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TERRITORIAL IMPACT ASSESSMENT OF NATIONAL AND REGIONAL TERRITORIAL COHESION IN ITALY

PLACE EVIDENCE AND POLICY ORIENTATIONS TOWARDS EUROPEAN GREEN DEAL

edited by Maria Prezioso

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edited by M. Prezioso

Pàtron Editore
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Summary

List of Acronyms . . . . . pag. 15

Foreword . . . . . » 17

Reading the Territorial Cohesion . . . . . » 26
1. Methodological Approach and development process in the PRIN research . . . . . » 28
2. Country and regions in the European framework of Territorial Cohesion . . . . . » 34
Discussion of results. . . . . » 39
Remarks. . . . . » 42
References . . . . . » 47
Appendix A: How STeMA selected the list of 74 indicators . . . . . » 49

Statistical visions from the STeMA application: a joint trial . . . . . » 53
1. Problem definition and objectives . . . . . » 53
2. Materials and methods . . . . . » 54
3. Results and discussion. . . . . » 55
4. Conclusion and further research . . . . . » 59
References . . . . . » 61

PART ONE. *Assessment of National Operational policies: effects on territorial cohesion* . . . . » 63

1. Territorial Capital: effects of national and regional cohesion policies . . . . . » 65
1.1. Introduction . . . . . » 65
1.2. Structures of research . . . . . » 66
1.3. National Operational Programme Small & Medium Enterprises Initiative: main objectives and procedure followed . . . . . » 69
References . . . . . » 71

2. The measure of territorial capital: the application of the STeMA Model to the NOP Infrastructure and Networks. . . . . » 73
2.1. Objectives and contents of the NOP . . . . . » 73
2.1.1. Analysis of the *Smart Growth* determinant . . . . . » 74
2.1.2. Analysis of the *Sustainable Growth* determinant . . . . . » 76
2.1.3. Analysis of *Inclusive Growth* determinant . . . . . » 86
2.1.4. Analysis of *Resources and Funds* determinant . . . . . » 89
2.2. Policy indications. . . . . » 100
References . . . . . » 100

3. Analysis of National Operational Programmes in relation to the theme of 'Territorial Capital'. NOP ESF Systems for Active Employment Policies and NOP ESF Youth Employment Initiative . . . . . pag. 102
3.1. The NOP ESF Systems for active employment policies . . . . . » 102
3.1.1. Reference thematic objectives . . . . . » 103
3.1.2. The NOP Youth Employment . . . . . » 103
3.2. Complementarity and integration with other dedicated documents . . . . . » 105
3.2.1. The NOP EDU For the School – Skills and environments for learning . . . » 105
3.2.2. The Common Strategic Framework 2014-2020. Main principles . . . . . » 105
3.2.3. Financial allocation of the NOP-SAEP . . . . . » 105
3.3. State-of-the-art policy applications . . . . . » 106
3.4. NOP-SAEP analysis conducted with STeMA . . . . . » 106
3.4.1. Inclusive Growth matrix . . . . . » 110
3.4.2. Resources and Funds matrix . . . . . » 110
3.4.3. Smart Growth matrix . . . . . » 112
3.4.4. Sustainable Growth matrix . . . . . » 113
3.5. Recommendations for the NOP 2020, Data territorialization . . . . . » 115
References . . . . . » 120

4. Social Inclusion and Territorial Dynamics . . . . . » 121
4.1. Introduction . . . . . » 121
4.2. Policies based on Age . . . . . » 123
4.3. Employment policies . . . . . » 126
4.4. Public health . . . . . » 127
4.5. Conclusions . . . . . » 128
References . . . . . » 130

5. Smart Growth and Inner Areas for the Territorial Cohesion of the Italian Regions . . . . . » 132
5.1. The difficult encounter between intelligent growth and peripheral areas: the terms of the debate in Europe and in Italy . . . . . » 132
5.2. Smart growth in Italy in the 2014-2020 programming . . . . . » 134
5.3. STeMA simulations and smart growth in the Italian provinces . . . . . » 135
5.3.1. The determinant *Smart Growth* and the UI and BUL indicators . . . . . » 135
5.3.2. The PAI, PL and RDI indicators . . . . . » 136
5.3.3. The IDI and PET indicators . . . . . » 137
5.3.4. The PLL and RL indicators . . . . . » 138
5.4. Smart growth at the service of the Territorial Cohesion of the Italian regions: from smart city to smart land . . . . . » 139
References . . . . . » 141

6. Inclusive Growth in Inner and Internal Areas: policies sustaining quality of life as driver of Territorial Development . . . . . » 143
6.1. Introduction . . . . . » 143
6.2. Promotion of inclusive growth in inner and internal areas . . . . . » 144
6.3. Promotion of inclusive growth through the NOP Metro . . . . . » 145
6.4. Promotion of inclusive growth through the NOP Culture and Development . . . . . » 147

6.5. Ex ante and ex post evaluation: the OpCu indicator . . . . . pag. 149
6.6. Policy recommendations: more measures fostering quality of life improvements means greater territorial growth . . . . . » 152
References . . . . . » 155

7. 'Inner Peripheries' and infrastructural policies in Italy . . . . . » 156
7.1. Introduction . . . . . » 156
7.2. Inner peripheries in Italy . . . . . » 156
7.3. Inner peripheries and infrastructural sustainability . . . . . » 161
7.4. The effects of policy decisions regarding infrastructure . . . . . » 163
References . . . . . » 168

8. Territorial Impact Assessment of the OPs 2014-2020 for the competitiveness of regional economies. A STeMA model application . . . . . » 170
Introduction . . . . . » 170
8.1. Methodological premises . . . . . » 170
8.2. Productivity/Competitiveness within the EU structural funds and territorial policies: criteria for the selection of the OPs . . . . . » 172
8.3. Productivity/Competitiveness within the EU structural funds and territorial policies: short description of the selected OPs . . . . . » 174
8.4. Matching topic, OPs objectives and policy choices for the STeMA ex post evaluation . . . . . » 176
8.4.1. Reading of the National Operational Programme for Enterprise and Competitiveness (NOP-E&C) . . . . . » 177
8.4.2. Reading of the National Operational Programme Small and Medium Enterprise Initiative (NOP-SME) . . . . . » 179
8.4.3. Reading of the National Operational Programme on Research and Innovation (NOP-R&I) . . . . . » 180
8.4.4. Reading of the National Operational Programme on Infrastructure and Networks (NOP-I&N) . . . . . » 182
8.4.5. The National Operational Programme on Youth Employment Initiative (NOP-YEI) . . . . . » 184
8.4.6. Reading of the National Operational Programme Systems of Active Employment Policies (NOP-SAEP) . . . . . » 186
8.4.7. Overall assessment of the selected Policy Choices featured in the initial STeMA setting . . . . . » 187
8.5. Assessment of the ex ante and ex post configurations of the theme Productivity/Competitiveness at the national level . . . . . » 188
8.5.1. NOPs applicable to all regions . . . . . » 188
8.5.2. NOPs applicable to the whole Italian *Mezzogiorno* ('Less developed and In transition regions') . . . . . » 194
8.5.3. NOPs applicable to the 'less developed' southern regions (Less developed regions) . . . . . » 196
8.6. Conclusions and Policy recommendations . . . . . » 198
References . . . . . » 203

9. Green, Blue and Circular Economy in Italy . . . . . » 205

9.1. A non-straightforward definition . . . . . pag. 205
9.2. State of the Art in Italy and main targets . . . . . » 207
9.2.1. National Action Plan on Circular Economy . . . . . » 207
9.2.2. National Strategy for Sustainable Development . . . . . » 207
9.2.3. Energia Clima 2030 – National Integrated Plan Energy and Climate . . » 209
9.2.4. National Energy Strategy . . . . . » 210
9.2.5. Document of Economy and Finance. . . . . » 210
9.3. Conclusions . . . . . » 210
References . . . . . » 212
Appendix 9a: The Sustainable Development Goals. . . . . » 213

10. Ideas and remarks for implementing plans in the South of Italy (Mezzogiorno) . . » 214
Introduction . . . . . » 214
10.1. The aspects of economic development . . . . . » 215
10.2. Cohesion and growth policies in the *Mezzogiorno*. . . . . » 216
10.2.1. How to estimate the impact of cohesion policies in Europe. . . . . » 217
10.3. A possible *Mezzogiorno* Investment Plan . . . . . » 222
10.4. Conclusions . . . . . » 225
References . . . . . » 226

11. The mid-term evaluation of 2014-2020 European Structural and Investment Funds Programmes. *The case study of ETC Programmes evaluation* . . . . . » 228
11.1. The mid-term evaluation of 2014-2020 ESIF Programmes at EU level . . . . . » 228
11.2. A case study: the evaluation of ETC Programmes . . . . . » 230
11.3. Conclusions . . . . . » 234
References . . . . . » 235

PART TWO. *The future of the Italian Regions* . . . . . » 237

I. The Region of Piedmont . . . . . » 239
I.1. Critical analysis of the Region and presentation of the ROP . . . . . » 239
I.1.1. The regional context . . . . . » 239
I.1.2. Piedmont ESF ROP. . . . . » 240
I.1.3. Piedmont ERDF ROP. . . . . » 241
I.2. Ex ante and ex post analysis of the determinants. . . . . » 242
I.2.1. *Smart Growth* . . . . . » 242
I.2.2. *Sustainable Growth*. . . . . » 249
I.2.3. *Inclusive Growth*. . . . . » 249
I.2.4. *Resources and Funds* . . . . . » 251
I.3. Final critical comments on the region and policy recommendation . . . . . » 251
I.4. Suggestions and policy guidelines for the post-2020 ROP . . . . . » 253
References . . . . . » 255
Appendix I.A . . . . . » 256
Appendix I.B . . . . . » 260

II. Cohesion Policies in the Alpine Valle D'Aosta Region . . . . . » 262
II.1. Valle d'Aosta: an Alpine Region. . . . . » 262

II.2. The 2014-2020 programmes . . . . . pag. 264
II.3. The ex ante context . . . . . » 266
II.4. Policy simulations . . . . . » 267
II.5. Concluding remarks . . . . . » 270
References . . . . . » 271

III. The Region of Liguria . . . . . » 272
III.1. Critical analysis of the Region and presentation of the ROP . . . . . » 272
III.1.1. The regional context . . . . . » 272
III.1.2. ESF ROP Liguria . . . . . » 273
III.1.3. ERDF ROP Liguria . . . . . » 274
III.2. Ex ante and post ante analysis of the determinants . . . . . » 274
III.2.1. *Smart Growth* . . . . . » 274
III.2.2. *Sustainable Growth* . . . . . » 278
III.2.3. *Inclusive Growth* . . . . . » 280
III.2.4. *Resources and Funds* . . . . . » 280
III.3. Final critical comment on the region and policy recommendation . . . . . » 281
III.4. Policy recommendations and goals for the ROP post 2020 . . . . . » 284
References . . . . . » 284
Annex III.A . . . . . » 286
Annex III.B . . . . . » 290

IV. Regional policies and the European dimension of growth in Lombardia . . . . . » 292
IV.1. Introduction . . . . . » 292
IV.2. 2014-2020 cohesion funds . . . . . » 293
IV.3. The regional context and the impact of cohesion policies . . . . . » 296
IV.3.1. *Smart Growth* . . . . . » 296
IV.3.2. *Sustainable Growth* . . . . . » 299
IV.3.3. *Inclusive Growth* . . . . . » 301
IV.3.4. *Resources and Funds* . . . . . » 304
IV.4. Conclusion . . . . . » 306

V. The case study of the Region Trentino-Alto Adige . . . . . » 308
V.1. The ESF/ERDF 2014-2020 OP of the Autonomous Province of Trento and Bolzano . . . . . » 308
V.2. Ex ante evaluation of indicators . . . . . » 314
V.3. Analysis of the ex post effects of policy choices . . . . . » 316
V.4. Some suggestions for policy choices in the post-2020 period . . . . . » 320
References . . . . . » 320

VI. The Case Study of Veneto Region . . . . . » 322
VI.1. Analysis and evaluation of the ex ante social, economic and territorial situation of the region through a reading of its main political and strategic documents . . . . . » 322
VI.1.1. Regional Operational Programme – European Social Fund (ESF ROP) 2014-2020 . . . . . » 322
VI.1.2. Regional Operational Programme – European Regional Development Fund (ERDF ROP) 2014-2020 . . . . . » 324

VI.1.2.1. Intervention strategies: Thematic Objects and Investment Priorities for a Smart, Sustainable and Inclusive Growth . . . . . pag. 326
VI.2. Comparing ex ante with ex post (and ex post territorialized) place evidences . . . » 329
VI.2.1. *Smart Growth* . . . . . » 329
VI.2.2. *Sustainable Growth* . . . . . » 330
VI.2.3. *Inclusive Growth* . . . . . » 330
VI.3. Some indications for policy choices in the post-2020 period . . . . . » 332
References . . . . . » 332

VII. A STeMA Model application to the Friuli Venezia Giulia Region . . . . . » 334
VII.1. The main official documents considered in the analysis . . . . . » 334
VII.2. Ex ante evaluation of indicators . . . . . » 336
VII.2.1. *Smart Growth* . . . . . » 336
VII.2.2. *Sustainable Growth* . . . . . » 337
VII.2.3. *Inclusive Growth* . . . . . » 338
VII.2.4. Circular, Green and Blue economy in the FVG ROP documents . . » 339
VII.3. Analysis of the ex post effects of policy choices . . . . . » 340
VII.4. Some suggestions for policy choices in the post-2020 period . . . . . » 343
References . . . . . » 344

VIII. STeMA Model and Cohesion policies: an application to the Emilia-Romagna Region . . . . . » 345
VIII.1. Introduction . . . . . » 345
VIII.2. From the traditional ex ante analysis to the STeMA application . . . . . » 346
VIII.3. The overall regional cohesion framework and the ERDF Regional Operational Programmme 2014-2020 . . . . . » 347
VIII.4. The STeMA evaluation model and the ex post territorial impact of the policy choices . . . . . » 349
VIII.5. Conclusions and the use of STeMA for policy recommendations . . . . . » 353
References . . . . . » 356

IX. A STeMA Model application to the Tuscany Region . . . . . » 357
IX.1. Introduction: from the traditional ex ante analysis to the STeMA application . . . » 357
IX.2. The overall regional cohesion framework and the Tuscan Regional Operational Programme 2014-2020 . . . . . » 358
IX.3. STeMA evaluation model and the selection of the Policy Choices . . . . . » 359
IX.4. STeMA evaluation model and the ex post territorial impact of the selected policy choices . . . . . » 360
IX.5. Conclusions and Policy recommendations . . . . . » 367
References . . . . . » 368

X. Marche Region: an application of STeMA TIA to regional planning policy . . . » 369
X.1. The Marche Region and the regional policies . . . . . » 369
X.2. Regional strategic planning policy . . . . . » 372
X.3. Status quo and ex ante territorialisation . . . . . » 375
X.3.1. *Smart Growth* . . . . . » 375
X.3.2. *Sustainable Growth* . . . . . » 376

X.3.3. *Inclusive Growth* . . . . . pag. 377
X.3.4. *Resources and Funds* . . . . . » 378
X.4. Policy choices for the implementation of the Europe 2020 strategies . . . . . » 379
X.4.1. *Smart Growth* . . . . . » 379
X.4.2. *Sustainable Growth* . . . . . » 381
X.4.3. *Inclusive Growth* . . . . . » 381
X.4.4. *Resources and Funds* . . . . . » 384
X.5. Concluding remarks in the post-2020 perspective . . . . . » 388
References . . . . . » 390

XI. Territorial cohesion assessment of Umbria Region . . . . . » 391
XI.1. Umbria Region: national strategies and regional programs to achieve cohesion policy objectives . . . . . » 391
XI.2. The regional geo-economic framework. What policies to implement? . . . . . » 395
XI.2.1. *Smart Growth* determinant . . . . . » 397
XI.2.2. *Sustainable Growth* determinant . . . . . » 398
XI.2.3. *Inclusive Growth* determinant . . . . . » 399
XI.2.4. *Resources and Funds* determinant . . . . . » 399
XI.3. Conclusions and suggestions for post 2020 . . . . . » 400
References . . . . . » 402

XII. Territorial cohesion in Latium Region. A STeMA measurement of Regional Operational Programme ERDF 2014-2020 . . . . . » 403
XII.1. The Latium Region at the beginning of 2014-2020 programming period . . » 403
XII.2. An ex ante evaluation of the Regional performance . . . . . » 409
XII.2.1. *Smart Growth* determinant . . . . . » 409
XII.2.2. *Sustainable Growth* determinant . . . . . » 410
XII.2.3. *Inclusive Growth* determinant . . . . . » 412
XII.2.4. *Resources and Funds* determinant . . . . . » 414
XII.3. Ex post Territorial Impact Assessment of the ERDF ROP 2014-2020 policies . . . » 414
XII.3.1. *Smart Growth* – ex post assessment . . . . . » 415
XII.3.2. *Sustainable Growth* – ex post assessment . . . . . » 418
XII.3.3. *Inclusive Growth* – ex post assessment . . . . . » 418
XII.3.4. *Resources and Funds* – ex post assessment . . . . . » 418
References . . . . . » 426

XIII. Abruzzo and regional programming for cohesion: Analysis and dynamics for the 2020 programming . . . . . » 427
XIII.1. Abruzzo: demographic dynamics for a strategy and policy to enhance the region . . . . . » 427
XIII.2. Regional Operational Programme (POR) Abruzzo 2014-2020 . . . . . » 428
XIII.3. ROP in STeMA analysis between opportunities and constraints . . . . . » 433
XIII.4. Conclusion . . . . . » 434
References . . . . . » 434

XIV. The territorial cohesion in Molise Region: socio-economic and financial framework, assessment and policy recommendations . . . . . » 436
XIV.1. The regional territorial framework: context analysis, planning and financial framework . . . . . » 436

XIV.2. Implementation of the STeMA-TIA model to the Molise territorial systems: analysis of results . . . . . pag. 444
XIV.2.1. *Smart Growth* determinant: Policy Impact and Territorial Impact analysis . . . . . » 445
XIV.2.2. *Sustainable Growth* determinant: Policy Impact and Territorial Impact analysis . . . . . » 447
XIV.2.3. *Inclusive Growth* determinant: Policy Impact and Territorial Impact analysis . . . . . » 449
XIV.2.4. *Resources and Funds* determinant: Policy Impact and Territorial Impact analysis . . . . . » 451
XIV.3. Policy recommendations for the future of cohesion policy in the Molise Region . . . . . » 454
References . . . . . » 457

XV. The state of territorial cohesion in the Campania Region: place-based evidence analysis and assessment for post 2020 planning . . . . . » 459
XV.1. The regional territorial framework: context analysis, planning and financial framework . . . . . » 459
XV.2. The response of the Campania territorial systems through the STeMA-TIA model . . . . . » 466
XV.2.1. *Smart Growth* determinant: Policy Impact and Territorial Impact analysis . . . . . » 467
XV.2.2. *Sustainable Growth* determinant: Policy Impact and Territorial Impact analysis . . . . . » 467
XV.2.3. *Inclusive Growth* determinant: Policy Impact and Territorial Impact analysis . . . . . » 469
XV.2.4. *Resources and Funds* determinant: Policy Impact and Territorial Impact analysis . . . . . » 472
XV.3. Scenarios and policy recommendations . . . . . » 475
References . . . . . » 479

XVI. The Puglia Regional Operational Programme: the potential and limits of regional programming in the 2014-2020 . . . . . » 481
XVI.1. Structures of research in Puglia . . . . . » 481
XVI.2. NOP Research and Innovation 2014-2020 and policy choices in Puglia . . . . . » 482
XVI.3. National Operational Programme Small & Medium Enterprises Initiative: territorial impacts in Puglia by STeMA . . . . . » 484
XVI.4. The Puglia Regional Operational Programme: the potential and limits of regional programming in the 2014-2020 . . . . . » 486
XVI.5. Analysis of ROP Puglia: identification of targets and of policies . . . . . » 487
XVI.6. Application of STeMA in high-impact policy choices . . . . . » 488
XVI.6.1. *Smart Growth* . . . . . » 488
XVI.6.2. *Sustainable Growth* . . . . . » 491
XVI.6.3. *Inclusive Growth* . . . . . » 493
XVI.7. Application of STeMA in the medium-low impact policy choices . . . . . » 496
XVI.7.1. *Smart Growth* . . . . . » 496
XVI.7.2. *Sustainable Growth* . . . . . » 497
XVI.7.3. *Inclusive Growth* . . . . . » 499

XVI.8. Conclusions . . . . . pag. 501
References . . . . . » 502

XVII. The measurement of territorial cohesion in Calabria through the STeMA model with reference to Regional programming . . . . . » 504
XVII.1. A contextual analysis of the Calabria region . . . . . » 504
XVII.1.1. Analysis of the *Smart Growth* determinant . . . . . » 505
XVII.1.2. Analysis of *Sustainable Growth* determinant . . . . . » 508
XVII.1.3. Analysis of *Inclusive Growth* determinant . . . . . » 512
XVII.1.4. Analysis of *Resources and Funds* determinant . . . . . » 516
XVII.2. Conclusions . . . . . » 518
References . . . . . » 520

XVIII. The measure of territorial cohesion: the application of the STeMA model to the Basilicata Region . . . . . » 521
XVIII.1. The regional context and the Operational Programme 2014-2020 . . . » 521
XVIII.1.1. Analysis of the *Smart Growth* determinant . . . . . » 526
XVIII.1.2. Analysis of the *Sustainable Growth* determinant . . . . . » 529
XVIII.1.3. Analysis of the *Inclusive Growth* determinant . . . . . » 531
XVIII.1.4. Analysis of the determinant *Resources and Funds* . . . . . » 539
XVIII.2. Policy suggestions . . . . . » 543
References . . . . . » 546

XIX. Territorial Cohesion in the Sicily's Planning 2014-2020. What are Policy Choices for not being isolated/islanders? . . . . . » 547
XIX.1. The planning of European funds in Sicily . . . . . » 547
XIX.2. Macro-areas and priority objectives for regional planning and application of the STeMA method . . . . . » 548
XIX.3. The determinants of the STeMA method for the analysis of policy choices in Sicily . . . . . » 549
XIX.3.1. *Smart Growth* determinant . . . . . » 549
XIX.3.2. *Sustainable Growth* determinant . . . . . » 552
XIX.3.3. *Inclusive Growth* determinant . . . . . » 555
XIX.4. Concluding remarks . . . . . » 558
References . . . . . » 559

XX. Implementation of cohesion policies in Sardinia Region. A critical analysis by the STeMA TIA system model . . . . . » 560
XX.1. Introduction . . . . . » 560
XX.2. Technical and financial structure of 2014-2020 ERDF ROPs . . . . . » 561
XX.3. Technical and financial structure of the 2014-2020 ESF ROP . . . . . » 563
XX.4. Ex ante and ex post evaluation of the three determinats . . . . . » 564
XX.4.1. The *Smart Growth* determinant: . . . . . » 564
XX.4.2. The *Sustainable Growth* determinant . . . . . » 565
XX.4.3. The *Inclusive Growth* determinant . . . . . » 568
XX.5. Final considerations and policy recommendations . . . . . » 570
References . . . . . » 573

List of Figures . . . . . pag. 575

List of Tables . . . . . » 580

Credits . . . . . » 585

LIST OF ACRONYMS

ACT	Agenzia per la Coesione Territoriale – Agency for Territorial Cohesion
AdP	Accordo di Partenariato – Partnership Agreement
BAT	Best Available Techniques
CAP	Common Agricultural Policy
CBC	Cross Border Cooperation
CE	Commissione Europea – European Commission
CF	Cohesion Fund
CINSEDO	Centro interregionale di studi e documentazione – Interregional Centre for Studies and Documentation
CIPE	Comitato Interministeriale per la Programmazione Economica – Interministerial Committee for Economic Planning
CLLD	Community-Led Local Development
CoR	European Committee of the Regions
CPR	Common Provisions Regulation
DEF	Documento di Economia e Finanza – Document of Economy and Finance
DG	Direzione Generale – Directorate General
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EGTC	European Group of Territorial Cooperation
EMFF	European Maritime and Fisheries Fund
ENI	European Neighbourhood Instrument
EP	European Parliament
ERDF	European Regional Development Fund
ERTMS	European Rail Traffic Management System
ERVET	Emilia Romagna Valorizzazione Economica del Territorio
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ESPON	European Territorial Observatory Network
ETC	European Territorial Cooperation
EU	European Union
FSC	Fondo di Sviluppo e Coesione – National Development and Cohesion Fund
FUA	Functional Urban Area
GDP	Gross Domestic Product
GIS	Geographic Information System
I&N	Infrastructure and Networks
ICT	Information and Communication Technology
IG	Inclusive Growth
IP	Inner Periphery
ITI	Integrated Territorial Investments

YEI	Youth Employment Initiative
LAP	Local Action Plan
MATTM	Ministero dell'Ambiente e della Tutela del Territorio e del Mare – Ministry of Environment and Territory and Sea Protection
MEF	Ministero dell'Economia e della Finanza – Ministry of Economy and Finance
MFF	Multiannual Financial Framework
MEGA	Metropolitan European Growth Area
MIBACT	Ministero per i Beni e le Attività Culturali e il Turismo – Ministry of Cultural Heritage and Tourism
MILPS	Ministero del Lavoro e delle Politiche Sociali – Ministry of Labour and Social Policies
MISE	Ministero dello Sviluppo Economico – Ministry of Economic Development
MIUR	Ministero dell'Istruzione, dell'Università e della Ricerca – Ministry of Education, University and Research
MS(s)	Member State(s)
NEET	Neither in Employment nor in Education or Training
NOP	National Operational Programme
NOP-E&C	National Operational Programme Enteprises and Competitiveness
NOP-EDU	National Operational Programme on Education
NOP-IN	National Operational Programme for Social Inclusion
NOP-I&N	National Operational Programme Infrastructure and Networks
NOP-Metro	National Operational Programme on Metropolitan Cities
NOP-Culture	National Operational Programme on Culture and Development
NOP-R&I	National Operational Programme Research and Innovation
NOP-SME	National Operational Programme Small and Medium Enterprises Initiative
NOP-SAEP	National Operational Programme Systems for Active Employment Policies
NOP-YEI	National Operational Programme Youth Employment Initiative
NUTS	Nomenclature des Unités Territoriales Statistiques – Nomenclature of Territorial Units for Statistics
OPs	Operational Programmes
PGTL	Piano Generale dei Trasporti e della Logistica – General Transport and Logistics Plan
PI	Principal Investigator
PNR	Programma Nazionale di Riforma – National Reform Program
PRIN	Progetto di ricerca di Rilevante Interesse Nazionale – Research Project of National Interest
PTR	Piano Territoriale Regionale – Territorial Regional Plan
R&D	Research and Development
R&F	Resources and Funds
RC	Reddito di Cittadinanza – Citizenship Income
ReI	Reddito di Inclusione – Inclusion Income
RDP	Rural Development Programme
RIS3	Research and Innovation Strategy for Smart Specialisation
ROP	Regional Operational Programme
S3	Smart Specialisation Strategy
SAM	Social Accounting Matrix
SESAR	Single European Sky Air Traffic Management System
SEZ	Special Economic Zone
SG	Smart Growth
SIA	Sostegno per l'Inclusione Attiva – Support for Active Inclusion
SDGs	Sustainable Development Goals
SME	Small Medium Enterprise
SNAI-NSIA	Strategia Nazionale per le Aree Interne – National Strategies for Inner Areas
SNSS	Strategia Nazionale per lo Sviluppo Sostenibile – National Strategy for Sustainable Development
SPAO-SAEP	Sistemi di Politiche Attive per l'Occupazione – Systems of Active Employment Policies
STeMA	Sustainable Territorial economic/environmental Management Approach
STFT	Systemic Territorial Functional Typologies
SuG	Sustainable Growth
SVIMEZ	Associazione per lo Sviluppo dell'industria nel Mezzogiorno – Association for the Development of Industry in Southern Italy
TC	Territorial Cohesion
TEN-T	Trans-European Networks – Transport
TIA	Territorial Impact Assessment
TOs	Thematic Objectives
U	PRIN Unit
UNEP	United Nations Environment Programme

Chapter XII

TERRITORIAL COHESION IN LATIUM REGION. A STeMA MEASUREMENT OF REGIONAL OPERATIONAL PROGRAMME ERDF 2014-2020

*Michele Pigliucci**

XII.1. The Latium Region at the beginning of 2014-2020 programming period

At the beginning of the 2014-2020 programming period, Latium Region did contribute to Italian GDP for 11%, resulting of a progressive period of decline started in 2007, at the beginning of previous period. The regional economy was mainly composed by Services (84,6%), while Industry didn't reach 15% (Italian medium rate is 24,7%), one-third from building, and Primary sector was at 1,2% (Regione Lazio, 2014a, p. 14).

In terms of role for the development of the country, Latium Region Regional Operational Plan (ROP) claims to be aware of the responsibility to host the metropolitan area of Rome Capital City (and biggest city of the country), which results in the responsibility to be the driver to development for the whole country: a clear definition of targets and an overall simplification of governance models are the main ways to reach this scope through a simple definition of achievable projects to be measured by weighable indicators.

The adoption of ROP was preceded by the drawing up of the strategic document *Linee di indirizzo per un uso efficiente delle risorse finanziarie destinate allo sviluppo 2014-2020* (Guidelines for an efficient use of financial resources for development 2014-2020) (Regione Lazio, 2014a) adopted by Latium Region in 2014, which aimed at identify a common framework for the development of the policies related to European Structural and Investment Funds (ESIF) and related expenses, in order to guarantee an efficient synergy for the use of European Regional Development Fund (ERDF), European Social Fund (ESF) and European Agricultural Fund for Rural Development (EAFRD). This document identifies the main Regional macroareas related to Thematic Objectives of the Program 2014-2020:

– Economic progress based on Research;

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– Innovation and digital growth;
– Economic and social progress reinforced by vocational education and training;
– Social progress and quality of life through integration between social and health politics;
– Policies for social and territorial cohesion;
– Policies for optimization of organization tasks of Regional Administration.

Since Latium Region is in the category of the more-developed regions, according to 2014-2020 classification of Cohesion Policy (OJEU, 2013, art. 90 c. 2), at least 80% of ERDF funds had to be allocated to four Thematic Objectives (UE 1299/2013, art. 6), and at least 20% for the TO 4[129]. According to this rule, the document *Linee di Indirizzo* draws a plan for the use of funds with a redefinition of the planning, evaluation and management phases in an innovative manner, in order to face severe consequences of economic crisis and to guarantee an efficient use of the EU funds. The most important element of this new approach is the institutional partnership in the definition of the territorial goals and plans to be adopted, and in the targets and objectives to be addressed, in close cooperation aiming at achieving and in a place-based approach (Regione Lazio, 2014a, p. 9):

– a close cooperation amongst national, regional and local public bodies and private stakeholders;
– active involvement of partners in the whole cycle of programming (preparation, implementation, monitoring and evaluation).

Territorial interpretation of the pillars of EU Strategy 2014-2020 put particular attention to the need to raise the expenditure in R&D, to enhance tertiary education and employment, to reduce poverty level and increase share of energy from renewable sources. Regional government programme was designed in 7 macro-areas, regrouping European aims in single steps, matching Thematic Objectives (TO) of Europe 2020 Strategy (*Linee di Indirizzo*, p. 22-23):

1) A modern Region helping development, intended as reorganisation and rationalization of Public Administration tasks (TO 4, 10 and 11);
2) A great Region of innovation (TO 1, 2, 3, 4, 6, 8, 9, 10);
3) Right to education for development and employment, intended as a tool for economic and social development (TO 2, 8, 9, 10, 11);
4) A Region that cares and protects, intended social development to be reached matching health and and social policies (TO 9, 10);
5) A sustainable Region (TO 3, 4, 5, 6);
6) Investments for a competitive territory (TO 2, 4, 8, 10, 22);
7) Choices for a more united society, intended as social and territorial cohesion (TO 2, 3, 8, 9, 10, 11).

While identifying the expenditure voices for investments, the ERDF ROP list the chapters of ERDF on which Latium Region decided in advance not to invest, in particular TO 8 and TO 7 (7) promoting sustainable transport and removing bottlenecks in key network infrastructures; (8) promoting sustainable and quality employment and supporting labour mobility.

[129] TO 4 – Supporting the shift towards a low-carbon economy in all sectors.

At the basis of this selection there is an analysis of competitiveness elements of Region: out of 600 thousand companies (in 2012), 164 thousands worked in trade, 89 thousands in building, 47 thousands in primary sector, 39 thousands in manufacturing and mining. The cornerstone of the Regional economy is tertiary non-trade activities, that counts 216 thousands companies, around 39% of the total. Among them, a lot of enterprises working in public sector, such as several Research Centres and Institutions (218 labs, 4 Excellence centres, 48 Research institutions, 12 Universities, 2 Scientific and technologic parks and 3 technological districts) that bring Latium Region at the high level of the list of innovative capacity (Regione Lazio, 2014a, p. 45).

Starting from this analysis, Latium ERDF ROP include a SWOT analysis of regional context per thematic objectives, whose results identifies main territorial priorities (Regione Lazio, 2014b, pp. 15-16):

– the need to strengthen "knowledge system" of Region, also with the help of technologies, to contribute to keep European global technologic leadership, to face challenges through technologies and to enhance industrial chances.

– The need to strengthen the access to Public Administration services. This results in Latium Digital Agenda (Regione Lazio, 2015), aiming at laying the foundation of a digitalisation of all the Public Authorities services for citizens and enterprises.

– The need of improving competitive position of Regional productive systems, bringing industrial system towards new business models, strengthening export and sustaining creation of new innovative start-ups.

– The need to enhance sustainable use of resources, and to improve sustainability of mobility within metropolitan area. In particular, Region aims at enhancing energy use in public buildings, considering the important weight of this sector in the Region.

These evaluations resulted in 5 strategic priority axes for territory:

– Priority axis 1: Research, Innovation;
– Priority axis 2: Digital Latium;
– Priority axis 3: Competitiveness;
– Prority axis 4: Sustainable energy and mobility;
– Priority axis 5: Hydrogeological and seismic risk;
– (Axis 6 Technical assistance).

Priority Axis 1 – Research and innovation: Latium aim at being specialized in the development of advanced services enhancing domestic and international technologies and knowledge. Starting from the context analysis and the dialogue with territorial stakeholders, three macro targets have been identified (Regione Lazio, 2014b, p. 17):

– facilitate a repositioning process of Regional enterprises towards a better added-value market segment, through know-how and excellence technologies processes;

– turn Latium a "great European Region of innovation" oriented to international market;

– bring Latium to the top of European benchmark in internationalization, with a particular attention to strategic interest marketplaces, like MENA (Middle East and North Africa) and BRICS (Brazil, Russia, India, China and South Africa).

The Smart Specialization Strategy of the Region takes in charge these targets, painting a model where technological, research and enterprise excellences work in contact with ITC companies for drawing innovative solutions able to improve the quality of life of citizens and institutions in agrifood, health, water management,

natural resources management, smart cities and security (Regione Lazio, 2014b, p. 17) in a real cross-sectorial view (Regione Lazio, 2016).

Priority Axis 2 – Digital Latium: In order to develop Information-based Society, and in line with European Digital Agenda (EC, 2014), Latium aims at enhancing digital infrastructures in order to guarantee online services from Public Administration to citizens and companies working in Region. The target is to guarantee a 100Mbps broadband to all the Regional territory, starting from Metropolitan area of Rome and industrial areas suffering crisis.

Priority Axis 3 – Competitiveness: Starting from the understanding of the economic global crisis, Latium identifies a complex of actions aiming at giving new vitality to economic regional sector through three keywords:

– Competitive repositioning of companies, through a common vision of market;
– Territorial marketing of the Region as a whole and its companies;
– Support to start-up creation through business accelerator and financial instruments for credit.

Priority Axis 4 – Sustainable energy and mobility: Latium Region wants to conjugate revitalisation of economic field with a strong fight against climate change issues, in order to plan an economic growth founded on "competitiveness in sustainability" (Prezioso, 2011), starting from an incentive to decarbonization of energy resources through new technologies, in line with National Energy Strategy (MISE, 2017) and Energy Roadmap 2050 (EU, 2012) of European Commission towards green economy. Achievement of energy efficiency targets is possible thanks to development of sustainable technologies in different sectors (green jobs), also in order to reduce enterprise's costs.

One of the key elements of this Axis is the turning of Public Local Transport towards a green technology, through replacement of vehicles and deep changes in the use of public infrastructures.

Priority Axis 5 – Hydrogeological and seismic risk: Latium Region suffers a high-level risk of seismic and hydrogeological damages, especially in some territories. In coherence with National Risk assessment (Presidency of the Council of Ministers Italian, Civil Protection Department, 2018), ERDF ROP foresees a complex plan for reducing risk reasons and for enhance seismic resistance of buildings.

The selection of the priority axes was done starting from a strategic view of the Region and was explained in the ROP with the explicit deep indication of mandatory steps to be reached in order to achieve the targets.

The ROP document reviews the situation related to compliance with ex ante conditionalities (ExAc), addressing the ones not fulfilled with specific strategies (Tab. XII.1).

The definition of investment priorities was reached through a broad participatory process on the basis of the motto "Invest for the future and determine the change", in order to re-thinking the development models and maximize result of the expenditure choices, switching from the 'how much' to the 'how' to spend, in a point of view oriented on the quality and not just the quantity of expenditure.

With the aim to use the funds in a 'smart way', ROP forecasts a deep modification of governance model in the use of EU funds, in order to match operative processes to spend better and sooner.

The achievement of these aims also passes through the complex application of National and Regional strategic documents, which constitute key elements of the overall strategy, in a cross-sectorial view. In particular, the *Strategia Nazionale per le*

Tab. XII.1 - Ex Ante priorities and compliance references.

ExAc	Priority Axes of ROP	References
T.01.1 – Research and Innovation: Existence of a national or regional smart specialisation strategy in line with the national reform programme, in order to produce leverage effect on private expenditure in research and innovation and complies with the characteristics of systems at national and regional levels	1. Research and Innovation	Smart Specialisation Strategy of Latium Region (DGR n.478 17/7/2014) Regional Strategic Programme for Research, Innovation and Technology transfer Creative Latium
T.02.1 – Digital Growth: A strategic-political framework devoted to digital growth, in order to boost private and public accessible services, of good quality and interoperable, increasing the spread among citizens, including vulnerable groups, enterprises, public administrations	2. Digital Latium	National strategy for digital growth Digital Agenda for Latium Region
T.02.1 – New access network infrastructure Generation (NGN): Existence of National or Regional plans for NGN, taking into account actions in order to achieve the Union's objectives of high-speed Internet access, focusing on areas where the market does not provide an infrastructure open to a affordable and quality cost in accordance with standards, providing services to vulnerable groups	2. Digital Latium	Italian Strategic Plan for high-speed Broadband
T.03.1 – Implementation of specific actions to support the promotion of entrepreneurship taking into account Small Business Act (SBA)	3. Competitiveness	Regional Law 8/2011 – "Provisions to promote the quality and simplification of regional legislation on small and medium-sized enterprises", which introduced SBA in Latium. Implementing Regulation was adopted with Regional Law 25/2012
T.04.1 – Implementation of actions to promote cost-effective improvement of efficiency energy end-use and effective investment in cost terms in energy efficiency at construction or renovation of buildings	4. Sustainable energy and mobility	Italian National Energy Strategy; Institution of a formal control service of Certificates of Energy Performance (Regional Law n. 90/2013)
T.05.1 – Risk prevention and risk management: existence of national or regional risk assessments for disaster management, taking into account adaptation to climate change	5. Hydro-geologic and seismic risk	Institution of SIRDIS, Regional Informative System for the Soil protection

Source: Author's elaboration of data from Regione Lazio, 2014b, pp. 200-265

Aree Interne (National Strategy for Inner areas – NSIA, Barca *et al.* 2014) identifies 5 areas of Latium territory, to be addressed by specific projects, to contribute in the achievement of ROP priorities also in inner peripheries.

In areas identified within NSIA, ROP intends to work through actions for reinforcement of Services of General Economic Interest, in order to create condition to stop the depopulation, defining a needs-based strategy for revitalize territories. With this aim, the NSIA was declined by Latium Region in specific pilot projects addressing in particular 'Valle di Comino' territory, in Frosinone province, a 571 km^2 terri-

Fig. XII.1 - Selected 'Inner Areas' for pilot strategies in Latium Region.
Source: Deliberazione Giunta Regionale Lazio 17 luglio 2014, n. 477. Individuazione Aree interne della Regione Lazio per la I fase di attuazione della Strategia nazionale Aree interne – Strategia per il Lazio. Allegato a p. 1

tory identified as pilot area for Regional strategy, considering, in Financial plan, the use of ERDF ROP 2014-2020 funds for reduction of digital divide. ERDF ROP foresees to allocate a share between 1%-5% of total amount for these areas (Regione Lazio, 2014b, p. 187 and 193).

The achievement of ROP targets passes through a complex set of policy interventions aiming at improving efficiency of ERDF funds in marking the change towards the territorial goals.

In particular, the adoption of Smart Specialisation Strategy (S3) (Regione Lazio, 2016) was the key document in fulfil the Ex Ante conditionalities related to Research and Innovation. Starting from the Research and Innovation Strategies for Smart Specialisation (RIS3) (EC, 2012), the strategy analyse the Regional situation and potentialities of innovations, with the aims to:

– develop a long-term strategy to foster dialogue between Innovation and Research actors;

– to promote path of valorization of excellences in industry and research, encouraging development of technologies in facing main social challenges;

– to find new technology paths for regional specialisation;

– to speed up the evolution of industry among the emerging market;

– avoid fragmentation of interventions and to set up all the instruments in innovation and research (Regione Lazio, 2016, p. 4).

The document includes the identification of Specialisation Areas of Region, selected through *focus groups*: Aerospace; Life Sciences; Cultural Heritage and Cultural technologies; Digital Creative Companies; Agrifood; Green economy and Security.

Finally, the document identifies main tools for the achievement of the targets, with the definition of financial and policy instruments, programmes (like 'Startup Lazio!') and strategic documents, such as Regional Strategic Programme for Research, Innovation and Technology transfer (Regione Lazio, 2017).

Digital Agenda of Latium Region (Regione Lazio, 2015) helps in achieving targets of Axis 2, through identification of main objectives like resetting digital divide, achievement of e-government and open government, innovative services for citizens and companies, and promotion of new citizenship through digital competences (Regione Lazio, 2015, pp. 3-4). The document lies in compliance with National Strategy for digital growth (Presidenza del Consiglio dei Ministri, 2015a) and European Digital Agenda (EC, 2014) and represents an important element for the actual implementation of ROP actions in Axis 2.

A key part of overall strategy for achievement of targets of Priority Axis 2 is the Italian Strategic Plan for the High-Speed Broadband (Presidenza del Consiglio dei Ministri, 2015b), a national plan approved in 2015, aiming at building a public network in all the national territory to be used by operators, in order to bridge the digital gap by 2020, starting from lagging territories.

XII.2. An ex ante evaluation of the Regional performance

The evaluation of regional performance was carried out through STeMA methodology, a Territorial Impact Assessment able to assess the weight of several indicators shared in fourth determinants founded on pillars of Europe 2020 Strategy for a Smart, Sustainable and Inclusive Growth. The fourth one is dedicated to use of funds for financing strategic actions: this evaluation is needed in order to better assess the effectiveness of policy choices in the achievement of strategic results for the territory.

The ex ante evaluation aims at assessing the situation of Region within the fourth determinant at t_0 moment, that is to say the performance of territory through indicator analysis, before the implementation of politics foreseen in ROP.

XII.2.1. Smart Growth *determinant*

Within the *Smart Growth* field, Latium Region shows a B level of overall performance, in a scale from A to D. The medium-high level is reached thanks to the pushing effect of Roma, that reach an A level in eight on nine indicators. The reason why the Capital area doesn't reach A level is due to the very low level (D) of *Index of Innovative Dependency*, that is an indicator related to the composition of *Human Capital* within NUTS3 territory. However, the maximum level reached by the other indicators, and consequently by the typologies, sectors and categories, push overall level of region to a B level. The same level is reached by Frosinone province; in this case just three indicators reach an A level: *Population with tertiary education*

Tab. XII.2 - STeMA ex ante assessment of Latium Region, *Smart Growth* determinant.

N2_03	Italy	Territory	SG_UI	SG_BUL	SG_PAI	VsT	DS	SG_PL	SG_IDI	SG_PET	SG_PLL	PETPLL	HC	E	IV	SG_RDI	SG_BLPA	ISQ	SG
IT1099	Lazio	**1**	A	A	C	C	C	A	D	A	B	A	B	B	B	A	D	B	B
IT1100	Viterbo	**6**	C	C	C	C	C	B	C	B	D	C	C	C	C	A	B	A	C
IT1101	Rieti	**6**	D	D	C	C	C	D	B	D	D	D	D	D	D	A	B	A	C
IT1102	Roma	**1**	A	A	A	A	A	A	D	A	A	A	B	B	B	A	A	A	B
IT1103	Latina	**3**	A	B	D	D	C	A	D	A	C	B	C	C	C	A	C	B	C
IT1104	Frosinone	**3**	B	D	B	C	C	B	C	A	C	B	B	B	B	A	A	A	B

Source: STeMA matrix

(PET), *R&D Infrastructures* (RDI) and *Telecommunication development level* (BLPA). The specific weight of these indicators permits to province to reach a B performance, equal to Rome, bringing regional level to B performance level.

As foreseen, the weight of bad performance of inner peripheries of Viterbo, Rieti and Latina represent a ballast in the regional *Smart Growth* determinant: the three rural provinces reach a C level, with some interesting result.

In particular, Viterbo and Rieti shows a bad (C and D) performance in all the indicators but the one related to *Research and Development Infrastructure*, which reach an A level: this seems to highlight the vocation of regional territory to a research-oriented economy, proven by the six public, eight private and seven telematic universities on regional territory.

Since reaching a determinant level of C, the Latina province shows some good performances in the indicators related to *Human Capital*, and in particular the percentage of population with high-level degree in education (level A both for three years and advanced degree). However, this result doesn't let to province to go over a C level.

The overall picture of region performance in *Smart Growth* shows deep differences between territory, giving evidence to a territorial organization still far from a polycentric vision, still highly oriented on a monocentric organization through Rome Capital city.

Capital city appears to be more 'smart' than the rest of the territory, also due to the deep centrality of administrative sector within city's economy: the status of Capital city brings the territory towards a stronger efficiency in the field of connectivity, communication development and internet use in public body. Furthermore, this kind of advantages are not widely distributed on the territory but keep stronger in province of Rome and in province of Frosinone, while the other three provinces stay far away from a standard of efficiency.

XII.2.2. Sustainable Growth *determinant*

As far as *Sustainable Growth* determinant is concerned, Latium Region reaches a low performance level C. In this case, differences between Rome Capital city and the other three provinces are lees deep, and ex ante assessment give evidence to a territo-

Tab. XII.3 - STeMA© ex ante assessment of Latium Region, *Sustainable Growth* determinant.

| Italy | Q_IM | Q_UL | Sistema produttivo locale | Q_Addetti green | Q_Igreen | Q_MdP | Identità produttiva sostenibile (IpS) | IpSSP | Identità del sistema produttivo (ISP) | Q_PILppSPA | Q_VAGreen | Variabile economico strutturale (VES) | VESISP | Q_Icom | Q_IcB | Internazionalizzazione (I) | Q_IDE | ATI | Q_Occ | Q_IAC | Q_PE | Q_CL | PFCL | C | COCC | Interazione economica (IE) | Q_BnK | Q_IAF | Interazione finanziaria (IF) | IEIF | Competitività sostenibile (CS) | Q_CC | Q_SAir | Stato dell'aria (SA) | Q_AcPot | SAAcPot | Q_Risk | Vulerabilità (Vuln) | Q_RaccD | Q_RifP | Q_RifU | RifURifP | Rifiuti (RI) | RiVuln | Q_AAG | Q_SNA | Cooperazione ambientale | Climate Change adaption (CCA) | Q_AccM | Q_BL | Accessibilità infrastrutturale | Q_IAutEn | Sostenibilità infrastrutturale (SI) | CCA + SI | Sustainable growth |
|---|---|---

rial disparity where rural territories has a better chance to be more competitive in sustainability than territories with a strong historic industrialization.

In fact, Viterbo rural province reaches a B level, higher than C of R oma, Latina and Frosinone. The latter, in particular, has to face a bad *Broadband penetration level* and a bad performance in *Employed* indicator probably related to the crisis of old-style industrial sector within the Sacco Valley, despite reaching the unique A level in the indicator related to *Local Units*. Same reason seems to be behind the bad performance of *Commercial integration of goods*, while indicator of 'Patents' reaches a A level only in the province of Rome Capital.

It is to be noted that the two main rural provinces in Latium Region reaches very different results in *Sustainable Growth* determinant: Rieti has the worst performance (D) in all the Region. This is related to the lowest level in twelve on twenty-eight indicators, such as *Manufacturing companies*, *Green Added Value*, *Insurance and Finance institutions* and *Separate waste collection*: in all of these indicators, Rieti is the only province in region with the lowest score. On the other side, Viterbo – the other rural province – reaches the best performance in the region with a B level, which is due to the highest impact of *Green jobs*, *Foreign Direct Investments* as well as of *Waste* sector.

XII.2.3. Inclusive Growth *determinant*

The *Inclusive Growth* determinant aims at highlighting the ability of the territory in reaching the goal of Europe 2020 in building an Inclusive Growth for Europe. In this topic, Latium Region looks to reaching a general good level B, thanks to a highest-score performance in some indicators, especially related to the economic issues and to cultural potentiality: *GDPpps*, *Cultural opportunities*, *Students inbound* and *Foreign Inclusion* sector. Furthermore, this regional performance is due to a very high weight of Rome in the region: at lower scale, the same indicators show a bad or even very bad performance in the other provinces, highlighting the overall imbalance between centre and peripheric areas of region.

Rome province, in facts, register a B level in the determinant, result of the maximum level (A) in some key indicators such as the *Rate of cross-border and trans-regional cooperation*, *Female employment* and *Per-capita consumption*. In the same indicators, the other provinces reach mostly levels among D and C. In *Female employment* Rieti rural province register a B level.

Apart from this indicator, Rieti is the lowest-level province in *Inclusion Growth*, with a D level. Several indicators (eleven out of twenty-seven) register worst performance, while only four boast the maximum level, including *Hospitalization* (Rome has a C level) and *Early school leaving* (Rome level D). Lowest level in economic indicators and in indicators measuring cultural offer give evidence to the peripherality of Rieti province, still unable to compete with the high weight of Rome and to find an endogenous way of local development.

Latina province, C level in determinant, register a better performance in some social indicator like *Nurseries*, and a worst in other ones like *Hospitalization*. In general, the *Economic variables* sector is able to assess the performance of the province in economic issues related to *Inclusive Growth*. Data of this sector shows a maximum level for the province of Rome, and C level for the other provinces but Rieti, which reaches the

Tab. XII.4 - STeMA ex ante assessment of Latium Region, *Inclusive Growth* determinant.

Italy	Lazio	VT	RT	RM	LT	FR
Q_PIL_ppSPA	A	C	D	A	C	C
Q_DisRed	A	D	D	A	C	C
PIL_ppSPA + DisRed M	A	C	D	A	C	C
Q_Cons	A	C	D	A	C	C
Q_IPzC	D	C	C	C	C	C
Cons + IPzC L	B	C	D	B	C	C
Variabili economiche	A	C	D	A	C	C
Q_TFT	B	C	D	B	C	C
Q_SpVit	C	D	D	B	C	C
BD	B	D	D	B	C	C
Q_SAL	D	A	D	C	C	C
SALBD	C	C	D	B	C	C
Q_OpCu	A	C	D	A	C	C
Q_TxTUR	C	C	D	B	C	C
Tempo libero	B	C	D	A	C	C
Qualità della vita (QV)	C	C	D	B	C	C
Variabili strutturali di inclusione (VSI)	B	C	D	A	C	C
Q_PTE	B	B	D	A	C	C
Q_Suln	A	B	D	A	C	C
Q_StuUsc	B	C	D	A	C	C
SdnStud	A	B	D	A	C	C
ISF	B	B	C	A	C	C
Q_AbbSc	D	B	A	D	C	C
Q_NEET	D	B	A	D	C	C
Esclusione del siste formativo (EFS)	D	B	A	D	C	C
Capacità del sistema formativo	C	B	C	B	C	C
Capacità formativa inclusiva (CFI)	C	B	C	B	C	C
VSI + CFI	B	C	D	A	C	C
Q_Occ	C	C	C	B	C	C
Q_RiskPovAs	C	C	C	C	C	C
Rischio di povertà	C	C	C	C	C	C
Q_TaxDisGio	D	D	C	C	C	C
Q_RiskMin	B	C	C	C	C	C
Rischio di esclusione giovanile (REG)	D	D	C	C	C	C
Rischio di esclusione sociale (RES)	C	C	C	C	C	C
Q_RS	A	C	B	B	C	C
Q_OcStr	A	C	D	A	C	C
Q_TxImSt	A	B	D	A	C	C
OcStr + TxImStr	A	C	D	A	C	C
Inclusione straniera (IS)	A	B	C	A	C	C
RES + IS = RESIS	C	C	C	C	C	C
Q_ParOp	B	C	A	C	C	C
Q_AN	B	C	B	C	C	C
Attitude to social welfare (ATS)	B	C	B	C	C	C
Capacità di inclusione sociale (CSI)	C	C	A	C	C	C
Q_AmReg	A	A	B	A	C	C
Q_PPEn	B	B	B	C	C	C
Q_PeEe	B	B	B	C	C	C
LPP	B	B	B	C	C	C
LPP + AmReg	A	A	B	B	C	C
Q_COOP	C	D	C	A	D	D
Fiducia nella governance	B	B	B	B	C	C
Capacità istituzioni (CI)	B	B	B	B	C	C
CSI + CI	C	C	C	C	C	C
Inclusive Growth	B	C	D	B	C	C

Source: STeMA matrix

Tab. XI.5 - STeMA ex ante assessment of Latium Region, *Resources and Funds* determinant.

Italy	RF_SpR&S	RF_SpSvEc	IC	RF_SpOc	RF_SpFoP	CU	InCon	RF_SpSS	RF_SpTra	CS	RF_SpG	RF_SpSoc	QV	Sost	Vuln	RF_FCP	RF_COOP	UF	R&F
Lazio	C	D	C	C	B	C	C	C	D	C	B	C	B	C	C	B	C	B	C
Viterbo	C	D	C	C	B	C	C	C	D	C	B	C	B	C	C	D	D	D	C
Rieti	C	D	C	D	C	D	D	D	D	D	D	D	D	D	D	D	C	D	D
Roma	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A
Latina	C	C	C	B	A	B	B	B	D	C	B	B	B	C	C	D	D	D	C
Frosinone	C	D	C	C	B	C	C	C	D	C	B	B	B	C	C	C	D	C	C

Source: STeMA matrix

worst level in the scale. Less differences in *Capability of education systems*, where all the provinces reach a B level and Rieti a C.

If Rieti shows big weakness in economic and cultural/educational indicators, Frosinone registers a bad performance in indicators related to *Social Inclusion* typology: in both sectors *Risk of social exclusion* and *Foreign inclusion* Frosinone is the unique province to get the worst level. High level in Inclusion of foreigners is guaranteed only in Rome, while Rieti and Frosinone don't go over C level. In the typology of *Institutional capability* Latina is the dark grey spot C in a light grey-level B of the other provinces.

11.2.4. Resources and Funds *determinant*

The analysis of the *Resources and Funds* determinant of Latium Region aims at giving evidence to the level of funding of territorial budgets oriented to the main issues related to Europe 2020 goals. Data collection was conducted on the basis of the published financial statements and permit to assess the level of attention payed by territories in the distribution of funds on the main expenditure items. The overall picture of regional expenditure is quite low (C). Among the voices, territories look to pay more attention to expenditures related to *Quality of life* sector, such as *Spending on youth policies, sport and leisure* and *Spending on social right, social policies and the family*, while less money are oriented to economic development, and transport remains an element of weakness of regional competitiveness.

XII.3. Ex post Territorial Impact Assessment of the ERDF ROP 2014-2020 policies

The ERDF ROP (Regional Operational Programme of ERDF) of Latium Region, identifies strategic lines of use of European funds within the Europe 2020 strategy for the development of the territory. Through a deep analysis of this document it is possible to assess how Latium policy/decision-makers are facing challenges of the ter-

ritory as resulted in ex ante analysis of the determinants. As shown in the previous paragraphs, Latium shows a bad performance level in *Sustainable Growth* (C), but B level of *Smart* and *Inclusive Growth* are reached through considerably deep differences among the provinces, where the burden of Rome Metropolitan area counterweights a very composite mosaic of territories, especially rural ones, which stay generally way behind the performance of Rome in several key indicators.

Starting from this ex ante situation, policy makers declares in the ERDF ROP that regional view is oriented to a strong investment in key strategic actions aiming at building a deep change intended to last in the future, summarized with the motto "Invest in the future and determine the change", also as a response to economic crisis, with the aim to propose a different kind of economic development (Regione Lazio, 2014b, p. 10). The idea of the change of direction compared to the current development models is the main path of the ROP, to make strongly more concrete the efficiency of the EU-funded policy oriented to territorial development.

In this paragraph will be carried out a Territorial Impact Assessment aiming at assessing the territorial impact of the Latium ERDF ROP policies in the different territorial typologies of the Region. Through STeMA methodology, assessment will be achieved in the same four determinants used in ex ante paragraph, in order to give back comparative results of the ex post situation.

XII.3.1. Smart Growth – *ex post assessment*

In conceptual initial analysis, Latium ROP shows a particular attention to *Smart Growth*: since all the first 3 TOs of ESIF general regulations in support of the Europe 2020 strategy are refereed to this determinant, Operational Programme aims at achieving huge results in this field, in which Region overall is at a medium-high ex ante level (B).

ROP starts from the consideration of the need to develop a better match between supply and demand in research field, as a key tool for the competitiveness of Regional productive system, to be based on high technological level of goods and services. Latium boast a big potential in innovation, thanks to a large concentration of excellence research centre, but looks to be unable to transfer this innovative added value to companies and citizens level. In this sense, strategic elements of the ROP are S3 strategy and High-speed broadband strategic plan, aiming at bridging the digital gap (Regione Lazio, 2014b, p. 27).

By applying policies choices of ROP within Smart Growth STeMA matrix, we can see an improvement of the performance of *Smart Growth* determinant only in Latina province (from C to B), while the other territories keep their ex ante level.

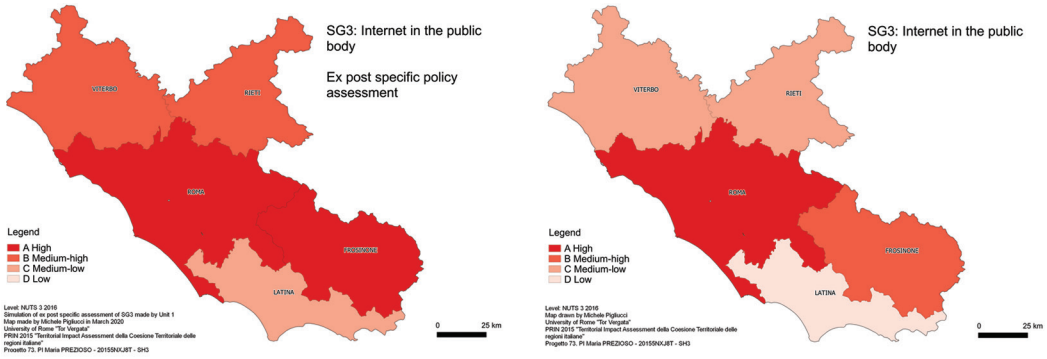
Scaling down to indicator level, we can notice more deep differences. It is interesting to highlight that Rome province doesn't find any changes but in *Innovative Dependency Index* (IDI), that is an indicator related to structure of *Human Capital* sector. IDI register an improvement of the performance in every provinces, while the *Education* typology (typology level) register a growing of performance in Rieti and Latina territories.

Digital Society typology registers also an important rising of level only in Viterbo, Rieti and Frosinone, while e-government improvement target seems to be reached in all the provinces but Rome.

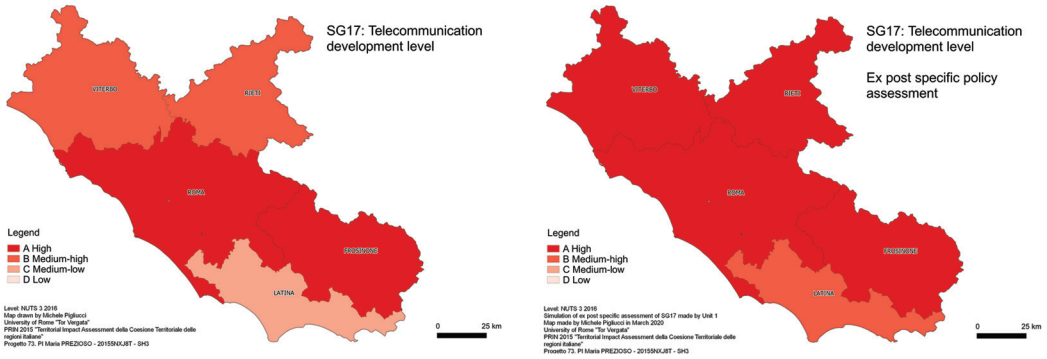
Tab. XII.6 - STeMA ex post assessment of Latium Region ROP policy choices, *Smart Growth* determinant. *Letters in bold shows a change in ex post situation.*

Italy	SG_UI	SG_BUL	SG_PAI	VsT	DS	SG_PL	SG_IDI	SG_PET	SG_PLL	PETPLL	HC	E	IV	SG_RDI	SG_BLPA	ISQ	SG
Lazio	A	A	**B**	**B**	**B**	A	**C**	A	B	A	B	B	B	A	**C**	B	B
VT	**B**	**B**	**B**	**B**	**B**	**A**	**B**	B	D	C	C	C	C	A	**A**	A	C
RT	**C**	**C**	**B**	**B**	**B**	**C**	**A**	D	D	D	**C**	**C**	**C**	A	**A**	A	C
RM	A	A	A	A	A	A	**C**	A	A	A	B	B	B	A	A	A	B
LT	A	**A**	**C**	**C**	C	A	**C**	A	C	B	**B**	**B**	**B**	A	**B**	**A**	**B**
FR	**A**	**C**	**A**	**B**	**B**	**A**	**B**	A	C	B	B	B	B	A	A	A	B

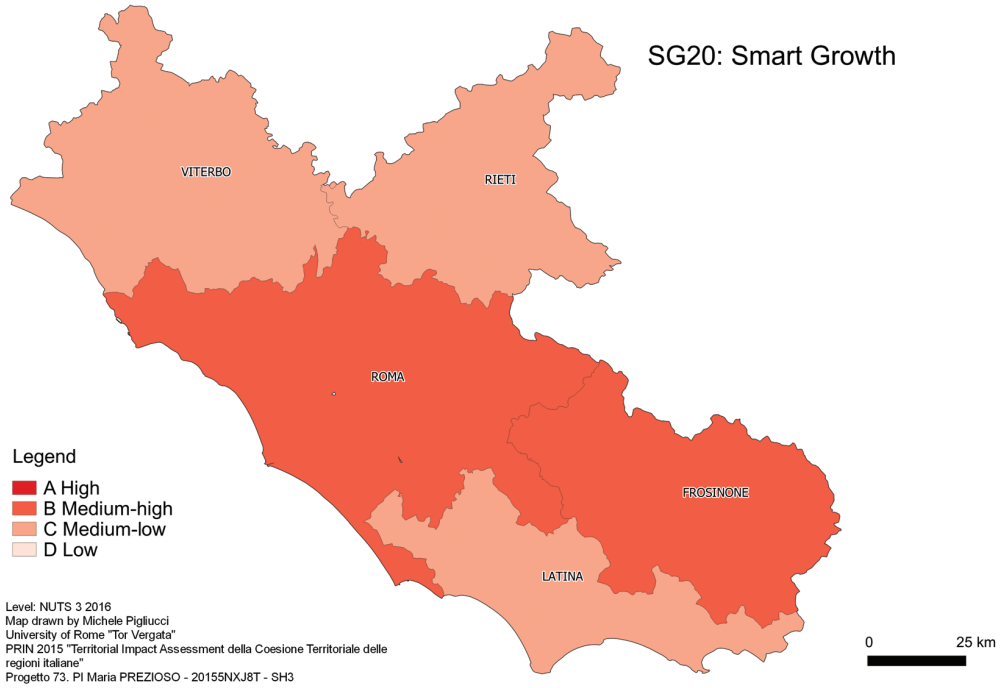
Source: STeMA matrix

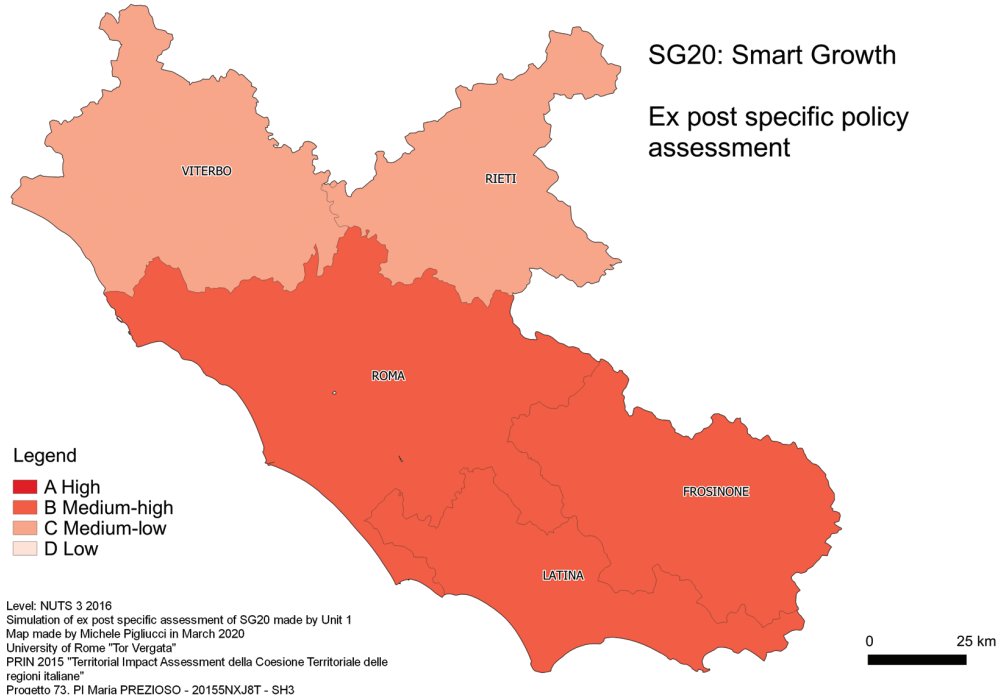


Figg. XII.2 and XII.3 - SG3 Indicator (*Internet in the public body*), ex ante and ex post situation.
Source: Author's elaboration



Figg. XII.4 and XII.5 - SG17 Indicator (*Telecommunication development level*), ex ante and ex post situation.
Source: Author's elaboration





Figg. XII.6 and XII.7 - SG20 *Smart Growth* determinant, ex ante and ex post situation.
Source: Author's elaboration

XII.3.2. Sustainable Growth – *ex post assessment*

With a C level, ex ante performance of Latium Region in *Sustainable Growth* is medium-low, with little differences among the provinces. Furthermore, the assess of ROP policy in this determinant shows an improvement of the performance in the Region as a whole, and in all the provinces, showing that result are properly addressed in this pillar.

Among the provinces, Viterbo rural one registers the best performance, reaching A level, while Rieti (the other rural province) grows a little, reaching C level.

Scaling down to indicators' level, it is possible to note that almost every indicator is interested by policy choices, in almost every territory. Rome is the province less interested, since in some case ex ante performance was yet at A level.

Indicator related to *Urban Waste* show an improvement in Rome and Latina performance (C and B), while Viterbo and Rieti keep their maximum level. By looking at financial and economic sustainable growth, it is interesting to underline that one of the main target of ROP, enhancing *Productive system Identity* (sector level) register an important improvement in all the provinces and in overall Region (B level).

XII.3.3. Inclusive Growth – *ex post assessment*

Even if ROP decides not to invest on any policies directly related to Thematic Objectives 8-11, overall performance of Latium Region registers an important improvement in *Inclusive Growth* determinant and indicators.

Through policies selected by ROP, Regional performance level in determinant grows to a A level; the province rises in all territory, reaching A level in Rome, C in Rieti and B in other provinces.

The complex set of policies, oriented in particular to Thematic Objectives 1-5, permits to territory to the level of indicators composing *Inclusive Growth* determinant. The Indicator related to *NEET* shows an improvement in all the provinces but Rieti (that was at A level in ex ante), reaching A level in Viterbo, B in Latina and Frosinone, C in Rome (in the ex ante it was D). This means that ROP policies can have a good impact in reducing number of NEETs.

Female Employment indicator registers also an increasing in determinant performance to A level at region scale, while Rieti reaches maximum level like Roma. Viterbo province registers a B level, while Frosinone and Latina stay behind with a C performance, anyway better than ex ante situation.

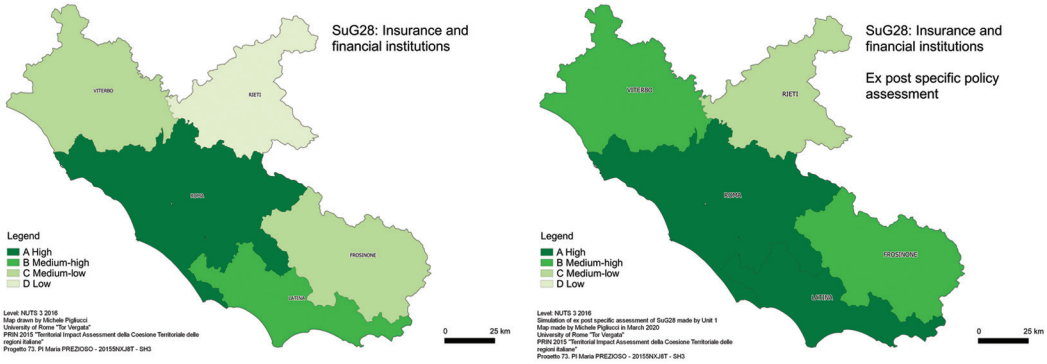
Performance of territories in *Institutional capability* of the region and of the provinces receive a good boost reaching top level as region and as Rieti and Roma provinces, while the other ones achieves a B good level.

XII.3.4. Resources and Funds – *ex post assessment*

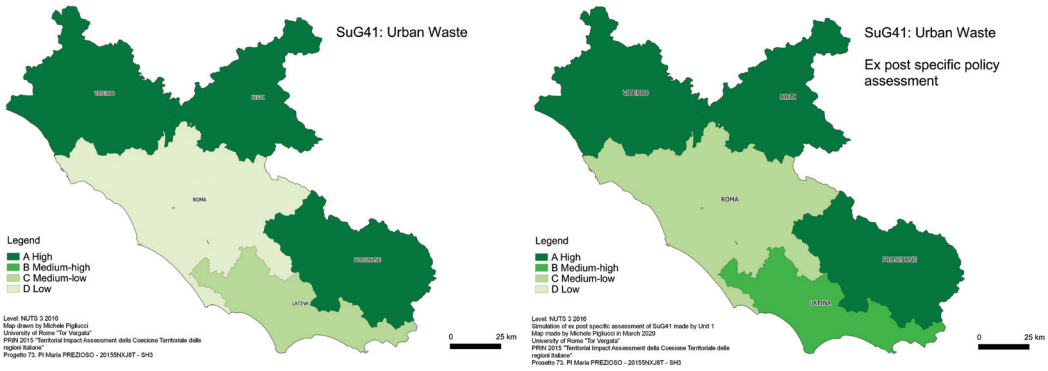
The last determinant assessed is related to the use of funds in financing specific policies for the achievements of Europe 2020 goals. Through this *Resources and*

Tab. XII.7 - STeMA ex post assessment of Latium Region ROP policy choices, *Sustainable Growth* determinant. *Letters in bold shows a change in ex post situation.*

| Italy | Lazio | Q_IM | Q_UL | Sistema produttivo locale | Q_Addetti green | Q_Igreen | Q_MdP | Identità produttiva sostenibile (IpS) | IpSSP | Identità del sistema produttivo (ISP) | Q_PILppSPA | Q_VAGreen | Variabile economico strutturale (VES) | VESISP | Q_Icom | Q_IcB | Internazionalizzazione (I) | Q_IDE | ATI | Q_Occ | Q_IAC | Q_PF | Q_CL | PFCL | IpSSP | Identità del sistema produttivo (ISP) | Interazione economica (IE) | Q_BnK | Q_IAF | Interazione finanziaria (IF) | IEIF | Competitività sostenibile (CS) | Q_CC | Q_SAir | Stato dell'aria (SA) | Q_AcPot | SAAcPot | Q_Risk | Vulerabilità (Vuln) | Q_RaccD | Q_RiP | Q_RiU | RiPURiP | Rifiuti (RI) | RiVuln | Q_AAG | Q_SNA | Cooperazione ambientale | Climate Change adaption (CCA) | Q_AccM | Q_BL | Accessibilità infrastrutturale | Q_IAutEn | Sostenibilità infrastrutturale (SI) | CCA + SI | Sustainable growth |
|---|---|---



Figg. XII.8 and XII.9 - SuG28 Indicator *Insurance and financial institutions*, ex ante and ex post situation.
Source: Author's elaboration



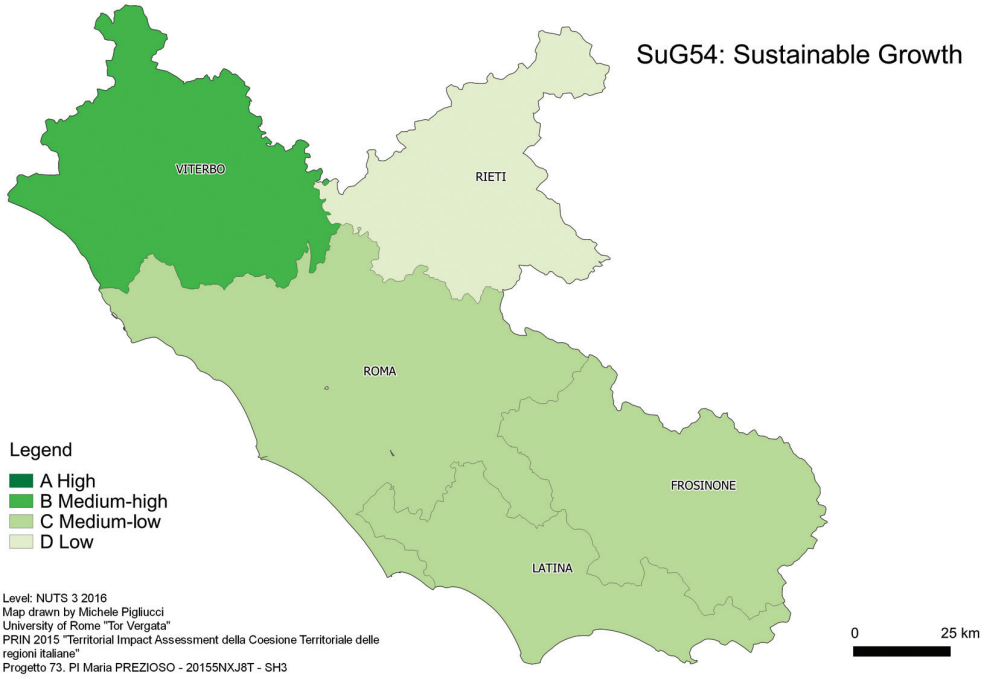
Figg. XII.10 and XII.11 - SuG41 Indicator *Urban Waste*, ex ante and ex post situation.
Source: Author's elaboration

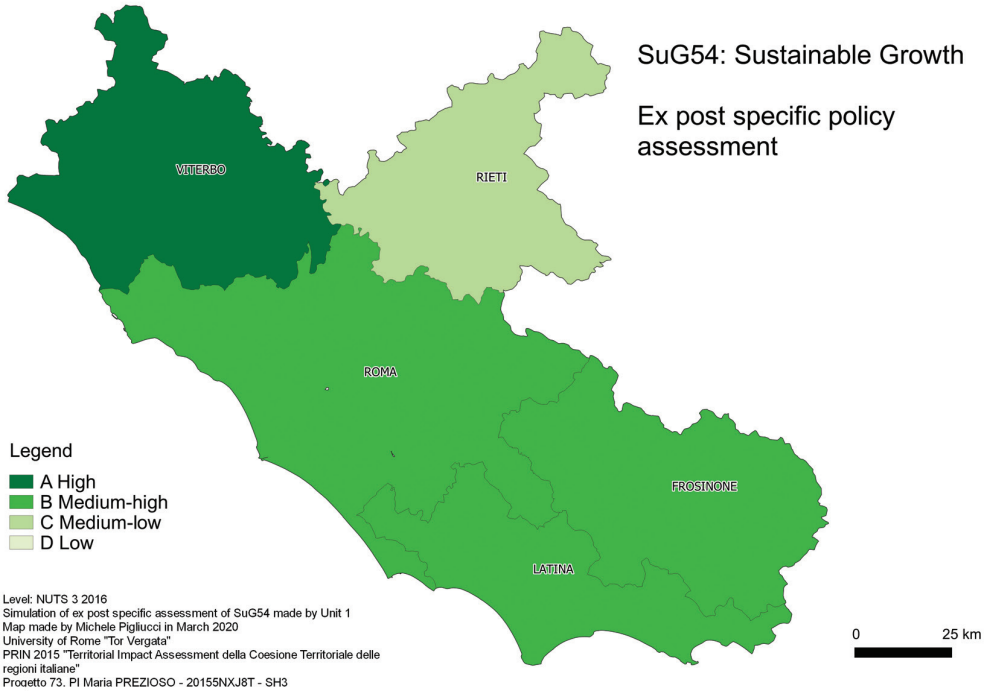
Funds determinant is possible to assess the situation of expenditure in key budget voices, in order to better understand the weight of policy choices within territories.

Ex ante situation of Region was characterized by a large amount of expenditure in Rome and in southern provinces, and a low level in rural provinces of Viterbo and Rieti.

The assessment of foreseen impact of the ROP policies shows a general improvement of all the indicators in all the territories but Rome, which was at A level in ex ante analysis. In particular, top level is reached in Vocational Training and in policies for youth and leisure, and cohesion overall level rises in all the territory.

The territory of Latium Region has political-administrative characteristics unique in Italy, due to the presence, on its territory, of the Capital city of Rome. The administrative structure and the territorial organization of the regional area is strongly influenced by the specific weight of this urban reality that is, on one hand, a driver for the development of whole regional economy – which reach performance level higher than the other regions of NUTS 1 level "Centro" –, but on the other hand, it risks devouring the potential territorial capital of peripheral provinces by preventing the homogeneous distribution of services and resources in a polycentric perspective: the presence of the

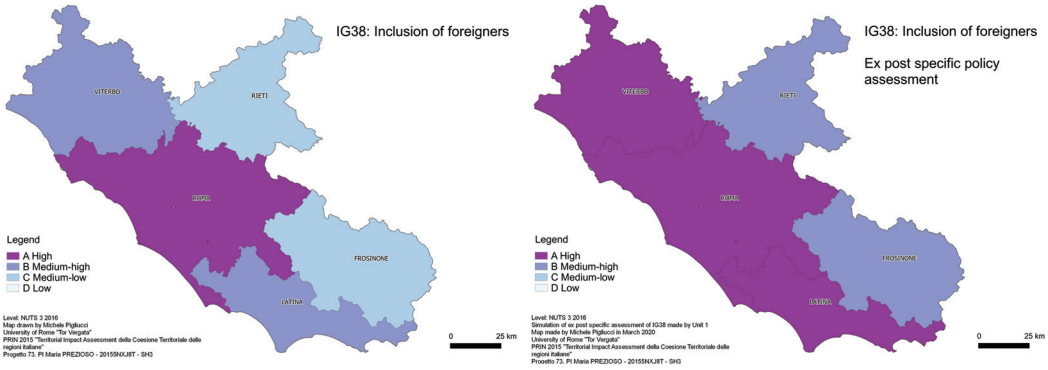




Figg. XII.12 and XII.13 - SuG54 *Sustainable Growth* determinant, ex ante and ex post situation.
Source: Author's elaboration

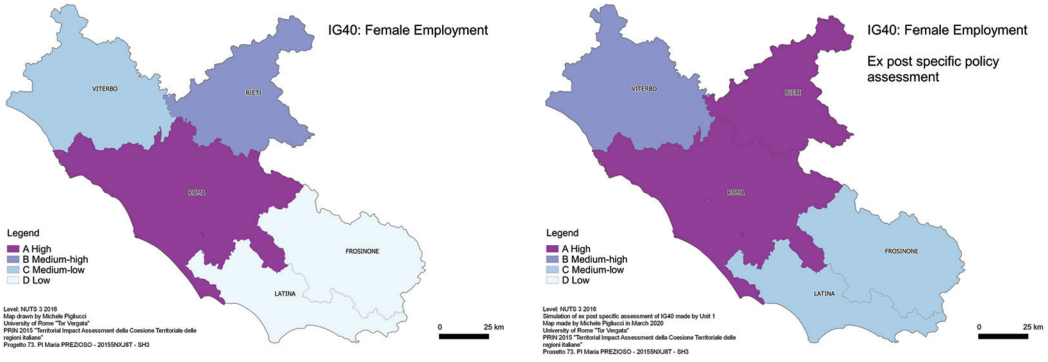
Tab. XII.8 - STeMA ex post assessment of Latium Region ROP policy choices, *Inclusive Growth* determinant. *Letters in bold shows a change in ex post situation.*

| Italy | Lazio | A | C | B | A | A | C | B | A | A | A



Figg. XII.14 and XII.5 - IG38 Sector *Inclusion of foreigners*, ex ante and ex post situation.

Source: Author's elaboration



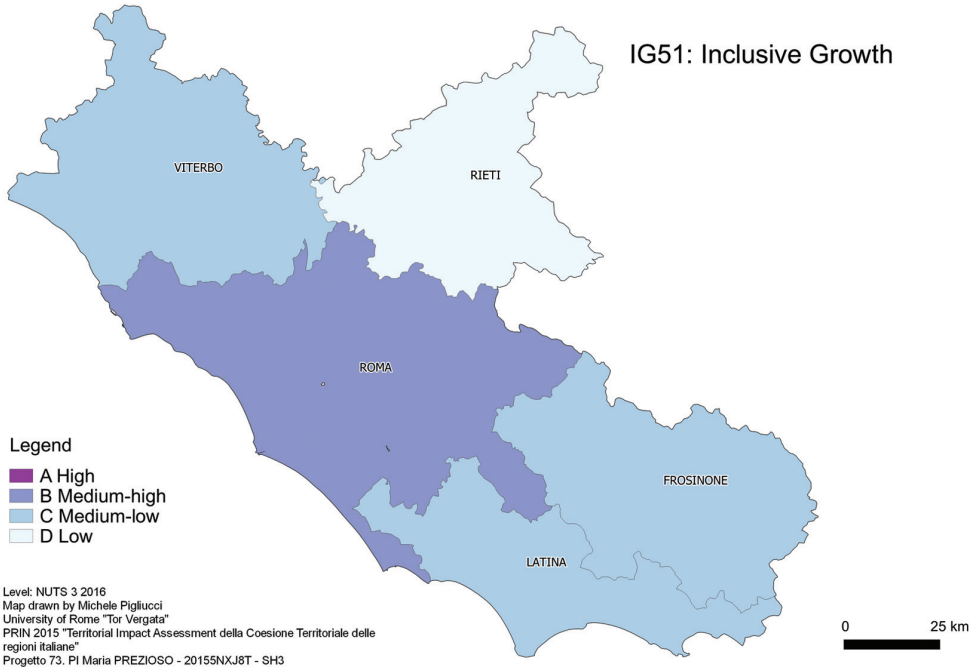
Figg. XII.16 and XII.17 - IG40 Indicator *Female Employment*, ex ante and ex post situation.

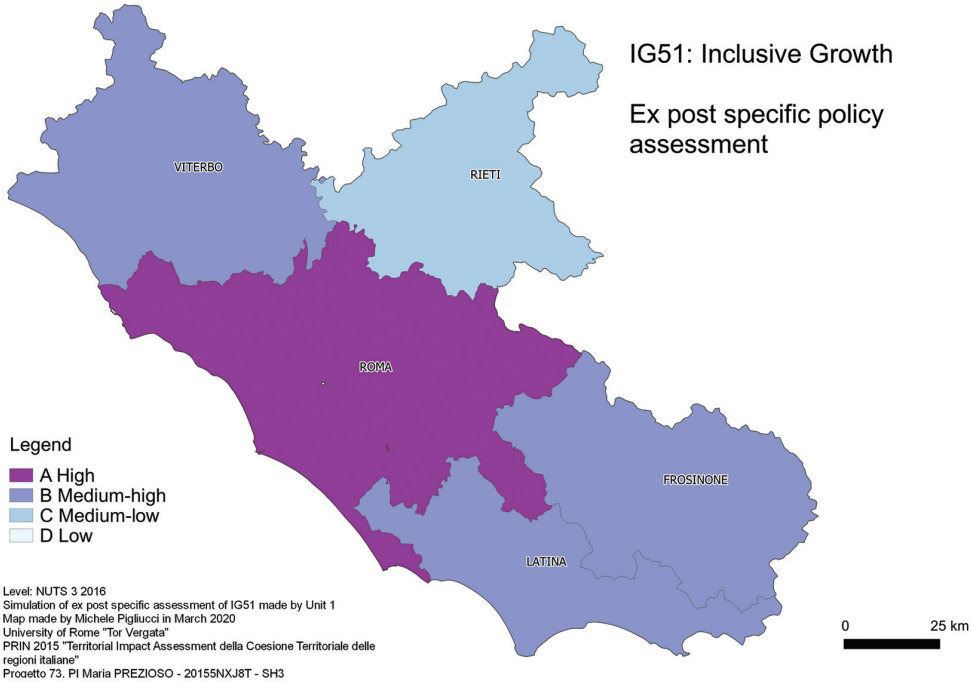
Source: Author's elaboration

Tab. XII.9 - STeMA ex post assessment of Latium Region ROP policy choices, *Resources and Funds* determinant. *Letters in bold shows a change in ex post situation*

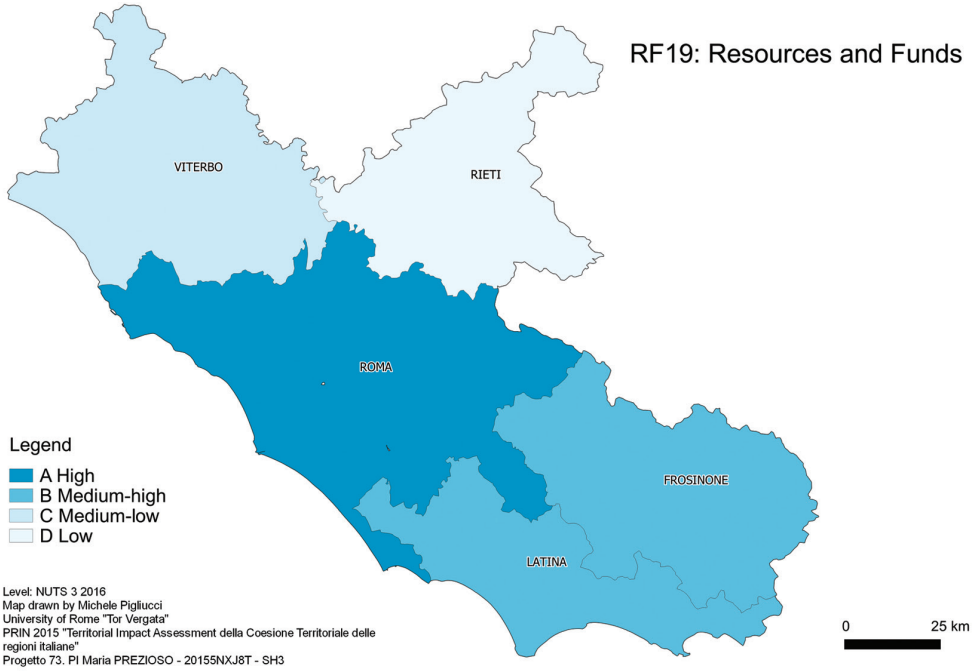
Italy	**RF_SpR&S**	**RF_SpSvEc**	**IC**	**RF_SpOc**	**RF_SpFoP**	**CU**	**InCon**	**RF_SpSS**	**RF_SpTra**	**CS**	**RF_SpG**	**RF_SpSoc**	**QV**	**Sost**	**Vuln**	**RF_FCP**	**RF_COOP**	**UF**	**R&F**
Lazio	**B**	**C**	**B**	**B**	**A**	**B**	**B**	**B**	**C**	**B**	**A**	**B**	**A**	**B**	**B**	**A**	**B**	**A**	**B**
Viterbo	**B**	**C**	**B**	**B**	**A**	**B**	**B**	**B**	**C**	**B**	**A**	**B**	**A**	**B**	**B**	**C**	**C**	**C**	**B**
Rieti	**B**	**C**	**B**	**C**	**B**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**B**	**C**	**C**
Roma	A	A	A	A	A	A	A	A	**A**	A	A	A	A	A	A	A	A	A	A
Latina	**B**	**B**	**B**	**A**	**A**	**A**	**A**	**A**	**C**	**B**	**A**	**A**	**A**	**B**	**B**	**C**	**C**	**C**	**B**
Frosinone	**B**	**C**	**B**	**B**	**A**	**B**	**B**	**B**	**C**	**B**	**A**	**A**	**A**	**B**	**B**	**B**	**C**	**B**	**B**

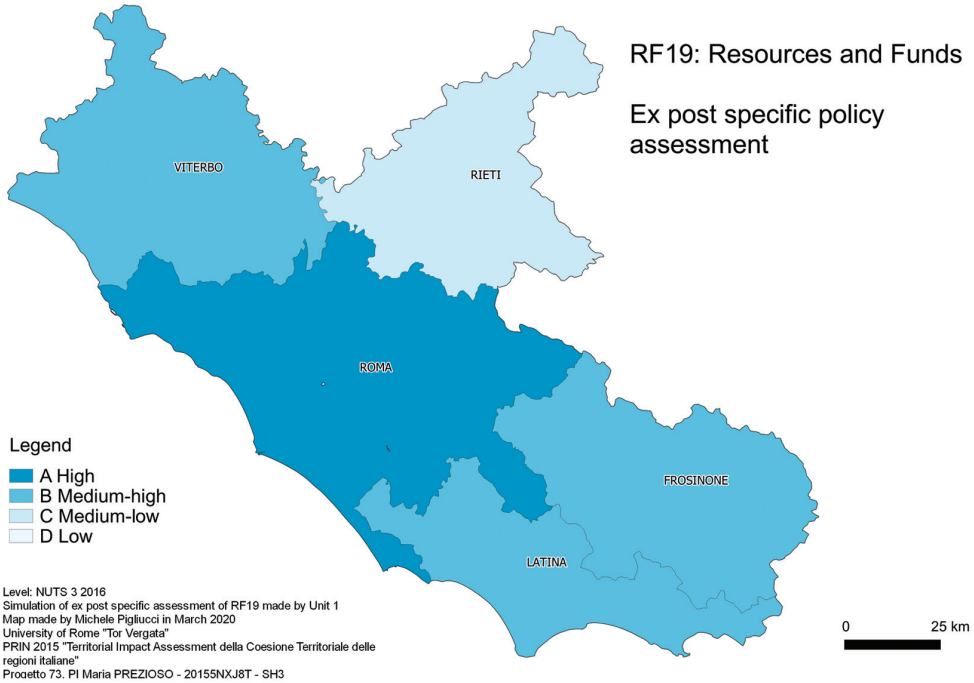
Source: STeMA matrix





Figg. XII.18 and XII.19 - IG51 *Inclusive Growth* determinant, ex ante and ex post situation.
Source: Author's elaboration





Figg. XII.20 and XII.21 - RF19 *Resources and Funds* determinant, ex ante and ex post situation.
Source: Author's elaboration

Capital city of Rome have brought a Regional development model strongly focused on the centre, with a very unbalanced demographic, urbanistic and economic growth. Starting from this assumption, ROP drew action aiming at addressing this unbalance through path of valorisation of peripheric areas, starting from cultural-touristic field, in order to reorganize regional weight according to a polycentric view.

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LIST OF FIGURES

Forewords
Fig. 0.1 - Website of Cohesion PRIN
Fig. 0.2 - Individual and Structural economic Cohesion in Italy within the Southern Seven area
Fig. 0.3 - Individual and Structural economic Cohesion in Italy within the Big Six area
Fig. 0.4 - 11-years trend of the individual Cohesion in Europe

Reading the Territorial Cohesion
Fig. A.1 - Impact evaluations and use of advanced method in Europe
Fig. A.2 - Logical organisation of concepts
Fig. A.3 - Systemic Territorial Functional Typologies in Italy
Fig. A.4 - Italy comparative ex ante analysis: mapping by time series at 2011 and 2018 at NUTS 2 and 3

Part One
Chapter 1. *Territorial Capital: effects of national and regional cohesion policies*
Figg. 1.1a and 1.1b - Research units by regions (1a) and provinces (1b), respectively at NUTS 2 and 3 in the European statistical classification of territorial units
Figg. 1.2a and 1.2b - The Business networks by regions (2a) and provinces (2b), respectively Nuts 2 and 3 in the European statistical classification of territorial units

Chapter 2. *The measure of territorial capital: the application of the STeMA Model to the Infrastructure and Networks NOP*
Fig. 2.1a - *Smart Growth* determinant: ex ante analysis, NUTS2
Fig. 2.1b - *Smart Growth*: ex ante analysis, NUTS3
Fig. 2.2a - *Smart Growth* determinant: ex post analysis, NUTS 2
Fig. 2.2b - *Smart Growth* determinant: ex post analysis, NUTS 3
Fig. 2.3a - *Smart Growth* determinant: ex post territorialized analysis, NUTS 2
Fig. 2.3b - *Smart Growth* determinant: ex post territorialized analysis, NUTS 3
Fig. 2.4a - *Sustainable Growth* determinant: ex ante analysis, NUTS 2
Fig. 2.4b - *Sustainable Growth* determinant: ex ante analysis, NUTS 3
Fig. 2.5a - *Sustainable Growth* determinant: ex post analysis, NUTS 2
Fig. 2.5b - *Sustainable Growth* determinant: ex post analysis, NUTS 3
Fig. 2.6a - *Sustainable Growth* determinant: ex post territorialized analysis, NUTS 2
Fig. 2.6b - *Sustainable Growth* determinant: ex post territorialized analysis, NUTS 3
Fig. 2.7a - *Inclusive Growth* determinant: ex ante analysis, NUTS 2
Fig. 2.7b - *Inclusive Growth* determinant: ex ante analysis, NUTS 3
Fig. 2.8a - *Inclusive Growth* determinant: ex post analysis, NUTS 2
Fig. 2.8b - *Inclusive Growth* determinant: ex post analysis, NUTS 3
Fig. 2.9a - *Inclusive Growth* determinant: ex post territorialized analysis, NUTS 2
Fig. 2.9b - *Inclusive Growth* determinant: ex post territorialized analysis, NUTS 3
Fig. 2.10a - *Resources and Funds* determinant: ex ante analysis, NUTS2

Fig. 2.10b - *Resources and Funds* determinant: ex ante analysis, NUTS3
Fig. 2.11a - *Resources and Funds* determinant: ex post analysis, NUTS 2
Fig. 2.11b - *Resources and Funds* determinant: ex post analysis, NUTS 3
Fig. 2.12a - *Resources and Funds* determinant: ex post territorialized analysis, NUTS 2
Fig. 2.12b - *Resources and Funds* determinant: ex post territorialized analysis, NUTS 3

Chapter 3. *Analysis of National NOP in relation to the theme of "Territorial Capital". ESF NOP Systems for active employment policies and ESF NOP Youth employment initiative*
Fig. 3.1 - Projects concluded per region at 31/08/2019
Fig. 3.2 - Projects financed per region at 31/08/2019
Fig. 3.3 - STeMA-TIA matrix correlation outline
Figg. 3.4 and 3.5 - Ex ante and ex post evaluation – *Inclusive Growth* determinant
Figg. 3.6 and 3.7 - Ex ante and ex post evaluation – *Resources and Funds* determinant
Figg. 3.8 and 3.9 - Ex ante and ex post evaluation– *Smart Growth* determinant
Figg. 3.10 and 3.11 - Ex ante and ex post evaluation– *Sustainable Growth* determinant
Figg. 3.12 and 3.13 - Ex post territorialised evaluation at NUTS 3 and 2 – *Inclusive Growth* determinant
Figg. 3.14 and 3.15 - Ex post territorialised evaluation at NUTS 3 and 2 – *Resources & Funds* determinant
Figg. 3.16 and 3.17 - Ex post territorialised evaluation at NUTS 3 and 2 – *Smart Growth* determinant
Figg. 3.18 and 3.19 - Ex post territorialised evaluation at NUTS 3 and 2 – *Sustainable Growth* determinant

Chapter 4. *Social Inclusion and Territorial Dynamics*
Fig. 4.1 - *Risk of poverty* – ex ante situation and ex post assessment
Fig. 4.2 - *Social inclusion capacity* – ex ante situation and ex post assessment
Fig. 4.3 - *Trust in governance* – ex ante situation and ex post assessment

Chapter 5. *Smart Growth and Inner Areas for The Territorial Cohesion of the Italian Regions*
Fig. 5.1 - Map of the *Smart Growth* determinant ex ante data according to STeMA method at Italian NUTS3 level

Chapter 6. *Inclusive Growth in Inner and Internal Areas: Policies sustaining Quality of Life as a driver of Territorial Development*
Fig. 6.1 - State of progress of Axis 1 initiatives as at 1 November 2019
Fig. 6.2 - List of policies for *Cultural Opportunities* (OpCu) indicator (data compiled by authors based on application of STeMA TIA model)
Fig. 6.3 - Ex post *Cultural Opportunities* (OpCu) at NUTS 2 scale
Fig. 6.4 - Ex post *Quality of Life* at NUTS 2 scale
Fig. 6.5 - Ex post *Quality of Life* at NUTS 3 scale

Chapter 7. *'Inner Peripheries' and infrastructural policies in Italy*
Fig. 7.1a - Italian inner peripheries
Fig. 7.1b - Italian inner peripheries according to 1, 2 or 3 criteria
Fig. 7.2 - *Infrastructural sustainability* typology ex ante values for the Italian inner peripheries
Fig. 7.3 - *Multimodal accessibility* indicator ex ante values for the Italian inner peripheries
Fig. 7.4 - *Broadband penetration level* indicator, ex ante values for the Italian inner periphery provinces
Fig. 7.5 - *Energy self-sufficiency index*, ex ante values for the Italian inner periphery provinces
Fig. 7.6 - *Multimodal accessibility* ex post specific territorialized assessment for the Italian inner periphery provinces
Fig. 7.7 - *Broadband penetration level* ex post specific territorialized assessment for the Italian inner periphery provinces
Fig. 7.8 - *Energy self-sufficiency index* ex post specific territorialized assessment for the Italian inner periphery provinces
Fig. 7.9 - *Infrastructural sustainability* typology ex post specific territorialized assessment for the Italian inner periphery provinces

Chapter 8. *Territorial Impact Assessment of the OPs 2014-2020 for the competitiveness of regional economies. A STeMA model application*
Fig. 8.1 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Smart Growth* determinant with the selection of policy choices derived from the NOP-YEI and NOP-SAEP
Fig. 8.2 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Sustainable Growth* determinant with the selection of policy choices derived from the NOP-YEI and NOP-SAEP
Fig. 8.3 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Inclusive Growth* determinant with the selection of policy choices derived from the NOP-YEI and NOP-SAEP
Fig. 8.4 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Smart Growth* determinant with the selection of policy choices derived from the NOP-R&I, NOP-YEI, NOP-SAEP

Fig. 8.5 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Sustainable Growth* determinant with the selection of policy choices derived from the NOP-R&I, NOP-YEI, NOP-SAEP
Fig. 8.6 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Inclusive Growth* determinant with the selection of policy choices derived from the NOP-R&I, NOP-YEI, NOP-SAEP
Fig. 8.7 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Smart Growth* determinant with the selection of policy choices derived from the NOP-E&C, NOP-SME, NOP-R&I, NOP-I&N, NOP-YEI, NOP-SAEP
Fig. 8.8 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Sustainable Growth* determinant with the selection of policy choices derived from the NOP-E&C, NOP-SME, NOP-R&I, NOP-I&N, NOP-YEI, NOP-SAEP
Fig. 8.9 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Inclusive Growth* determinant with the selection of policy choices derived from the NOP-E&C, NOP-SME, NOP-R&I, NOP-I&N, NOP-YEI, NOP-SAEP

Chapter 11. *The mid term evaluation of 2014-2020 European Structural and Investment Funds Programmes. The case study of ETC Programmes evaluation*
Fig. 11.1 - Budget identified in the Evaluation Plans of the ETC Programmes for evaluation activites

Part Two
Chapter I. *The Region of Piedmont: critical analysis of the Region and presentation of the ROP*
Fig. I.1 - *Smart Growth* determinant. Situation in the provinces of Piedmont after implementation of the policies
Fig. I.2 - *Sustainable Growth* determinant. Situation in the provinces of Piedmont after implementation of the policies
Fig. I.3 - *Inclusive Growth* determinant. Situation in the provinces of Piedmont after implementation of the policies
Fig. I.4 - *Resources and Funds* determinant. Situation in the provinces of Piedmont after implementation of the policies

Chapter II. *Cohesion Policies in the Alpine Valle D'Aosta Region*
Fig. II.1 - Internal areas (as per the NSIA) in the Aosta Valley Region
Fig. II.2 (a, b, c, d) - Ex post specific policy assessment for the four determinants: 2a. *Sustainable Growth*, 2b. *Smart Growth*, 2c. *Inclusive Growth*, 2d. *Resources and Funds*
Fig. II.3 (a, b, c, d – clockwise order) - Ex post specific territorialized assessment for the four determinants: 3a. *Sustainable Growth*, 3b. *Smart Growth*, 3c. *Inclusive Growth*, 3d. *Resources and Funds*

Chapter III. *The Region of Liguria*
Fig. III.1 - *Smart Growth* determinant. Situation in the provinces of Liguria after implementation of the policies
Fig. III.2 - *Sustainable Growth* determinant. Situation in the provinces of Liguria after implementation of the policies
Fig. III.3 - *Inclusive Growth* determinant. Situation in the provinces of Liguria after implementation of the policies
Fig. III.4 - *Resources and Funds* determinant. Situation in the provinces of Liguria after implementation of the policies

Chapter IV. *Regional policies and the European dimension of growth in Lombardia*
Fig. IV.1a - Ex post policy assessment for *Smart Growth* determinant in Lombardia
Fig. IV.1b - Ex post territorialized policy assessment for *Smart Growth* determinant in Lombardia
Fig. IV.2a - Ex post policy assessment for *Sustainable Growth* determinant in Lombardia
Fig. IV.2b - Ex post territorialized policy assessment for *Sustainable Growth* determinant in Lombardia
Fig. IV.3a - Ex post policy assessment for *Inclusive Growth* determinant in Lombardia
Fig. IV.3b - Ex post territorialized policy assessment for *Inclusive Growth* determinant in Lombardia
Fig. IV.4a - Ex post policy assessment for *Resources and Funds* determinant in Lombardia
Fig. IV.4b - Ex post territorialised policy assessment for *Resources and Funds* determinant in Lombardia

Chapter VIII. *STeMA Model and Cohesion policies: an application to the Emilia-Romagna Region*
Fig. VIII.1 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Smart Growth* determinant with the selection of policy choices derived from the ERDF ROP of the Emilia-Romagna
Fig. VIII.2 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Inclusive Growth* determinant with the selection of policy choices derived from the ERDF ROP of the Emilia-Romagna
Fig. VIII.3 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Sustainable Growth* determinant with the selection of policy choices derived from the ERDF ROP of the Emilia-Romagna

Chapter IX. *A STeMA Model application to the Tuscany Region*
Fig. IX.1 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Smart Growth* determinant with the selection of policy choices derived from the ERDF ROP of the Tuscany

Fig. IX.2 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Sustainable Growth* determinant with the selection of policy choices derived from the ERDF ROP of the Tuscany
Fig. IX.3 - Geographical representation of the 4 configurations of STeMA (ex ante, ex post, ex ante territorialized, ex post territorialized) for the *Inclusive Growth* determinant with the selection of policy choices derived from the ERDF ROP of the Tuscany

Chapter X. *Marche Region: an application of STeMA TIA to regional planning policy*
Fig. X.1 - Ex ante territorialized values of the four determinants
Fig. X.2 - Ex post territorialized values of the four determinants applying ERDF ROP choices

Chapter XI. *Territorial cohesion assessment of Umbria Region*
Fig. XI.1 - Territorial strategies in Umbria region
Fig. XI.2 - Territorial Strategic Plan
Fig. XI.3 - The complementarity between, the Europe 2020 Strategy, the thematic objectives of the cohesion policy and Umbria ERDF Regional Operational Programme
Fig. XI.4 - Determinants of Cohesion in STeMA Methodology: ex post territorialisation

Chapter XII. *Territorial cohesion in Latium Region. A STeMA measurement of Regional Operative Plan ERDF 2014-2020*
Fig. XII.1 - Selected 'Inner Areas' for pilot strategies in Latium Region
Figg. XII.2 and XII.3 - SG3 Indicator (*Internet in the public body*), ex ante and ex post situation
Figg. XII.4 and XII.5 - SG17 Indicator (*Telecommunication development level*), ex ante and ex post situation
Figg. XII.6 and XII.7 - SG20 *Smart Growth* determinant, ex ante and ex post situation
Figg. XII.8 and XII.9 - SuG28 Indicator (*Insurance and financial institutions*), ex ante and ex post situation
Figg. XII.10 and XII.11 - SuG41 Indicator (*Urban Waste*), ex ante and ex post situation
Figg. XII.12 and XII.13 - SuG54 *Sustainable Growth* determinant, ex ante and ex post situation
Figg. XII.14 and XII.5 - IG38 Sector (*Inclusion of foreigners*), ex ante and ex post situation
Figg. XII.16 and XII.17 - IG40 Indicator (*Female Employment*), ex ante and ex post situation
Figg. XII.18 and XII.19 - IG51 *Inclusive Growth* determinant, ex ante and ex post situation
Figg. XII.20 and XII.21 - RF19 *Resources and Funds* determinant, ex ante and ex post situation

Chapter XIII. *Abruzzo and regional programming for cohesion: Analysis and dynamics for the 2020 programming*
Fig. XIII.1 - Inhabitants in Abruzzo on 1st January 2018
Fig. XIII.2 - Density of population in Abruzzo on 1st January 2018

Chapter XIV. *The territorial cohesion in Molise Region: socio-economic and financial framework, assessment and policy recommendations*
Fig. XIV.1 - Territorial strategies in the ERDF ESF ROP 2014-2020 (Internal Areas, Urban Areas, other internal areas)
Fig. XIV.2 - Financing of projects 2014-2020 by Fund. Total (billions of euro); % Shares
Fig. XIV.3 - Financing of projects 2014-2020 by province. Total and per capita
Fig. XIV.4 - Financing of projects 2014-2020 by type and by theme
Fig. XIV.5 - Molise Region, *Smart Growth* determinant: ex post territorialisation analysis (NUTS 3)
Fig. XIV.6 - Molise Region, *Sustainable Growth* determinant: ex post territorialisation analysis (NUTS 3)
Fig. XIV.7 - Molise Region, *Inclusive Growth* determinant: ex post territorialisation analysis (NUTS 3)
Fig. XIV.8 - Molise Region, *Resources and Funds* determinant: ex post territorialisation analysis (NUTS 3)

Chapter XV. *The state of territorial cohesion in the Campania Region: place-based evidence analysis and assessment for post 2020 planning*
Fig. XV.1 - Campania territorial classification RDP 2014-2020
Fig. XV.2 - Financing of projects 2014-2020 by Fund. Total (billions of euro); % Shares
Fig. XV.3 - Financing of projects 2014-2020 by province. Total and per capita
Fig. XV.4 - Financing of projects 2014-2020 by type and by area
Fig. XV.5 - Campania Region, *Smart Growth* determinant: ex post territorialisation analysis (NUTS 3)
Fig. XV.6 - Campania Region, *Sustainable Growth* determinant: ex post territorialisation analysis (NUTS 3)
Fig. XV.7 - Campania Region, *Inclusive Growth* determinant: ex post territorialisation analysis (NUTS 3)
Fig. XV.8 - Campania Region, *Resources and Funds* determinant: ex post territorialisation analysis (NUTS 3)

Chapter XVI. *The Puglia Regional Operational Program: the potential and limits of regional programming in the 2014-2020*
Fig. XVI.1 - *Local Units* indicator, ex ante and ex post data in the high impact policy choices scenario
Fig. XVI.2 - *Local Units* indicator, ex ante and ex post data in the medium-low impact policy choices scenario

Chapter XVII. *The measurement of territorial cohesion in Calabria through the STeMA model with reference to Regional programming*

Fig. XVII.1 - *Smart Growth* determinant: ex ante analysis (NUTS 3)
Fig. XVII.2 - Amount of founding activated procedures and payments
Fig. XVII.3 - *Smart Growth* determinant: ex post analysis (NUTS 3)
Fig. XVII.4 - *Smart Growth* determinant: ex post territorialized analysis (NUTS 3)
Fig. XVII.5 - *Sustainable Growth* determinant: ex ante analysis (NUTS 3)
Fig. XVII.6 - *Sustainable Growth* determinant: ex post analysis (NUTS 3)
Fig. XVII.7 - *Sustainable Growth Growth* determinant: ex post territorialized analysis (NUTS 3)
Fig. XVII.8 - *Inclusive Growth* determinant: ex ante analysis (NUTS 3)
Fig. XVII.9 - *Inclusive Growth* determinant: ex post analysis (NUTS 3)
Fig. XVII.10 - *Inclusive Growth* determinant: ex post territorialized analysis (NUTS 3)
Fig. XVII.11 - *Resources and Funds* determinant: ex ante analysis (NUTS 3)
Fig. XVII.12 - *Resources and Funds* determinant: ex post analysis (NUTS 3)
Fig. XVII.13 - *Resources and Funds* determinant: ex post territorialized analysis (NUTS 3)

Chapter XVIII. *The measure of territorial cohesion: the application of the STeMA model to the Basilicata Region*
Fig. XVIII.1a - *Smart Growth* determinant: ex ante analysis, on a provincial scale
Fig. XVIII.1b - *Smart Growth* determinant: ex post analysis, on a provincial scale
Fig. XVIII.1c - *Smart Growth* determinant: ex post territorialized analysis, on a provincial scale
Fig. XVIII.2a - *Sustainable Growth* determinant: ex ante analysis, on a provincial scale
Fig. XVIII.2b - *Sustainable Growth* determinant: ex post analysis, on a provincial scale
Fig. XVIII.2c - *Sustainable Growth* determinant: ex post territorialized analysis, on a provincial scale
Fig. XVIII.3a - *Inclusive Growth* determinant: ex ante analysis, on a provincial scale
Fig. XVIII.3b - *Inclusive Growth* determinant: ex post analysis, on a provincial scale
Fig. XVIII.3c - *Inclusive Growth* determinant: ex post territorialized analysis, on a provincial scale
Fig. XVIII.4a - *Resources and Funds* determinant: ex ante analysis, on a provincial scale
Fig. XVIII.4b - *Resources and Funds* determinant: ex post analysis, on a provincial scale
Fig. XVIII.4c - *Resources and Funds* determinant: ex post territorialized analysis, on a provincial scale

Chapter XIX. *Territorial Cohesion in the Sicily's Planning 2014-2020. What are Policy Choices for not being isolated/islanders?*
Fig. XIX.1 - The representation of ex ante data of *Smart Growth* determinant according to STeMA method at Sicilian Region NUTS3 level
Fig. XIX.2 - The representation of ex ante data of *Sustainable Growth* determinant according to STeMA method at Sicilian Region NUTS3 level
Fig. XIX.3 - The representation of ex ante data *Inclusive Growth* determinant according to STeMA method at Sicilian Region NUTS3 level

Chapter XX. *Implementation of cohesion policies in Sardinia Region. A critical analysis by the TIA system model*
Fig. XX.1 - *Smart Growth – Ultra wide band access* (BUL) in region's ex post scenario (data compiled by authors based on application of STeMA TIA model)
Fig. XX.2 - *Sustainable Growth – Green Added Value* (added value of green jobs) in ex post regional analysis (data compiled by authors based on application of STeMA TIA model)
Fig. XX.3 - *Foreign residents* in ex post regional results (data compiled by authors based on application of STeMA TIA model)
Fig. XX.4 - Policy recommendations

LIST OF TABLES

Reading the Territorial Cohesion
Tab. A.1 - The complementarity between the thematic objectives of the cohesion policy, the Europe 2020 Strategy and the STeMA policy choice
Tab. A.2 - Format of Metadata
Tab. A.3 - Indicators and logical tree of *Smart Growth* determinant (including Digital, Education, Innovation)
Tab. A.4 - Indicators and logical tree of *Sustainable Growth* determinant (including climate, energy, mobility, competitiveness)
Tab. A.5 - Indicators and logical tree of *Inclusive Growth* determinant (Employment and skill, Combat Poverty, Inclusion)
Tab. A.6 - Indicators and logical tree of *Resources and Funds* determinant

Statistical visions from the STeMA application: a joint trial
Tab. B.1 - Policy choices and policy effects with reference to *Smart Growth* matrix
Tab. B.2 - Effectiveness of the policy actions related to the goal of *Smart Growth* on each of the 12 desired effects and weight matrix D of policy impacts on each indicator
Tab. B.3 - Matrix D': capacity distribution of policies for each effect (policy impacts modified)
Tab. B.4 - Impact of the policies related to each effect on the nine indicators of *Smart Growth* matrix
Tab. B.5 - Impact of all the effect of the policies on each indicator within *Smart Growth* matrix

Part One
Chapter 1. *Territorial Capital: effects of national and regional cohesion policies*
Tab. 1.1 - Research units and technological transfer in Italy

Chapter 2. *The measure of territorial capital: the application of the STeMA Model to the NOP Infrastructure and Networks*
Tab. 2.1 - Structure of the NOP-I&N
Tab. 2.2 - Financial framework of NOP-I&N
Tab. 2.3 - Interventions detail (Axis)
Tab. 2.4 - Criticality of the *Smart Growth* determinant (SG) and of the indicator *R&D Infrastructures* (RDI) at NUTS2
Tab. 2.5 - Criticality of the *Smart Growth* determinant (SG) and of the indicator *R&D Infrastructures* (RDI) at NUTS3
Tab. 2.6 - The Policy choices activated in the context of Smart Growth
Tab. 2.7 - The main critical issues in the ex ante analysis for *Sustainable Growth* determinant (SuG)
Tab. 2.8 - The policies activated in the context of Sustainable Growth
Tab. 2.9 - The policies for the implementation of the Inclusive Growth
Tab. 2.10 - *Inclusive Growth:* selected indicators and components for ex ante (A), ex post (B) and territorialized ex post (C)

Chapter 3. *Analysis of National NOP in relation to the theme of 'Territorial Capital'. NOP ESF Systems for active employment policies and ESF NOP Youth employment initiative*
Tab. 3.1 - Detail of the NOP-SAEP investment priorities based on the priority axes
Tab. 3.2 - Main beneficiaries
Tab. 3.3 - Policy correlation

Tab. 3.4 - Policy choice activated for the simulation
Tab. 3.5 - Weight of effects by policy choice – Inclusive Growth
Tab. 3.6 - Weighted average impacts of policy on the single indicator – Inclusive Growth
Tab. 3.7 - Weight of effects by policy choice – Resources & Funds
Tab. 3.8 - Weighted average impacts of policy on the single indicator – Resources & Funds
Tab. 3.9 - Weight of effects by policy choice – Smart Growth
Tab. 3.10 - Weighted average impacts of policy on the single indicator – Smart Growth
Tab. 3.11 - Weight of effects by policy choice – Sustainable Growth
Tab. 3.12 - Weighted average impacts of policy on the single indicator – Sustainable Growth
Tab. 3.13 - Policies activated based on the solved expenditure (in blue, A) Policies activated based on requirements emerged after ex ante analysis (in red, B). Total policies activated A + B

Chapter 5. *Smart Growth and Inner Areas for The Territorial Cohesion of the Italian Regions*
Tab. 5.1 - *Smart Growth* ex ante territorial performance

Chapter 6. *Inclusive Growth in Inner and Internal Areas: Policies sustaining Quality of Life as a driver of Territorial Development*
Tab. 6.1 - Investment priorities of NOP-Metro for Axes 3 and 4
Tab. 6.2 - Priority axes and initiatives of the NOP-Culture
Tab. 6.3 - Funding of NOP-Culture
Tab. 6.4 - Ex ante ed Ex post *Cultural Opportunities* (OpCu) and *Tourism rat*e (TxTUR) indicators and *Quality of life* (QL) sector at NUTS 2 scale

Chapter 8. *Territorial Impact Assessment of the OPs 2014-2020 for the competitiveness of regional economies. A STeMA model application*
Tab. 8.1 - The NOPs analysed, Regions, and areas of application
Tab. 8.2 - The selected National Operational Programmes
Tab. 8.3 - Regional GDP per capita 2010-2017 (EU28 = 100)
Tab. 8.4 - Policy choices regarding Productivity/Competitiveness
Tab. 8.5 - List of policy choices derived from the Initiative for Small and Medium Enterprises (NOP-SME)
Tab. 8.6 - List of policy choices derived from the OP Research and Innovation (NOP_R&I)
Tab. 8.7 - List of policy choices derived from the NOP-I&N (Infrastructure and Networks)
Tab. 8.8 - List of policy choices derived from the NOP-YEI (Youth Employment Initiative)
Tab. 8.9 - List of policy choices derived from the OP regarding Active Policy Systems for Employment (NOP-SAEP)
Tab. 8.10 - List of the policy choices activated in the STeMA simulation, derived from the 6 OPs examined, in regards of the P/C theme
Tab. 8.11 - List of the policy choices activated in the STeMA simulation and derived from the NOP-SAEP and NOP-YEI, applicable to all regions (i.e. More developed, In transition, Less developed)
Tab. 8.12 - List of the policy choices activated in the STeMA simulation and derived from the NOP-I&N; NOP-SAEP and NOP_YEI, applicable to the 'Less developed and In transition' region
Tab. 8.13 - List of the policy choices activated in the STeMA simulation and derived from the NOP-E&C, NOP-SME, NOP-R&I, NOP-I&N, NOP-YEI, NOP-SAEP, applicable to the 'Less developed' region in the South

Chapter 9. *Green, Blue and Circular Economy in Italy*
Tab. 9.1 - The Italian National Strategy for Sustainable Development 5 P and the SDG
Tab. 9.2 - Main Italian Plans, Strategies and Instruments towards the "Green Economy"
Tab. 9.3 - The 2030 Sustainable Development Goals

Part Two
Chapter I. *The Region of Piedmont*
Tab. I.1 - ESF ROP – Axes and investment priorities of the Piedmont Region
Tab. I.2 - ERDF ROP – Axes and investment priorities of the Piedmont Region
Tab. I.3 - Expenditure effected
Tab. I.4 - Situation in the provinces of Piedmont and the entire region pre and post implementation of the policies
Tab. I.5 - Situation in the provinces of Piedmont and the entire region pre and post implementation of the policies
Tab. I.6 - Situation in the provinces of Piedmont and of the entire region pre and post implementation of the policies
Tab. I.7 - Situation in the provinces of Piedmont and the entire region pre and post implementation of the policies
Tab. I.8 - Policies selected on the basis of expenditure paid (in blue, A), policies implemented on the basis of the regional policy needs revealed by the ex ante analysis (in red, B). Total policies implemented A + B
Tab. I.9 - Indicators of the ERDF ROP by thematic axes

Chapter II. *Cohesion Policies in the Alpine Valle D'Aosta Region*
Tab. II.1 - Thematic objectives (TO) in the 2014-2020 period

Chapter III. *The Region of Liguria*
Tab. III.1 - ESF ROP – The axes and investment priorities of the Region of Liguria
Tab. III.2 - ERDF ROP – The axes and investment priorities of the Region of Liguria
Tab. III.3 - Solved expenditure
Tab. III.4 - *Smart Growth* determinant. The situation in the provinces of Liguria and the entire region before and after activating the policies
Tab. III.5 - *Sustainable Growth* determinant. The situation in the provinces of Liguria and the entire region before and after activating the policies
Tab. III.6 - *Inclusive Growth* determinant. The situation in the provinces of Liguria and the entire region before and after activating the policies
Tab. III.7 - *Resources and Funds* determinant. The situation in the provinces of Liguria and the entire region before and after activating the policies
Tab. III.8 - Policies activated based on the solved expenditure (in blue, A). Policies activated based on regional requirements emerged after ex ante analysis (in red, B). Total policies activated A + B
Tab. III.9 - ERDF ROP per thematic axes

Chapter IV. *Regional policies and the European dimension of growth in Lombardia*
Tab. IV.1 - Territorial typologies of the Lombard provinces in the STeMA model
Tab. IV.2 - The regional selected policies in relation to Smart, Sustainable and Inclusive Growth

Chapter V. *The case study of the Region Trentino-Alto Adige*
Tab. V.1 - Detailed analysis of the ESF ROP of Autonomous Province of Trento and Autonomous Province of Bolzano, with Thematic Axes (TA) and Actions (Ac) in relation (main and secondary) with the Thematic Objectives (TO) set by EU Commission
Tab. V.2.1 - Detailed analysis of the ERDF ROP of APT, with Specific Objective (SO) and Actions (Ac) in relation (main and secondary) with the Thematic Objectives (TO) set by EU Commission
Tab. V.2.2 - Detailed analysis of the ERDF ROP of APB, with Specific Objective (SO) and Actions (Ac) in relation (main and secondary) with the Thematic Objectives (TO) set by EU Commission
Tab. V.3 - Policy choices included in the ROPs of APT and APB
Tab. V.4 - Selected Policy choices that can improve poor indicators for APT and APB

Chapter VI. *The Case Study of Veneto Region*
Tab. VI.1 - ESF ROP 2014-2020, State of implementation (31.12.2018)
Tab. VI.2 Policy choices included in the Veneto ROPs

Chapter VII. *A STeMA Model application to the Friuli Venezia Giulia Region*
Tab. VII.1 - Policy choices included in the ROPs of FVG
Tab. VII.2 - Policy choices that can improve poor indicators for FVG within the STeMA matrices

Chapter VIII. *STeMA Model and Cohesion policies: an application to the Emilia-Romagna Region*
Tab. VIII.1 - Financial Framework of the 2014-2020 ERDF ROP for the Emilia-Romagna Region
Tab. VIII.2 - Thematic Objectives, Investment Priorities and Specific Objectives selected by the Emilia-Romagna ERDF ROP
Tab. VIII.3 - STeMA Policy choices related to the Emilia-Romagna 2014-2020 ERDF ROP
Tab. VIII.4 - Comparison of regional STeMA evaluation for Emilia Romagna region (NUTS2 level) of the determinants *Smart Growth*, *Inclusive Growth*, and *Sustainable Growth*, according to the 4 possible territorial configurations: ex ante, ex post, ex ante territorialised and ex post territorialised

Chapter IX. *A STeMA Model application to the Tuscany Region*
Tab. IX.1 - Financial Framework of the 2014-2020 ERDF ROP of the Tuscany Region
Tab. IX.2 - Thematic Objectives, Investment Priorities and Specific Objectives selected by Tuscany Region
Tab. IX.3 - STeMA Policy Choices related to the Tuscany 2014-2020 ERDF ROP
Tab. IX.4 - Comparison of regional STeMA evaluation for Tuscany region (NUTS2 level) of the determinant *Smart Growth*, *Inclusive Growth*, and *Sustainable Growth*, according to the 4 possible territorial configurations: ex ante, ex post, ex ante territorialised and ex post territorialised

Chapter X. *Marche Region: an application of STeMA TIA to regional planning policy*
Tab. X.1 - Macro areas of Intervention, Thematic Objectives, Financial allocations all funds 2014-2020
Tab. X.2 - Correspondence Axes, Thematic objectives, Financial allocations ERDF ROP 2014/20
Tab. X.3 - *Smart Growth* matrix – Regional ex ante data for Marche region
Tab. X.4 - *Sustainable Growth* matrix – Regional ex ante data for Marche region
Tab. X.5 - *Inclusive Growth* matrix – Regional ex ante data for Marche region
Tab. X.6 - *Resources and Funds* matrix – Regional ex ante data for Marche region

Tab. X.7 - Policy choices related to ERDF ROP and improving options
Tab. X.8 - Financial allocation by TO, Priorities and Expected results related to ERDF ROP
Tab. X.9 - Determinants results for Marche Region and Provinces

Chapter XI. *Territorial cohesion assessment of Umbria Region*
Tab. XI.1 - Summary framework of the Umbria Region

Chapter XII. *Territorial cohesion in Latium Region. A STeMA measurement of Regional Operative Plan ERDF 2014-2020*
Tab. XII.1 - Ex Ante priorities and compliance references
Tab. XII.2 - STeMA ex ante assessment of Latium Region, *Smart Growth* determinant
Tab. XII.3 - STeMA ex ante assessment of Latium Region, *Sustainable Growth* determinant
Tab. XII.4 - STeMA ex ante assessment of Latium Region, *Inclusive Growth* determinant
Tab. XII.5 - STeMA ex ante assessment of Latium Region, *Resources and Funds* determinant
Tab. XII.6 - STeMA ex post assessment of Latium Region ROP policy choices, *Smart Growth* determinant
Tab. XII.7 - STeMA ex post assessment of Latium Region ROP policy choices, *Sustainable Growth* determinant
Tab. XII.8 - STeMA ex post assessment of Latium Region ROP policy choices, *Inclusive Growth* determinant
Tab. XII.9 - STeMA ex post assessment of Latium Region ROP policy choices, *Resources and Funds* determinant

Chapter XIII. *Abruzzo and regional programming for cohesion: Analysis and dynamics for the 2020 programming*
Tab. XIII.1 - ROP Abruzzo: planning strategies 2014-2020
Tab. XIII.2 - Operational Plan revised 2018-2020
Tab. XIII.3 - *Smart Growth* determinant. STeMA indicators for Abruzzo ROP from the 2014-2020 programming

Chapter XIV. *The territorial cohesion in Molise Region: socio-economic and financial framework, assessment and policy recommendations*
Tab. XIV.1 - Position of the Molise Region compared to Europe 2020 Strategy benchmarks
Tab. XIV.2 - Molise Region: main territorial indicator benchmarks – 2017
Tab. XIV.3. Molise Region – *Smart Growth* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)
Tab. XIV.4 - Molise Region – *Sustainable Growth* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)
Tab. XIV.5 - Molise Region, *Inclusive Growth* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)
Tab. XIV.6 - Molise Region, *Resources and Funds* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)

Chapter XV. *The state of territorial cohesion in the Campania Region: place-based evidence analysis and assessment for post 2020 planning*
Tab. XV.1 - Position of the Campania Region compared to Europe 2020 Strategy benchmarks
Tab. XV.2 - Campania Region: main social and economic indicator benchmarks – 2017
Tab. XV.3 - Campania Region, *Smart Growth* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)
Tab. XV.4 - Campania Region, *Sustainable Growth* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)
Tab. XV.5 - Campania Region, *Inclusive Growth* determinant: Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)
Tab. XV.6 - Campania Region, *Resources and Funds* determinant Comparative Analysis of ex ante, ex post and ex post territorialisation data (NUTS 2) (only selected indicators)

Chapter XVI. *The Puglia Regional Operational Program: the potential and limits of regional programming in the 2014-2020*
Tab. XVI.1 - Research units and technological transfer in Puglia
Tab. XVI.2 - Underlying logic of the definition of policies in the ROP Puglia 2014-2020
Tab. XVI.3 - Correlation between regional strategy and selection of policy choices
Tab. XVI.4 - Smart Growth: high impact policy choices. Comparison between ex ante and ex post data
Tab. XVI.5 - Smart Growth: high impact policy choices. Comparison between ex ante and ex post ex post territorialized data
Tab. XVI.6 - Sustainable Growth: high impact policy choices. Comparison between ex ante and ex post data
Tab. XVI.7 - Sustainable Growth: high impact policy choices. Comparison between ex ante and ex post territorialized data
Tab. XVI.8 - Inclusive Growth: high impact policy choices. Comparison between ex ante and ex post data
Tab. XVI.9 - Inclusive Growth: high impact policy choices. Comparison between ex ante and ex post territorialized data
Tab. XVI.10 - Smart Growth, medium-low impact policy choices. Comparison between ex ante and ex post data
Tab. XVI.11 - Smart Growth, medium-low impact policy choices. Comparison between ex ante and ex post territorialized data
Tab. XVI.12 - Sustainable Growth, medium-low impact policy choices. Comparison between ex ante and ex post data

Tab. XVI.13 - Sustainable Growth, medium-low impact policy choices. Comparison between ex ante and ex post territorialized data
Tab. XVI.14 - Inclusive Growth, medium-low impact policy choices. Comparison between ex ante and ex post data
Tab. XVI.15 - Inclusive Growth, medium-low impact policy choices. Comparison between ex ante and ex post territorialized data

Chapter XVIII. *The measure of territorial cohesion: the application of the STeMA model to the Basilicata Region*
Tab. XVIII.1 - The axes of intervention and resources of the ERDF ROP Basilicata 2014-2020
Tab. XVIII.2 - ERDF ROP Basilicata: a summary of the programmatic actions for each axis
Tab. XVIII.3 - The axes of intervention and the resources of the ESF ROP Basilicata 2014-2020
Tab. XVIII.4 - *Smart Growth.* The 5 critical indicators in the ex ante analysis
Tab. XVIII.5 - Policies activated in the context of *Smart Growth* matrix
Tab. XVIII.6 - *Sustainable Growth.* The 5 critical indicators in the ex ante analysis
Tab. XVIII.7 - Policies activated in the context of *Sustainable Growth* matrix
Tab. XVIII.8 - *Inclusive Growth*. Indicators with critical issues in the ex ante analysis
Tab. XVIII.9 - Policy needs correspondences
Tab. XVIII.10 - Policies activated in the context of *Inclusive Growth* matrix
Tab. XVIII.11 - *Resource and Found.* Critical indicators in the ex ante analysis
Tab. XVIII.12 - Policies activated in the context of *Resource and Found* matrix
Tab. XVIII.13 - Progress of ERDF ROP expenditure
Tab. XVIII.14 - Progress of ESF ROP expenditure
Tab. XVIII.15 - Policy needs on a regional scale according to STeMA model

Chapter XIX. *Territorial Cohesion in the Sicily's Planning 2014-2020. What are Policy Choices for not being isolated/islanders?*
Tab. XIX.1 - The macro-areas and the corresponding thematic objectives (TO) in 2014-2020 Sicilian Planning

Chapter XX. *Implementation of cohesion policies in Sardinia Region. A critical analysis by the STeMA TIA system model*
Tab. XX.1 - Axes of Sardinia ERDF ROP 2014-2020
Tab. XX.2 - Funds allocated, earmarked, spent and certified for Sardinia ERDF ROP 2014-2020
Tab. XX.3 - Percentage of certified expenditure of total of sums allocated for each fund from Sardinia ERDF ROP 2014-2020
Tab. XX.4 - Axes of Sardinia ESF ROP 2014-2020.
Tab. XX.5 - Allocated and earmarked funds and certified expenditure for Sardinia ESF ROP 2014-2020
Tab. XX.6 - *Smart Growth* – Determinant and selected indicators values for Sardinia region and provinces by application of STeMA TIA
Tab. XX.7 - *Sustainabe Growth* – Determinant and selected indicators values for Sardinia region and provinces by application of STeMA TIA
Tab. XX.8 - *Inclusive Growth* – Determinant and selected indicators values for Sardinia region and provinces by application of STeMA TIA
Tab. XX.9 - Policies implemented for three matrices of the STeMA TIA model

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