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Nota di contenuto	I Mathematical Foundations -- 1.1 Tensors and continuum mechanics -- 1.2 Scalars and vectors -- 1.3 Indicial notation -- 1.4 Algebra of Cartesian tensors -- 1.5 Matrices and determinants -- 1.6 Linear equations and Eigenvalue problem -- 1.7 Theorems on tensor fields -- 1.8 Differential geometry -- 1.9 Dirac-delta and Heaviside step functions -- 1.10 Bessel functions -- 1.11 Laplace transforms -- 1.12 Inverse Laplace transforms -- 1.13 One-to-one mappings -- 1.14 Curvilinear coordinates -- 1.15 Derivatives with respect to curvilinear coordinates -- 1.16 Exercise problems -- II Stress and Strain Tensors -- 2.1 Introduction -- 2.2 Force distribution and stresses -- 2.3 Stress vector and equations of mation -- 2.4 Euler’s laws of motion -- 2.5 Stress tensor -- 2.6 Stationary shear stresses -- 2.7 Octahedral shear stress and stress deviator -- 2.8 Strain tensor -- 2.9 Compatibility conditions -- 2.10 Cylindrical and spherical coordinates -- 2.11 Problems -- 2.12 Exercise problems -- III Linear Elasticity -- 3.1 Strain energy function -- 3.2 Orthotopic and isotropic elastic solids -- 3.3 Young's moduli and Poisson's ratios for orthotropic elastic solids -- 3.4 Solution schemes -- 3.5 Field equations in tenns of displacements -- 3.6 Problems -- IV Elastostatic Plane Problems -- 4.1 Plane problems

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Sommario/riassunto

This book has been written with two purposes, as a textbook for engineering courses and as a reference book for engineers and scientists. The book is an outcome of several lecture courses. These include lectures given to graduate students at the Asian Institute of Technology for several years, a course on elasticity for University of Tokyo graduate students in the spring of 1979, and courses on

	elasticity, viscoelasticity and ftnite deformation at the National University of Singapore from May to November 1985. In preparing this book, I kept three objectives in mind: ftrst, to provide sound fundamental knowledge of solid mechanics in the simplest language possible; second, to introduce effective analytical and numerical solution methods; and third, to impress on readers that the subject is beautiful, and is accessible to those with only a standard mathematical background. In order to meet those objectives, the ftrst chapter of the book is a review of mathematical foundations intended for anyone whose background is an elementary knowledge of differential calculus, scalars and vectors, and Newton's laws of motion. Cartesian tensors are introduced carefully. From then on, only Cartesian tensors in the indicial notation, with subscript as indices, are used to derive and represent all theories.

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Private Sector Responses to Crime and Violence; Introduction; Study Scope and Methods; Box 1.1 Literature Review on the Role of Firms in Environments Affected by Violence and Conflict; Boxes; Note; References; Chapter 2 Crime, Violence, and the Economy; Factors Contributing to Crime and Violence; Figure 2.1 Countries with the Highest Homicide Rates; Figure 2.2 Homicide Rates in Case Study Countries; Indicators of Crime and Violence; Figures
Figure 2.3 Homicide Rate Trends in Central America, Selected Countries, 1999-2009 Comparing the Impacts of Crime and Violence; Figure 2.4 Security Constraints and Costs of Doing Business in Case Study Countries Relative to Global Averages; References; Chapter 3 Coping Mechanisms of Private Firms: Analysis of Global Cases; Overview of Case Studies; How Crime and Violence Affect Firms; Table 3.1 Overview of Case Studies for How Firms Cope with Crime and Violence; Tables; Coping Mechanisms; Table 3.2 Matrix of Firm Strategies to Cope with Crime and Violence; Analysis and Lessons Learned
Policy Implications Notes; References; Chapter 4 World Bank Group Work: From Policies and Research to Operational Initiatives; Growing Focus on Crime and Violence; Private Sector Development (PSD) Initiatives; Table 4.1 Recent World Bank CASs and CPSs Addressing Crime and Violence in Latin America and the Caribbean; Non-PSD Initiatives; Box 4.1 Public-Private Dialogue in Investment Climate Interventions; Notes; References; Chapter 5 World Bank Group Support for Private Sector Development in Environments of Crime and Violence; Opportunities for Support; Moving the Agenda Forward
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Table 6.5 Mexico: Summary of Key Crime and Violence Indicators and Coping Mechanisms

Sommario/riassunto

Crime and violence inflict high costs on the private sector-costs that are rising globally, according to the World Bank's Enterprise Surveys, discussions with chambers and associations, and the Bank's Country Partnership Strategies, which reference the losses in terms of gross domestic product (GDP). In Latin America and the Caribbean, for example, losses due to crime and violence have been estimated at 9 percent of GDP in Honduras, 7.7 percent in El Salvador, and 3.6 percent in Costa Rica. In sectors such as clothing assembly, international purchasers can shift know-how and capital quickly to