

80
THE OECD JOBS STRATEGY

TECHNOLOGY, PRODUCTIVITY AND JOB CREATION

BEST POLICY PRACTICES



TABLE OF CONTENTS

INTRODUCTION AND MAIN CONCLUSIONS	13
Introduction	13
The policy environment	15
Best policy practice and main recommendations	20
Overview of the main country-specific findings	29

Part I – Policy Framework

CHAPTER 1. TECHNOLOGY, GROWTH AND EMPLOYMENT IN THE KNOWLEDGE-BASED ECONOMY	35
1.1. Context and background: the macroeconomic performance of OECD economies	35
1.2. Technology, structural change and growth: the move to knowledge-based economies	36
1.3. Technology and productivity: microeconomic evidence and macroeconomic puzzles	44
1.4. The impact on employment, skills and wages: potential gains and current problems	48
1.5. Concluding remarks	55
CHAPTER 2. THE MECHANISMS OF INNOVATION AND TECHNOLOGY DIFFUSION	57
2.1. Introduction	57
2.2. Country specificities in the patterns of innovation	63
2.3. Conclusion	76
CHAPTER 3. CHANGING PATTERNS OF PUBLIC SUPPORT AND PRIVATE R&D EFFORTS	77
3.1. Context and background	77
3.2. Government funding of science and technology	77
3.3. Causes and consequences of changing innovative efforts	93
3.4. Driving forces behind changing R&D	95
3.5. Economic consequences of changing R&D efforts	98
CHAPTER 4. THE POLICY CHALLENGE	101
4.1. Introduction	101
4.2. Policy rationale	101
4.3. In search of best practices in technology policy	104
4.4. Structural and macroeconomic framework conditions for technology policy	109
4.5. Making reform politically feasible	116

Part II – Best Policy Practices

CHAPTER 5. POLICY EVALUATION	123
5.1. Introduction	123
5.2. The scope and evolution of policy evaluation in innovation and technology	124
5.3. Different country evaluation practices	125
5.4. Best-practice principles for policy evaluation	132
5.5. Trends and challenges for the future development of evaluation practice	143
CHAPTER 6. MANAGING THE SCIENCE BASE	145
6.1. Introduction	145
6.2. The relationship between science and innovation	145
6.3. Resources for science	149
6.4. The science-industry interface	152
6.5. Structural issues	155
6.6. Main lessons	159
CHAPTER 7. FINANCIAL SUPPORT TO INDUSTRIAL R&D EFFORTS	167
7.1. Introduction	167
7.2. Tax incentives to industrial R&D	167
7.3. The effectiveness of R&D tax incentives	174
7.4. Policy implications and best practice in the design of tax incentives	180
7.5. Direct financial support to industrial R&D	181
CHAPTER 8. TECHNOLOGY DIFFUSION POLICIES AND INITIATIVES	197
8.1. Introduction	197
8.2. From technology transfer to diffusing knowledge	197
8.3. Evolving roles for technology diffusion initiatives	198
8.4. Levels of policy intervention	199
8.5. Targeted technology diffusion initiatives	200
8.6. Country differences in policy challenges and diffusion strategies	202
8.7. Assessing targeted policy initiatives: evidence from OECD countries	205
8.8. General best-practice principles in technology diffusion programmes	212
8.9. Main lessons and implications for diffusion policy	213
8.10. Conclusions	215
CHAPTER 9. PROMOTING NEW TECHNOLOGY-BASED FIRMS	219
9.1. Introduction	219
9.2. The importance of NTBFs in a knowledge-based economy	219
9.3. Obstacles to the creation and growth of NTBFs	227
9.4. Promoting NTBFs: best policy practice	233

CHAPTER 10. FACILITATING GROWTH IN NEW DEMAND	243
10.1. Introduction	243
10.2. Internet-based multimedia services	243
10.3. Sector-specific policy practices	247
10.4. Supply and demand for environmental goods and services	256
10.5. Policy assessment	259
10.6. Best practices to stimulate supply and demand for environmental goods and services	267
10.7. Conclusions	267
 CHAPTER 11. HIGH-PERFORMANCE WORKPLACES AND INTANGIBLE INVESTMENT	 271
11.1. Organisation, skills and technology	271
11.2. Approaches to best policy practice	271
11.3. Encouraging innovation	284
11.4. Accelerating diffusion of organisational innovations	285
11.5. Raising skills to enhance adoption and impacts of high-performance workplaces	286
11.6. Encouraging greater labour-related flexibility	295
11.7. Co-ordinating and delivering policy	299
 <i>Glossary of abbreviations, acronyms and terms</i>	 <i>303</i>
 <i>Bibliography</i>	 <i>311</i>

