Economic security of Russia: crisis lessons and growth perspectives

VOLUME I

Edited by
Member of the RAS and RAMS V.A. Chereshnev,
Member of the RAS A.I. Tatarkin,
Doc. of Economics, Doc. of geological and mineralogical sc. M.V. Fedorov

Yekaterinburg
2012
TABLE OF CONTENTS

OPENING STATEMENT .............................................................. 6
INTRODUCTION ........................................................................ 10

SECTION 1. SUMMARIZING THE RESULTS

Chapter 1. WHERE DID THE CRISIS COME FROM? WHAT IS IT: A RESTART OF THE HISTORY AND A PERMANENTLY INHERENT REFINEMENT OR A PARADIGM SHIFT OF MODERNITY? ................................................................. 12
  1.1. The global economic crisis and post-crisis development models: macroeconomic analysis ...... 12
  1.2. Innovational development as a basis for economic growth of a region ........................................ 20
  1.3. Problematic innovations: main risks ................................................................................................. 31

Chapter 2. REAL PICTURE OF ECONOMIC SECURITY STATE OF RUSSIA ........................................... 59
  2.1. Diagnostic picture of the economic security of Russian regions (from 1998 default to the current financial and economic crisis of 2008—2009) ............................................................ 59
  2.2. Obvious flaws in the management of the Russian economy that can still be corrected ............ 68

Chapter 3. NATIONAL WEALTH IN THE CONTEXT OF ENHANCING THE ECONOMIC SECURITY LEVEL OF RUSSIA ................................................................. 77
  3.1. The results of estimation of natural resource capital levels by federal districts and subjects of Russia .............................................................................................................................. 77
  3.2. Evaluation of the physical capital of the Russian Federation subjects for the period of 2000—2011 .................................................................................................................. 85
  3.3. Diagnostic picture of the human capital state of the Russian Federation subjects for the period of 2000—2011 ..................................................................................................... 104

Chapter 4. RECLAMATION OF RAW MINERAL RESOURCES AS A FACTOR OF ECONOMIC SECURITY OF RUSSIA ................................................................. 141
  4.1. The role of raw mineral resources in the development of the country .............................................. 141
  4.2. Factors of sectoral economic security in the raw mineral complex .................................................... 147
  4.3. The influence of the raw mineral complex on the economic security of Russian regions ........ 159
  4.4. Directions for the improvement of the state policy in ensuring economic security in the exploration of raw mineral resources ................................................................. 179

1304
Chapter 5. NATURAL FACTOR AND ECONOMIC SECURITY ........................................ 183
  5.1. Cycles of solar activity as the basis of economic cycles ..................................... 183
  5.2. Great cycles of solar activity as the basis of the great cycles of inflation, unemployment,
       stagflation and interest ......................................................................................... 192

Chapter 6. ENERGY SECURITY OF RUSSIAN REGIONS ........................................ 200
  6.1. Evaluation of the energy factor in the economic security system of the Russian regions
       in 2000–2011 ......................................................................................................... 200
  6.2. Energy-investment attractiveness and its impact on the economic security
       of Russian regions ................................................................................................. 215
  6.3. The strategy of regional electrification - the key to Russia’s energy security ............ 227

Chapter 7. PROVISION OF SOCIO-DEMOGRAPHIC SECURITY
           OF THE RUSSIAN REGIONS ........................................................................... 240
  7.1. Theoretical and methodological approach to the study of socio-demographic security
       problems at the territories of different levels ......................................................... 240
  7.3. Diagnostic picture of social and demographic security of municipal entities
       in Sverdlovsk region, where the enterprises of large integrated structures are located 260
  7.4. Provision of social and demographic security with the usage of monitoring
       of insured persons in compulsory insurance ......................................................... 274

Chapter 8. COMPLIANCE OF SPECIALISTS’ TRAINING BY THE SYSTEM
           OF VOCATIONAL EDUCATION TO THE LABOR MARKET NEEDS AS A CONDITION
           OF SOCIAL SECURITY ....................................................................................... 290
  8.1. The interaction of the labor market and the educational market: defining the problem 290
  8.2. Dynamics of vocational education system structure ............................................. 291
  8.3. Age and educational structure of employees ......................................................... 295
  8.4. The need for skilled personnel and staff requirements
       (according to a survey of employers) ................................................................. 300
  8.5. Interaction of employers and vocational education system
       (data from in-depth interviews) ........................................................................... 316

Chapter 9. STRATEGY AND TACTICS IN PUBLIC POLICY
           OF NANOINDUSTRY DEVELOPMENT ............................................................. 329
  9.1. The objective regularities of nanoindustry formation in the world and in Russia ........ 329
  9.2. National strategy and tactics of nanoindustry development ................................. 335
  9.3. Transactional problems and institutional regulation of nanoindustrialization .......... 344
  9.4. Mechanisms of implementation and promotion of nanotechnological products ......... 351

Chapter 10. ECONOMIC SECURITY OF A REGION IN THE PROCESS
            OF SPATIAL TRANSFORMATIONS ................................................................. 360
  10.1. Unified economic space and economic security of a region .................................. 360
20.3. Ecologization of production as a condition for the preservation of the natural and the assimilatory capacity of a territory ................................................................. 723

Chapter 21. RESOURCE SAFETY AS A FACTOR OF ECONOMIC SECURITY OF RUSSIA .......................................................................................................................... 733
   21.1. The concept of resource security in the frames of economic security ........................................... 733
   21.2. Logistics audit as an instrument of resource security management of a subject ......................... 739
   21.3. Mechanism (technique) of assessing resource security based on the logistics audit ............... 745

Chapter 22. DEVELOPMENT OF ECONOMY OF KNOWLEDGE IN THE CONTEXT OF ECONOMIC SECURITY .............................................................. 753
   22.1. Tendencies of change of research-and-production capacity of the Russian industrial enterprises and threat of economic security ...................................................... 753
   22.2. Threshold values of the human capital of the industrial enterprises ........................................ 761
   22.3. Formation and development of the intellectual capital of industrial production ................. 768
   22.4. Control system of development of innovative business in the region ..................................... 776
   22.5. Institutional traps of development of business as threat of economic security of Russia .......... 785

SECTION 2. FORECASTS FOR THE FUTURE...

Chapter 1. FORMATION OF INTEGRATIVE STRATEGIC DEVELOPMENT OF THE TERRITORIES AS THE BASIS OF ECONOMY MODERNIZATION .................. 794
   1.1. Integrative strategic development of territories as a new organizational and methodological institute for predicting the future ....................................................... 794
   1.2. The main values of integrative strategic development of territories ............................................. 805
   1.3. Elaboration technology of integrative strategic development of territories .............................. 816

Chapter 2. MANAGEMENT OF MONETARY SPHERE AND PROSPECTS FOR ECONOMIC GROWTH: LESSONS OF THE CRISIS, MODELS AND FORECASTS .............................................................................. 831
   2.1. Myths of modern inflation: what does the theory say ................................................................. 831
   2.2. Relationship between money supply and inflation: U-shaped curve ....................................... 842
   2.3. Inflation management as an instrument to stimulate economic growth .................................. 851
   2.4. Control over governmental spending: Haavelmo alternative and Army-Rana curves ........... 859

Chapter 3. INNOVATIONAL DRIVERS OF REGIONAL ECONOMY DEVELOPMENT ........ 878
   3.1. Innovational policy in the circuit of economic security of a region ........................................... 878
   3.2. Public-private partnership as an instrument for innovational development of a region .......... 893
   3.3. Digital business environment of innovational development of business structures in a region ............................................................................................................. 907
Chapter 4. PREDICTION OF SOCIO-ECONOMIC DEVELOPMENT OF RUSSIAN REGIONS USING THE METHODS OF NON-LINEAR DYNAMICS

4.1. Synergistic approach to forecasting socio-economic development of a region and the assessment of economic risks

4.2. Forecast of demographic development of Russia for the period until 2030

Chapter 5. FORMATION OF A NEW SOCIALLY-ORIENTED CONTOUR OF TECHNOLOGICAL DEVELOPMENT CIRCUIT OF RUSSIAN REGIONS

5.1. Trajectory of reaching 6-7 technological modes and landscape of engineering and economic development of Russian regions for the period until 2030

5.2. Modernization of industry towards the direction of improving the quality of human life

5.3. Modernization capabilities of innovational complexes


6.1. Cyclical crisis of the global system «nature-society-human»: symptoms, reasons and key consequences

6.2. The birth of a new energy of the future: from the «era of hydrocarbons» to the «electric world»

6.3. The energy potential of the social and humanitarian development of Russia

6.4. Possible scenarios for the future development: risks and opportunities for Russia

Chapter 7. MANAGEMENT OPTIMIZATION OF SOCIO-DEMOGRAPHIC DEVELOPMENT OF A REGION

7.1. Management optimization of socio-demographic transformations and anomalies of a region (on the example of Ural Federal District)

7.2. Modeling of migrant workers flows in a region in terms of liberalization of migration law (on the example of Sverdlovsk region)

7.3. Duration of life as a key indicator of social security level and sustainable socio-economic development in a region

Chapter 8. MIGRATION TRENDS AND MIGRATION POLICY OF RUSSIA: PROBLEMATIC AREAS, STRATEGIC AND TACTICAL MEASURES ON REGULATION OPTIMIZATION

8.1. Key issues of the modern migration situation and migration policy in Russia

8.2. Labor migration to Russia: trends and consequences

8.3. Labor emigration from Russia: the scale and new forms

8.4. Strategic points and tactical measures to optimize the management of migration flows in Russia

Chapter 9. MINIMIZATION OF THE SHADOW ECONOMY AS A SOURCE OF GROWTH IN THE POST-CRISIS PERIOD
9.1. Methodological tools for predicting the shadow activity of taxpayers under the influence of changes in the socio-economic environment and tax policy .......................... 1058

9.2. Conceptual framework to minimize the negative impact of the shadow economy on the economic system of a region ............................................................................. 1068

9.3. Scenary analysis of the concept implementation of minimizing the negative impact of the shadow economy on the economic system of a region ........................................ 1081

FINAL STATEMENT ..................................................................................................................... 1088

REFERENCES ............................................................................................................................. 1089

APPENDICES ............................................................................................................................. 1123