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Titolo	Bayesian compendium // Marcel van Oijen
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Descrizione fisica	1 online resource (XIV, 204 p. 60 illus., 23 illus. in color.)
Disciplina	519.542
Soggetti	Bayesian statistical decision theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- 1 Introduction to Bayesian thinking -- 2 Introduction to Bayesian science -- 3 Assigning a prior distribution -- 4 Assigning a likelihood function -- 5 Deriving the posterior distribution -- 6 Sampling from any distribution by MCMC -- 7 Sampling from the posterior distribution by MCMC -- 8 Twelve ways to fit a straight line -- 9 MCMC and complex models -- 10 Bayesian calibration and MCMC: Frequently asked questions -- 11 After the calibration: Interpretation, reporting, visualization -- 2 Model ensembles: BMC and BMA -- 13 Discrepancy -- 14 Gaussian Processes and model emulation -- 15 Graphical Modelling (GM) -- 16 Bayesian Hierarchical Modelling (BHM) -- 17 Probabilistic risk analysis and Bayesian decision theory -- 18 Approximations to Bayes -- 19 Linear modelling: LM, GLM, GAM and mixed models -- 20 Machine learning -- 21 Time series and data assimilation -- 22 Spatial modelling and scaling error -- 23 Spatio-temporal modelling and adaptive sampling -- 24 What next? -- Appendix 1: Notation and abbreviations -- Appendix 2: Mathematics for modellers -- Appendix 3: Probability theory for modellers -- Appendix 4: R -- Appendix 5: Bayesian software.
Sommario/riassunto	This book describes how Bayesian methods work. Its primary aim is to demystify them, and to show readers: Bayesian thinking isn't difficult and can be used in virtually every kind of research. In addition to revealing the underlying simplicity of statistical methods, the book explains how to parameterise and compare models while accounting

for uncertainties in data, model parameters and model structures. How exactly should data be used in modelling? The literature offers a bewildering variety of techniques and approaches (Bayesian calibration, data assimilation, Kalman filtering, model-data fusion). This book provides a short and easy guide to all of these and more. It was written from a unifying Bayesian perspective, which reveals how the multitude of techniques and approaches are in fact all related to one another. Basic notions from probability theory are introduced. Executable code examples are included to enhance the book's practical use for scientific modellers, and all code is available online as well.

2. Record Nr.	UNINA9910975210903321
Autore	Nallari Raj <1955->
Titolo	Clusters of competitiveness // Raj Nallari, Breda Griffith
Pubbl/distr/stampa	Washington, DC : , : World Bank, , [2013]
ISBN	1-4648-0050-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (pages cm)
Collana	Directions in development
Altri autori (Persone)	GriffithBreda
Disciplina	338.6/048
Soggetti	Competition Economic development
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Contents -- Preface -- About the Authors -- Abbreviations -- Chapter 1 Competition, Competition Policy, and Growth -- Competition and Growth -- Product Market Regulation and Economic Performance -- Competition Policy -- Conclusion -- Notes -- References -- Chapter 2 Competitiveness and Its Indicators -- Elements of Competitiveness -- Defining Competitiveness -- Price Indicators of Competitiveness -- Nonprice Indicators of Competitiveness -- Doing Business: Measuring Business Regulations -- Conclusion -- Notes -- References -- Chapter 3 National Competitiveness -- Defining National Competitiveness -- Competitiveness Rankings -- Conclusion -- Notes -- References -- Chapter 4 Innovation Policy for Competitiveness -- Innovation: Definition and Measurements -- Innovation, Growth, and

Competitiveness -- Policies for Innovation -- How Can Government Help? -- Conclusion -- Notes -- References -- Chapter 5  
 Competitiveness and Clusters -- Background to Clusters -- Cluster Initiatives -- Policy Implications -- Conclusion -- Notes -- References -- Box -- Box 2.1 Price and Nonprice Indicators of Competitiveness: The Case of Armenia -- Figures -- Figure 1.1 Markups in Manufacturing and Nonmanufacturing -- Figure 1.2 The Tree Structure of the Economy-wide PMR Indicator -- Figure 1.3 PMR in Accession and OECD Countries, Aggregate Level, 2008 -- Figure 1.4 Decomposition of PMR in Accession Countries, 2008 -- Figure 2.1 Business Environment Quality: The Diamond -- Figure 2.2 The Three Pillars of Trade Competitiveness -- Figure 2.3 Outcomes and Determinants of Competitiveness -- Figure B2.1.1 Armenia's Share of World Exports -- Figure B2.1.2 Nominal and Real Effective Exchange Rates for Armenia -- Figure B2.1.3 GDP Dynamics and Global Competitiveness Rankings for Armenia -- Figure 2.4 The 12 Pillars of Competitiveness.  
 Figure 2.5 Correlation between Doing Business Rankings and OECD Rankings of Product Market Regulation -- Figure 2.6 Correlation between Doing Business Rankings and World Economic Forum Rankings on Global Competitiveness -- Figure 3.1 REER Competitiveness Gains and Losses, Selected Countries, 2000-11 -- Figure 3.2 World Competitiveness Scoreboard 2011: Top 20 Economies -- Figure 3.3 Competitiveness Trends, 2005-11 -- Figure 3.4 Trends in the GCI Innovation Pillar Score, 2005-11 -- Figure 3.5 Variation in Individual Economies' Regulatory Environment (dispersion around average) -- Figure 3.6 Regions Ranked by Strength of Legal Institutions and Complexity and Cost of Regulatory Processes -- Figure 3.7 Impact of Regulatory Reform on Registration of New Firms -- Figure 4.1 New-to-Market Product Innovators as a Percentage of Innovative Firms by R&D Status, 2004-06 -- Figure 4.2 Contribution of Innovation to Growth in Ghana and the Republic of Korea, 1960-2005 -- Figure 4.3 Major Technical Systems from the Middle Ages through the Present -- Figure 4.4 Cross-Border Capital Inflows, 1985-2009 -- Figure 4.5 Global Growth in Real GDP, 2000-12 (quarterly change from prior year) -- Figure 4.6 Innovation Accounts for a Large Share of Labor Productivity Growth, Percentage Contributions, 1995-2006 -- Figure 4.7 Determinants of Technology Upgrading in Developing Countries -- Figure 4.8 Growing Innovation: The Government as Gardener -- Figure 4.9 Patenting Activity of Young Firms, 2005-07 -- Figure 5.1 An Agribusiness Cluster -- Figure 5.2 Determinants of Innovative Capacity -- Figure 5.3 Productivity and the Business Environment -- Figure 5.4 Dimensions of Clusters and Economic Policy -- Figure 5.5 One Approach to Developing a Cluster Initiative -- Figure 5.6 Policy Setting in which CIs Are Conducted.  
 Figure 5.7 Level of Trust between Firms and between the Private and Public Sector -- Figure 5.8 Objectives Considered Most Important for the CI -- Figure 5.9 Target Industries Selected by Donors or Government for the Purposes of CIs -- Figure 5.10 Cluster Strength -- Figure 5.11 Cluster Strength by Initiator-Developing and Transition Countries -- Figure 5.12 Entity Responsible for Initiating CI by Economy's Underlying Level of Development -- Figure 5.13 Influence in First Stage of Cluster Initiatives' Operation, by Sector and Economy Type -- Tables -- Table 1.1 Markups Estimates by Industry -- Table 1.2 Review of Studies Examining the Effect of PMR on Macroeconomic Outcomes -- Table 1.3 Regulation and Growth in GDP per Capita, Aggregate PMR -- Table 1.4 Regulation and Growth in GDP per Capita, Regulatory Domains -- Table 1.5 Regulation and Growth in GDP per

Capita, Threshold Results -- Table 1.6Administrative Barriers to Starting a Business, by Region -- Table 1.7Structure, Conduct, and Performance of Selected Industries in Five Developing Economies -- Table 1.8Persistence of Profitability in Emerging Markets and Advanced Markets -- Table 1.9Competition Assessment Framework -- Table 2.1The Who, What, and How of Firms' Competitiveness -- Table 2.2Definition of Competitiveness and Its Underlying Elements -- Table 2.3Price and Cost Indicators of Competitiveness -- Table 2.4Price Measures of Competitiveness -- Table 2.5Factors and Subfactors Comprising the National Environment (World Competitiveness Yearbook) -- Table 2.6Subindex Weights and Income Thresholds for Stages of Development (Global Competitiveness Index) -- Table 2.7 Eleven Areas of Business Regulation Measured by Doing Business -- Table 3.1Global Competitive Index for Top 10 Countries for 2011-12 versus 2005-06 and 2008-09 Rankings. Table 3.2Twelve Pillar Rankings for GCI Top 10 Countries, 2011-12 -- Table 3.3GCI and Pillar Rankings for North America and Europe Region, Selected Countries, 2011-12 -- Table 3.4GCI and Pillar Rankings for Asia and the Pacific Region, Selected Economies, 2011-12 -- Table 3.5GCI and Pillar Rankings for Latin America and the Caribbean Region, Selected Countries, 2011-12 -- Table 3.6GCI and Pillar Rankings for Middle East and North Africa Region, Selected Countries, 2011-12 -- Table 3.7GCI and Pillar Scores-Sub-Saharan Africa, Selected Countries, 2011 -- Table 3.8Top 10 Economies for Ease of Doing Business in 2013, versus 2012 and 2011 Rankings -- Table 3.9Ten Economies Showing Most Improvement in Ease of Doing Business, 2011-13 -- Table 4.1Simple Innovation Indicators -- Table 4.2Extent of Economic Growth beyond Growth Predicted by Rates of Capital Accumulation, Selected Economies, 1960-89 -- Table 4.3 Conventional Breakdown of Sources of Growth, 1970-2000 -- Table 4.4Level of Productivity in Countries of Various Incomes, 1970-2000 -- Table 4.5Decomposition of the Predicted Growth in National Market Shares from an Estimated Empirical Model of Cross-Country Competitiveness, 1961-73 -- Table 4.6Percentage of Rural and Urban Population with Access to Clean Water, 1990 and 2004 -- Table 4.7 Pace of Dissemination of Major Technologies, 1748-2000 -- Table 4.8 OECD and World Bank Policy Principles for Innovation -- Table 4.9 Summary of Innovation Policy Elements -- Table 5.1Four Types of Economic Agglomerations -- Table 5.2Social Science Contribution to Understanding of Clusters -- Table 5.3Regional Specialization-Clusters in the United States, 2008, Selected Geographic Areas -- Table 5.4Composition of Regional Economies, United States, 2004 -- Table 5.5Comparison of Cluster Initiatives by Level of Economic Development. Table 5.6Possible Policy and Strategic Recommendations from a Cluster Initiative.

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## Sommario/riassunto

This primer on a€œClusters of Competitivenessa€? provides a critical overview of competitiveness at many levels. Competitiveness is a broad subject with applications at the level of the firm, industry, region, nation, and global economy. Each one of these aspects has a rich literature drawn on by academics and policy makers over a long period. This book seeks to present a broad overview of the main ideas underlying competitiveness and its applications, highlighting and discussing in greater depth the topics that are of relevance currently. Specifically, the book draws out the experiences of and lessons for developing economies, and examines in detail the role for policy. Competition, competitiveness and growth are inherently linked and provide a compelling basis for policy analysis and recommendations.

We begin by looking at competition and competition policy and the effects of these on economic growth. We concentrate on product market regulation and find that more stringent regulation is negatively associated with economic growth. Competition policy has an important role to play in promoting growth. We highlight the reasons why competition policy is critical for developing economies in the current era of globalization and liberalization. Moving on, we next provide an overview of competitiveness, highlighting its application to the firm, nation and global economy. We differentiate between price and non-price measures of competitiveness, examining the advantages and disadvantages of each and providing a clear guide to the non-price measures that have proliferated in the business literature in recent decades. We examine how the concept of national competitiveness has evolved. We classify this according to price and non-price measures. Data from the International Institute for Management Development, the World Economic Forum and the World Bank are discussed, illustrating competitiveness rankings across countries over time. We then turn to innovation emphasizing its relationship to economic growth and competitiveness. The modern, knowledge-driven globalized economy is a product of innovation and competitiveness. Drawing on this, we next examine the necessary elements of an effective innovation policy in meeting the economic and social challenges of the modern age. We conclude this primer with a critical overview of clusters and the stimulus for economic development at the local, regional and global level that arises from the connections between firms forming clusters. We look at cluster initiatives, which are organized efforts to increase growth and competitiveness within a region and are also a tool for government in pursuing policy reform

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