Peterson K. Ozili</i>	171
<b>Chapter 11 Sustainable Heritage Management: A Literature Review</b> <i>Derya Timucin Hayat and Blend Ibrahim</i>	181
<b>Chapter 12 Economic and Fiscal Effects of COVID-19 Pandemic: An Evaluation of Selected Countries</b> <i>Oytun Mecik, Ercan Bahtiyar and Mustafa Karabacak</i>	195
<b>Chapter 13 Decreasing Carbon Footprint for Sustainable Consumption</b> <i>Necla Kuduz</i>	215
<i>Index</i>	231

## ABOUT THE CONTRIBUTORS

**Mujde Aksoy** is a Lecturer at Bandirma Onyedi Eylul University, Bandirma, Balikesir. She graduated from Industrial Engineering Department, Dumlupinar University in 2005. She completed her Master's degree in Business, Balikesir University in 2013, and her PhD degree in Business & Marketing at Bandirma Onyedi Eylul University, in 2020. Her research interests are customer behaviour and service marketing. She has taught a wide range of topics relating to marketing, international marketing, service marketing since 2019.

**Gani Asllani** holds MA and PhD in Finance from University of Pristina, Kosovo. He teaches public finance, taxation and competition rights. He is an Associate Professor at University 'Haxhi Zeka', Peja within the Law Faculty. During his 20 years of experience, he has contributed to the creation of the tax system in Kosovo, making tax analysis and expertise, participating in several working groups at international level (IMF, OECD and Robert Shuman Center for Advance Studies).

**Ercan Bahtiyar**, PhD, was born in Kardzhali/Bulgaria in 1987. He is a Research Fellow at Usak University FEAS, Department of Public Finance. He graduated from Afyon Kocatepe University, Department of Public Finance in 2008. He completed his Master's degree in the field of Public Finance Theory at Dokuz Eylul University in 2012. He got his PhD degree in Public Finance at Usak University, Department of Public Finance in 2019. His teaching and research fields include public finance theory, taxation and economic freedoms, tax systems, tax criminal law and tax jurisdiction.

**Mehmet Baygin** was born in Elazig, Turkey, in 1988. He received a BS degree in Computer Engineering from Firat University, Elazig, Turkey, in 2010, his MS degree in Computer Engineering from Firat University, Elazig, Turkey, in 2013, and a PhD degree in Computer Engineering from Firat University, Elazig, Turkey, in 2018. He is currently an Assistant Professor Doctor in the Department of Computer Engineering, Ardahan University, Ardahan, Turkey. His research interests are image processing, computer vision, photovoltaic systems and heuristic methods.

**Clinton Cassar** is a Visiting Lecturer at the Department of Public Policy, University of Malta. In 2008, he was awarded a Bachelor of Arts (Honours) degree in Geography with first-class honours, followed by a Postgraduate Certificate in Education a year after. In 2015, he was awarded a Master in Education for Sustainable Development with distinction. He has published original research in the areas pertaining to governance, education and sustainability both in local and

international journals. Throughout the years, he also provided his expertise as a Trainer and Consultant with various private and public entities.

**George Dimech**, MPhil (Construction Management, Melit.), MBA(Distinction) (Reading), RICS Postgraduate Diploma Project Management (Distinction) (Reading), DipSurv (Distinction)(CEM), MRICS, MCIArb, is a Senior Visiting Lecturer within the Faculty for the Built Environment at the University of Malta. He currently teaches procurement, tendering and contract administration, risk and value management modules at undergraduate and postgraduate levels. He is a Chartered Quantity Surveyor, Project Manager, Consultant and Arbitrator. During his 32 -year career he has served as CEO, Managing Director, Senior Consultant, Principal Contracts Manager and Quantity Surveyor in a variety of roles and academic directions. His private and public sector contracts experience include dispute resolution, mixed-use developments, restoration, hospitality, healthcare facilities and hospitals.

**Rebecca Dalli Gonzi**, PhD (Glasg), MSc (Edin), B.E. & A., (Melit) (Hons), A. & C.E., A.L.C.M. (Lond), is an Architect, Project Co-ordinator and Lecturer. She is a Registered and Certified Civil Engineer by the Chamber of Architects Malta, and a Registered Chartered Member of the Royal Institute for British Architects London. She has worked in the private and public sectors, both in Malta and in Scotland. She is a Resident Academic at the University of Malta and lecturing Project Management in the Department of Construction and Property Management and within the Department of Insurance, in Geopolitical and Environmental Risk, and Business continuity Management. She lectures Project Development at the Institute for Sustainable Energy. She founded the DALI Model, which is a tool for assessing organisational risk, which can be used when firms require a recovery response due to a crisis. This model has been presented as an empirically tested model in a specific setting for managing organisational risk so that firms achieve their goals with minimal setbacks. Her book entitled *Change and Continuity Management in the Public Sector*, which presents the research underlying this model, reinforces the idea that good governance requires the right decision-taking methods if any organisation is to succeed. Areas in her portfolio of research include organisational management, strategic project management and construction management.

**Simon Grima** is the Head of the Department of Insurance, in charge of the Bachelor of Commerce in Insurance, the Bachelor of Commerce (Honours) and Master's degrees in Insurance and Risk Management, Deputy Dean of the Faculty of Economics, Management and Accountancy and an Associate Professor at the University of Malta. He set up the Insurance Department in 2015 and started and Coordinates the MA and MSc Insurance and Risk Management degrees. He served as the President of the Malta Association of Risk Management between 2013 and 2015, and President of the Malta Association of Compliance Officers between 2016 and 2018. Moreover, he is among the first Certified Risk Management Professionals and a Board Member

of the Federation of European Risk Managers (FERMA), is the Co-chair and Chairman of FERMA Certification and the Scientific Education Committee of the Public Risk Management Organization, respectively, and was a Member of the Curriculum Development Team of Professional Risk Managers' International Association in 2014. His research focus and consultancy is on governance, regulations and internal controls (i.e. risk management, internal audit and compliance) and has over 30 years of experience varied between financial services and with public entities in academia, internal controls, investments and IT. He acts as an Independent Director for Financial Services Firms, sits on Risk, Compliance, Procurement, Investment and Audit Committees, and carries out duties as a Compliance Officer, Internal Auditor and Risk Manager. He has acted as Co-chair and is a Member of the Scientific Program Committee on some international conferences and is a Chief Editor, Editor and Review Editor of some Journals and Book Series. He has been awarded Outstanding Reviewer for *Journal of Financial Regulation and Compliance* in the 2017 Emerald Literati Awards.

**Arzu Gürdoğan** She completed her Primary and Secondary Education at Bodrum and Bodrum Anatolian Tourism Vocational High School respectively. Her undergraduate education was completed at the Adnan Menderes University School of Tourism and Hotel Management School. She then graduated from the Dokuz Eylül University, Department of Tourism. Between 1999–2008 she worked as a research Assistant in Tourism Management at the Adnan Menderes University, School of Hotel Management. where she received her doctoral degree in 2010. Since 2012 she is a lecturer at the Ortaca Vocational High School in Mugla Sitki Kocman University, School of Travel and Tourism and Leisure Services Department.

**Derya Timucin Hayat** received her BSc in Tourism Management (2002); MSc in Tourism and Hospitality Management (2005) from Eastern Mediterranean University; and PhD in Tourism and Hospitality Management (2020) from Girne American University. She has over 10 years of experience in the hospitality industry. Now she is a Lecturer in the School of Tourism and Hospitality Management, 'Girne American University, North Cyprus-Turkey'. Her current research interests include stakeholder management, sustainable tourism and cultural heritage tourism/eco-tourism. She is giving lectures on hotel operations, travel agency operations, human resource in hospitality and hospitality ethics.

**Hamdi Hoti** received his PhD at the University of Tirana. He is an Associate Professor at the Faculty of Economics, University 'Ukshin HOTI' Prizren. His research interests include corporate governance, change management, human resource management, scientific research methods and project management. He is a Vice Dean in the same faculty.

**Mërgim H. Hoti** is a PhD Candidate at the South-East European University in Computer Science. Also, currently, he is a Teaching Assistant at the University of

Prizren ‘Ukshin HOTI’, Faculty of Computer Science and Faculty of Education and his interest’s fields are natural language processing, artificial intelligence and data mining.

**Blend Ibrahim** is an Assistant Professor of Marketing and Tourism at the Department of Tourism Management, School of Tourism and Hospitality Management, ‘Girne American University, North Cyprus-Turkey’. He received his BSc in Business Management from Aleppo University, Faculty of Economics and Administrative Sciences (2008), MSc in Business Management (2016) and PhD in Business Management (Marketing) (2019) from Girne American University. His current research interests include social media marketing, corporate social responsibility, consumer behaviour, sustainable tourism, tourism and hospitality management, and branding. He is a Member of the International Network of Trainers and Consultants at ATLAS.ti (Germany) for qualitative data analysis.

**Salih Serkan Kaleli** was born in Erzurum, Turkey, in 1986. He received his Bachelor’s degree in the Department of Business Management at Ataturk University, Erzurum, Turkey in 2009; his Master’s degree in Numerical Methods at Ataturk University in 2013; and his PhD in the Department of Management Information Systems at Ataturk University in 2019. He is currently an Assistant Professor Doctor at the Department of Office Management and Manager Assistance at Social Sciences Vocational School at Ardahan University, Ardahan, Turkey. He is interested in such research areas as optimisation, statistics and business management.

**Mustafa Karabacak** was born in Eskişehir in 1985. He graduated from Anadolu University, Economic and Administrative Sciences Faculty, Department of Economics in 2008. He began his academic career as a Research Assistant at Usak University in 2009. He completed his PhD at Anadolu University in 2016. Then he became an Assistant Professor at Usak University. His main research subject is money and foreign exchange markets.

**Necla Kuduz** graduated from Selcuk University Vocational School of Social Sciences, Marketing Department in 2004. In 2008, she graduated from the Faculty of Economics and Administrative Sciences, Management Department, Selçuk University. In 2011, she completed her Master’s degree in Selcuk University Social Sciences, Institute Business Management and Marketing Department. The subject of the Master’s Thesis is on Green Marketing was published as a book. In 2015, she completed a PhD at Dokuz Eylul University Management. The subject of the Doctoral Thesis is on Hedonic Consumption. Since May 2016, she continues to work at the Faculty of Applied Sciences of Uşak University.

**Edisona Kurhasku** is a PhD Candidate in economic field, University ‘Hasan Prishtina’ Prishtina. She has long experience in developing marketing techniques especially in Republic of Kosovo where two of her theses have discussed role and challenges in Kosovo’s market. Also, she has several scientific papers which are focussed on developing and finding new forms of solution especially in marketing field.

**Oytun Meçik**, PhD, was born in Eskişehir/Turkey in 1985. He graduated from Eskişehir Osmangazi University, Department of Economics in 2008. In the same year, he began his academic career as a Research Assistant at Uşak University, Department of Economics and he completed his graduate degree at Uşak University in 2010. Then, he completed his PhD studies at Anadolu University, Department of Economics in 2014. He has been working at Eskişehir Osmangazi University, Department of Economics since 2015. He became an Associate Professor in 2017. His main research fields of study, labour market, social and economics networks, and structural transformations.

**Peterson K. Ozili** is an Economist, affiliated with the Central Bank of Nigeria. He works extensively in Academia and Policy-making. He has experience in economic policy, financial inclusion, financial stability, financial innovation, banking regulation and supervision. His areas of specialisation are: financial economics, international development, accounting, development finance, the economics of financial markets, banking and financial reporting. He has published extensively in many accounting and finance journals such as the *British Accounting Review*, *Journal of Applied Accounting Research*, *Journal of Accounting in Emerging Economies*, *International Journal of Managerial Finance*, *European Journal of Finance*, *Research in International Business and Finance*, etc.

**Esat Saçkes** is a Lecturer at Balıkesir University in Turkey. He graduated from the Tourism Management Department, Balıkesir University in 2003. He completed his Master's degree in Tourism Management and Marketing, Balıkesir University in 2007, and his PhD degree in Tourism Marketing at Balıkesir University in 2019. From 1996 to 2007 he worked at the Front Office Department in many hotels around Turkey. He currently works at the Department of Tourism Management (Sindirgi School of Advanced Vocational Studies), Balıkesir University. He teaches a wide range of topics relating to tourism, hospitality, and marketing and tourism automation softwares. His research interests include electronic word of mouth marketing, quiet tourism in tourism and hospitality services.

**Armend Salihu** works as an IT Auditor at National Audit Office – Republic of Kosovo. Also he is engaged as Teaching Assistant at the University of Prishtina, Faculty of Mathematics – Natural Sciences. Currently, he is pursuing a PhD in Computer Science at the South-East European University. His research interests are: IT audits, information system audit, theoretical computer science, security, technology and simulations.

**Alan Wild** is a Retired Academic Advisor actively involved in construction management and acting as an International Distance Tutor. He worked at the University of Central England until 2002 as Academic Supervisor of the 1990 MSc in Construction Project Management. He has taught worldwide as a Distance Teacher for the Open University and for Henley Management College and the College of Estate Management since 1978 and worked for Warwick Manufacturing Group from 1990 to 2000. From 1999 to 2001 he taught at the

University of Montpellier under the Erasmus program. He has written extensively on aspects of management, including construction and the manager as ‘reflective practitioner’, and has worked with practitioners from all levels of industry and commerce, including lay trade union representatives through to senior managers.

**Ozer Yilmaz** is an Associate Professor of Marketing at Bandirma Onyedi Eylul University, Bandirma-Balikesir-Turkey. He has a BS in Business Administration from Balikesir University (2003), MBA and PhD in Business Administration from Balikesir University (2014). His research interests are customer behaviour, marketing research and service marketing. He has taught marketing research, principles of marketing, international marketing, service marketing, etc., at both graduate and undergraduate levels.

# CHAPTER 1

## DESIGNING CURRICULUM ABOUT GOVERNANCE AND SUSTAINABILITY IN HIGHER EDUCATION: A CASE STUDY

Clinton Cassar

### ABSTRACT

*Introduction: Public administration has always been at the forefront of promoting sound and ethical values in society. The myriad of events that are shaping our world, such as global warming, deforestation, poverty and economic instability, calls for a shift from government to governance. This change demands a collaborative type of governance on the quest to implement sustainability. Collaborative governance can be initiated by its workforce, who are the individuals closest to the structures of public administration and can act as agents of change in this mission. Thus, personnel need to be equipped with the required knowledge, attitudes and skills, about and for, sustainable development. This can be addressed through education for sustainable development (ESD), a lifelong tool which requires adaption to national requirements, but most importantly to societal needs.*

*Aim: This research focusses on a longitudinal case study from the Maltese islands, the smallest state of the European Union. Since enacting the Sustainable Development Act in 2012, through which sustainable development has been mainstreamed in the Maltese public sector, never was the need felt to educate public officers for sustainable development. Hence, this research*

*aims at shedding light on the curriculum design process of an education module called 'Public Administration and Sustainability' as part of a Bachelor of Art's programme at the University of Malta.*

*Method: Framing an educational module in a tertiary institution requires tact in aligning the syllabus, not only to the pedagogical requirements, but also to the place of work. In this exploratory study, two research questions, each linked with a set of original hypotheses are tackled through a pool of data obtained from a variety of methodological tools employed, by analysing two important variables – the curriculum and the student. The former is reviewed through a content analysis exercise whereas feedback from the latter is scrutinised through a questionnaire.*

*Findings: Data triangulation demonstrates that the curriculum design of the educational module promotes a holistic learning experience, since it integrates effectively the cognitive, affective and psychomotor domains of the Bloom's Taxonomy. Furthermore, the different student cohorts share common positive views about this module.*

*Originality of Study: Previous studies indicate that there is a lacuna in research regarding curriculum design and review, especially regarding sustainable development. This research is significant as it attempts at filling this void by scrutinising closely curriculum design in higher ESD.*

*Implications: Drawing upon the results, a number of recommendations are provided, among them is 'The Multiplier Transformation Triad Model', which portrays the institutional, educational and individual transformations needed to promote sustainability. Moreover, this research might provide more insights about governments' commitment towards sustainability but should also serve useful to researchers or practitioners in various fields such as public administration, governance, sustainability and even higher education.*

**Keywords:** Governance; public administration; sustainability; education for sustainable development; curriculum design; higher education

## INTRODUCTION

Our future often appears exceptionally bleak and grim with the prospect of many issues, such as climate change, deforestation and pollution enmeshing the world and leaving their toll on many countries. In response to this, [Counce, Holmes, Reimer, Heckrotte, and Alderson \(2010\)](#) postulate that following the more spontaneous Agricultural and Industrial Revolution, our society is now facing a third and more conscious revolution – The Sustainability Revolution. Indeed, the quest for such revolution calls for a paradigm shift that envisions the integration of 'environmental, social and economic factors to reduce radically resource use, while increasing health, equity, and quality of life for all stakeholders' ([Zheng et al., 2009](#)).

As Romano (2004) rightly asserts, when the population encounters a new problem or threat, action is usually taken in the form of legislation to protect society's endangerment. While legislation evidently plays an essential role in the implementation of sustainable development, many a time, education utilised as a lifelong tool, is considered as a requisite to address its core principles among different members of society:

It can thus be argued that the higher education sector bears a modicum of responsibility for the current crisis, and consequently, has a role to play in educating students about, and for, sustainability. (Everett, 2008 as cited in Howlett, Ferreira, & Blomfield, 2016, p. 2)

It is for this reason that governments' onus is to recognise the need of implementing sustainability. In doing so, it needs to articulate and shape human resources in view of future skills, as asserted by the International Labour Organization (2015) which states that 'without skilled workers and competent enterprises, the shift to a greener economy, will be neither technically feasible nor economically viable'.

Offering a fruitful and effective educational experience is hard, but it is even harder to align it with the future job market through upskilling and reskilling. The job market often calls for the need of sustainability to create a fairer and just world not only for our contemporaries but especially for future generations. Public administration is paramount for the implementation of sustainable development in all its intricacies such as planning, policies, environmental management and even education, since it shapes the lives of people at large. Equipping and engaging learners with the above-mentioned, necessitates investment in education that promotes active learning through real-life examples synchronised with values central to public administration. As a result, it should ensure that its workforce all have a stake in education for sustainable development (ESD). In fact, this research underlines the process involved in designing a higher education curriculum for public officers and scrutinises the impact it left on them. This is examined through a longitudinal case study, which will be discussed in the successive sections of this chapter.

## THE RESEARCH SCOPE

This research is motivated by the lack of studies and underestimation of pedagogical content *vis-à-vis* sustainability in higher education (Adomßent et al., 2014; Milutinović & Nikolić, 2014). Milutinović and Nikolić (2014, p. 108) assert that 'education about sustainable development means teaching and learning about the concept itself, politics, policies and sustainable development theories'. However, its main crux is to encourage students to 'improve their sustainability awareness and contribute sustainability in their professional lives' (Lindgren, Rodhe, & Huisingh, 2006).

Taking this into consideration, this chapter seeks to unravel, reconceptualise and assess the relevant theoretical underpinnings of governance and sustainability that lay the foundation to the case study from the Maltese Islands about curriculum design in higher education for sustainable development (HESD).

A dual perspective approach, encompassing the curriculum content and student, is adopted to determine the objectives of this research, which consist of: (i) mapping out the different phases in designing this educational module; and (ii) analysing students' perceptions towards the learning experience. Careful consideration was vital in formulating two core research questions, each linked with a number of original hypotheses. Rooted on the aforementioned variables, the following research questions and hypotheses are being rolled out:

*Research Question 1:* How is the module's content grounded on principles of curriculum design?

*H1.* There is no difference between low-order thinking and high-order thinking across the teaching blocks.

*H2.* There is no difference between the learning outcomes pertaining to the course syllabus and the learning objectives for each lecture.

*H3.* There is no difference between the three learning domains (cognitive, affective and psychomotor) across the various teaching blocks.

*Research Question 2:* What impact does the educational module leave on students?

*H4.* The impact left by the educational module varies marginally between student cohorts.

*H5.* The choice of sustainable issues that require attention by public administration are similar between student cohorts.

This exploratory study will generate a diverse pool of data, making it more relevant since it provides different theoretical perspectives, which might aid other higher education institutions while planning their educational programmes and even public administrations when training their workforce.

This chapter is divided into a number of sections. Following the introduction and the research scope, the theoretical parameters are delineated and are then marshalled to the Maltese perspective. The methodological framework is then rolled out in the next section. The findings stemming from the different methods employed are presented, so that the concluding remarks and recommendations are discussed in the last section.

## GOVERNANCE AND SUSTAINABLE DEVELOPMENT

As [Strange and Bayley \(2008\)](#) indicate, economic and social progress demands guiding principles and measures on which governments can emulate within their territories for the common good. Sustainable development befits the needs of public administration as it emphasises on the spatiotemporal foundations, being the crux of generational policy and planning. This resonates the principles of the Brundtland Report, which state that 'sustainable development is not a fixed state of harmony but rather a process of change' ([World Commission on Environment](#)

and Development, 1987). The focus on ‘change’ is deemed essential when adopting the Brundtlandian philosophy of sustainable development, since it revolves around a vision which strikes a balance between intragenerational and intergenerational demands of society, often a prerogative of many governments’ mandate.

It is for this reason that the shift from ‘government’ to ‘governance’ is befitting in this context, since it involves a change in the intricacies of public decision-making. This requires moving away from the hierarchical structures of the state and creating multilayered policy-making that incorporates plural actors (Lo, 2018). The relevant stakeholders need to be on board to improve not only the quality of life but also the delivery of public services and regulatory frameworks. Placing people at the centre of governance has indeed transformed public administration towards strengthening its potential in delivering its service central to the agenda of sustainable development. As a result, common values shared in tandem by governance and sustainable development require the former to act as the ‘linking pin’ of a collaborative platform for the common good (United Nations Department of Economic & Social Affairs, 2016).

This has brought to light the notion of either ‘collaborative governance’ or ‘interactive governance’ (Denters, Van Heffen, Huisman, & Klok, 2003; Kooiman, 2003; Sørensen, 2013) which are often interchangeable, since they emphasise on the human aspect of governance. Both notions are associated with several benefits since besides acting as a vehicle for democracy and sustainable development, they provide, as Cheyne (2015, p. 418) asserts ‘spaces for dialogue, knowledge exchange, problem-driven collaboration and joint strategising between political and administrative elites and those affected by governance outcomes’. This type of governance is flexible in nature and operates beyond national structures, as asserted by United Nations Department of Economic and Social Affairs (2016, pp. 13–14):

only international collaboration and a networked system of stakeholder interaction can meet the needs of the new development agenda ... governments are forming effective partnerships and strategic alliances with private sector and civil society organizations to confront challenges the public sector cannot tackle alone.

The collaboration and interaction between stakeholders occurs at various levels, both vertically and horizontally, mirroring the principles of multilevel governance and cross-sectoral collaboration. One can deduce that collaborative governance rests on human-centredness, which should ultimately start from the people closest to the structures of public administration, that is, its workforce. This resounds Sustainable Development Goal (SDG) 16. It postulates that countries need ‘effective, accountable and transparent institutions’ which promote ‘responsive, inclusive, participatory and representative decision-making’ requiring ‘human resources [in public institutions] equipped with skills and capacities to deliver sustainable development’ (UN General Assembly, 2015).

Public administrations have to adopt various ‘changes’, as previously referred to by the Brundtlandian vision, which necessitates a shift from ‘government’ to ‘governance’ and from ‘unsustainable’ to ‘sustainable’. These changes could be accentuated through stakeholder collaboration especially its own human

resources. Trained public officers can offer valid contribution towards this change. They might help to transform an institution which has the 'capacity to resolve problems of public policy and implement rules' (UNESCO, 2015, p. 40), once educational opportunities for sustainable development are permeated across all levels and members of society. Based on the above-mentioned, planning a holistic curriculum is required to equip public officers for sustainability. The next section presents the theoretical foundations associated with this subject matter.

## CURRICULUM DESIGN IN HIGHER EDUCATION

Even though the term curriculum is encountered many a time and is by and large utilised in the education domain, defining it often seems subjective, as a myriad of interpretations would be garnered in this respect. Obtaining a deeper understanding of curriculum especially in higher education is necessary to ameliorate learning experiences in universities.

At *prima facie*, many people would agree that a curriculum is an educational plan. However, in reality such educational plan is multifaceted in nature since the content which is meant to be covered is referred to as the 'intended curriculum' while what is actually delivered is the 'enacted curriculum'. On the other hand, what is understood by students is the 'learned curriculum' and such competences are measured by the 'assessed curriculum' (Porter & Smithson, 2001). These four diverse but still pertinent characteristics of curriculum demonstrate that designing it is a daunting task, since many subliminal factors need to be taken into consideration, especially in higher education settings when syllabi are less perspective but more flexible in nature.

Ornstein and Hunkins (2009, p. 15) postulate that 'curriculum development encompasses how a curriculum is planned, implemented and evaluated, as well as what people, processes and procedures are involved'. On the other hand, JISC (2014, p. 2) explores further the intricacies involved which comprises a 'high-level process defining the learning to take place within a specific programme of study, leading to specific unit(s) of credit or qualification'. Tungare et al. (2007) accentuate that the syllabus is the 'backbone of a course' and it should contain various details such as 'the course number, title, a description, the learning objectives of the course, a list of the topics covered, links to reference material such as books or publications, and other related information'. As Toohey (1999) rightly points out, educators in higher education institutions have the flexibility in controlling the curriculum when compared to educators in other levels of education. Even though integrating institutional, national and international requirements is imperative, curriculum design should however be kept within the context of where and when it is being formulated, thus encouraging adaptability, transferability and cohesion. All this should encapsulate the notions of 'value added' and 'fitness for purpose' as postulated by Butcher, Davies, and Highton (2006). The former stresses on quality education and clear strategies to add value to learning, whereas the latter considers the adjustment of learning according to the learners' needs.

O'Neill (2010) suggests that having curriculum models or frameworks as a roadmap is essential for educational leaders to accomplish such arduous task successfully. Ornstein and Hunkins (2009) add that there are many curriculum development models that help in designing pedagogical content; however, they often disregard the human element which includes feelings, attitudes and values. Hence, such tools should complement this process without neglecting the educator's professional and personal judgement. There is no 'one size fits all' approach as these models differ 'in the extent to which they are conceptual or applied as well as in the ways in which they have influenced debate and practice about higher education curriculum' (Bovill & Woolmer, 2019). Keeping in mind that these models contribute significantly to the field, this study attempts at analysing 'how they are used and interpreted, [to] determine any possible outcomes' (Bovill & Woolmer, 2019).

One of these approaches is proposed by Nicholls (2002), who delineates various steps involved in designing an educational module. This comprises the selection of aims, followed by the learning experiences that will help in the attainment of aims and learning outcomes. Next, is the selection of content (subject matter) and its organisation through teaching-learning strategies. The final stages envisage the evaluation of the learning outcomes achieved by students, together with feedback about the learning experience. While Nicholls (2002) perspective is linked with theoretical underpinnings based on course content and design, Carliner (2003) proposes a more hands-on approach based on Analysis, Design, Delivery, Implementation and Evaluation (ADDIE). Unlike the former approach, the ADDIE's perspective gives importance to the delivery and implementation of the teaching strategies. On the other hand, Lattuca and Stark (2009) propose eight stages through an 'Academic Plan', seemingly amalgamating it with Nicholls' and Carliners' approach. These stages include – purpose, content, sequence, learners, instructional processes, instructional resources, evaluation and adjustment. Matejke and Kurke (1994 as cited in Albers, 2003), assert that syllabi should serve not only as a plan to outline the topics covered, but also as a communication device and a cognitive map, by which a holistic framework of the entire learning process is created, encapsulating even educator and student interactions.

Student involvement in learning can, in turn, encourage the transferability of skills at their place of work, as stressed by Bennett, Dunne, and Carre (1999), O'Brien and Hart (1999) as cited in Hall and Thomas (2005) who state that 'the purpose of higher education and its relative importance ... is linking education closer to the world of work ... has become an increasing focus of attention'. The planned trajectory of the curriculum, especially in higher education lies akin to student motivation (Boud, 2013; Herrnstein & Murray, 2010; Kolb & Kolb, 2012). Hyder and Bhamani (2016) add that learning outcomes play an essential role in all this, since they serve as a blend of assessment criteria and teaching strategies, usually stating the following, '... on successful completion of the module, you will be able to ...' (Moon, 2006, p. 3 as cited in Savic & Kashef, 2013). It is important to differentiate between learning outcomes and learning objectives. Learning objectives are more detailed, specify instructional intent and focus on knowledge, attitudes and skills whereas learning outcomes offer a broad overview, guarantee

achievements and are an interrelationship between outcomes, knowledge and competencies (Marden, 2002).

When an educational programme is devised with a set of well-defined learning outcomes, a holistic curriculum can be easily formulated. More often than not, higher education programmes promulgate constructive alignment by synchronising learning outcomes, teaching methods and assessment:

The fundamental principle of constructive alignment is that a good teaching system aligns teaching method and assessment to the learning activities stated in the objectives so that all aspects of this system are in accord in supporting appropriate student learning. (Biggs, 1999, p. 25)

One way how constructive alignment can be implemented is through the Bloom's Taxonomy, which serves as the backbone of the learning outcomes and objectives. This will be explained thoroughly in the following section.

## THE APPLICATION OF BLOOM'S TAXONOMY

The Bloom's Taxonomy is a widely recognised tool used in 'a convenient way to describe the degree to which university students can understand and use concepts, to demonstrate particular skills, and to have their values, attitudes, and interests improved' (Aheisibwe, Kobusigye, & Tayebwa, 2021). Callister (2010) asserts that even though the Bloom's Taxonomy is not the only hierarchical learning scheme which can be utilised, it is considered as the most influential. It focusses on three domains, each having a set of action verbs:

*The Cognitive Domain* involves the mental process of knowing and learning. It incorporates the action verbs: *Remember*, which means to recall or recognise knowledge from memory; *Understand*, signifies to show comprehension of subject matter; *Apply*, refers to making use of acquired information in a new situation; *Analyse*, means to scrutinise, categorise and differentiate new situations; *Evaluate*, is to make judgement and create an opinion; and *Create*, implies to assemble different elements into one structure or pattern (Anderson & Krathwohl, 2001).

*The Affective Domain*, encompasses the emotional aspect of learning. Its action verbs include: *Receiving*, which means to passively being aware of subject content and matter; *Responding*, signifies being actively involved in the learning process; *Valuing*, implies the worth attached to a particular object or phenomenon; *Organising*, is linking ideas and values to previous knowledge in order to create new ideas; and *Characterising*, means consistently demonstrating the same internal values (Hoque, 2017).

*The Psychomotor Domain*, comprises the physical movement of learning. Its action verbs are: *Imitation*, which means observing and emulating another individual's behaviour or skill; *Manipulation*, signifies performing a skill through guidance; *Precision*, is performing the skill with precision without