Technological Change and Economic Performance

Albert N. Link and Donald S. Siegel

Routledge

Contents

| | List of figures | viii |
|----|--|------|
| | List of tables | ix |
| | Preface , | xi |
| | Acknowledgments ! | xii |
| 1 | Introduction | 1 |
| 2 | Some preliminary concepts | 5 |
| 3 | Early theoretical and empirical studies of economic growth | 13 |
| 4 | The production function concept of technological change | 20 |
| 5 | Alternative frameworks for measuring technical progress | |
| | and productivity | 34 |
| 6 | Trends in productivity growth | 42 |
| 7 | The productivity slowdown | 49 |
| 8 | Sources of technical knowledge | 60 |
| 9 | The technology-productivity growth relationship | 70 |
| 10 | Effects of information technology on workers and | |
| | economic performance | 79 |
| 11 | Research partnerships and economic performance | 98 |
| 12 | Concluding statement | 120 |
| | Appendix A: Definition of symbols | 121 |
| | Appendix B: Stochastic frontier estimation | 124 |
| | Bibliography | 126 |
| | Index | 149 |