# CONTENTS

**GENERAL INTRODUCTION**

**EARLY CESSATION OF ACTIVITY IN THE LABOUR MARKET: IMPACT OF SUPPLY AND DEMAND FACTORS**

1. INTRODUCTION

2. DISTURBING TRENDS FOR THE SUSTAINABILITY OF PENSION SYSTEMS?

3. BARRIERS TO WORKING AT AN OLDER AGE

   3.1. SUPPLY-SIDE BARRIERS

      3.1.1. Microeconomic models of utility maximization

      3.1.2. Simulation models of social security incentives on the decision to cease activity

      3.1.3. Some empirical evidence on the decision to retire early

      A) Effect of wealth

      B) Effect of income/wage

      C) Effect of replacement rates

      D) Effect of human capital depreciation

      E) Effect of health

      F) Effect of gender and marital status

      G) Effect of the economic situation

   3.2. DEMAND-SIDE BARRIERS

      3.2.1. Labour demand analysis

      3.2.2. Seniority/age, wages and productivity

      3.2.3. Cost of dismissing

      3.2.4. Enterprise restructuring or economic shock

      3.2.5. Generalized shortage of jobs

      3.2.6. Difficult working conditions: trade unions’ policy

   3.3. SOCIAL PROTECTION SYSTEM-SIDE BARRIERS

      3.3.1. Pathways into early retirement

      3.3.1.1. Early retirement pensions (pre-pension plans)

      3.3.1.2. Other pathways into early retirement: disability/sickness and unemployment insurance

4. DATA

5. ECONOMETRIC ANALYSIS

   5.1. MODEL

   5.2. RESULTS

6. CONCLUSION

7. APPENDIX

**OVEREDUCATION ON THE BELGIAN LABOUR MARKET**

1. INTRODUCTION
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>BACKGROUND</td>
<td>76</td>
</tr>
<tr>
<td>2.1</td>
<td>THEORETICAL PERSPECTIVE</td>
<td>76</td>
</tr>
<tr>
<td>2.2</td>
<td>EMPIRICAL PERSPECTIVE</td>
<td>79</td>
</tr>
<tr>
<td>3.</td>
<td>METHODOLOGY</td>
<td>84</td>
</tr>
<tr>
<td>4.</td>
<td>DATABASE</td>
<td>86</td>
</tr>
<tr>
<td>5.</td>
<td>ECONOMETRIC ANALYSIS</td>
<td>91</td>
</tr>
<tr>
<td>5.1</td>
<td>MODEL</td>
<td>91</td>
</tr>
<tr>
<td>5.2</td>
<td>RESULTS</td>
<td>92</td>
</tr>
<tr>
<td>6.</td>
<td>CONCLUSION</td>
<td>96</td>
</tr>
<tr>
<td>7.</td>
<td>APPENDIX</td>
<td>98</td>
</tr>
<tr>
<td>REGIONAL INEQUALITIES IN TERMS OF DEPENDENCY IN BELGIUM: LONG-TERM PROSPECTS</td>
<td>129</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>INTRODUCTION</td>
<td>129</td>
</tr>
<tr>
<td>2.</td>
<td>OVERVIEW OF THE LITERATURE</td>
<td>131</td>
</tr>
<tr>
<td>3.</td>
<td>ASSESSMENT OF DEPENDENCY AT HOME IN 2001</td>
<td>137</td>
</tr>
<tr>
<td>3.1</td>
<td>DIFFICULTIES IN MEASURING DEPENDENCY</td>
<td>137</td>
</tr>
<tr>
<td>3.2</td>
<td>WHY RELY ON ADMINISTRATIVE DATA?</td>
<td>140</td>
</tr>
<tr>
<td>3.3</td>
<td>DESCRIPTION OF DATA</td>
<td>141</td>
</tr>
<tr>
<td>3.4</td>
<td>EVALUATION OF DEPENDENCY AT HOME IN 2001</td>
<td>142</td>
</tr>
<tr>
<td>4.</td>
<td>PROJECTION BY 2050 OF PEOPLE IN DEPENDENCY</td>
<td>148</td>
</tr>
<tr>
<td>4.1</td>
<td>METHODOLOGY</td>
<td>148</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Survival table and calculation of life expectancy with and without dependency</td>
<td>149</td>
</tr>
<tr>
<td>4.1.2</td>
<td>Assumptions about the evolution of life expectancy in dependency</td>
<td>149</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Projection methodology for dependency prevalence rates</td>
<td>151</td>
</tr>
<tr>
<td>4.2</td>
<td>RESULTS OF THE PROJECTION OF DEPENDENCY AT HOME</td>
<td>152</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Projection of the national prevalence rates</td>
<td>153</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Projection of prevalence rates by region</td>
<td>154</td>
</tr>
<tr>
<td>4.3</td>
<td>PROJECTION OF THE NUMBER OF DEPENDANTS AT HOME</td>
<td>160</td>
</tr>
<tr>
<td>5.</td>
<td>ASSESSING THE COST OF LONG-TERM CARE INSURANCE IN WALLONIA</td>
<td>161</td>
</tr>
<tr>
<td>6.</td>
<td>CONCLUDING REMARKS</td>
<td>166</td>
</tr>
<tr>
<td>7.</td>
<td>APPENDIX</td>
<td>170</td>
</tr>
<tr>
<td>GENERAL CONCLUSION</td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>REFERENCES</td>
<td>210</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF FIGURES AND TABLES

FIGURES

EARLY CESSATION OF ACTIVITY IN THE LABOUR MARKET: IMPACT OF SUPPLY AND DEMAND FACTORS

FIGURE 1: PARTICIPATION RATES FOR THE POPULATION AGED 50-64 --------------------------------------- 14
FIGURE 2: EMPLOYMENT RATES FOR THE POPULATION AGED 50-64 & 25-49 --------------------------------------- 16
FIGURE 3: POPULATION AGEING AND LABOUR MARKET EFFECTS ------------------------------------------------ 17

REGIONAL INEQUALITIES IN TERMS OF DEPENDENCY IN BELGIUM: LONG-TERM PROSPECTS

FIGURE 1: PREVALENCE RATES OF THE LEAST RESTRICTIVE DEPENDENCY INDICATOR BY SEX AND AGE (IN 2001) ------------------------------------------ 144
FIGURE 2: PREVALENCE RATES OF THE LEAST RESTRICTIVE DEPENDENCY INDICATOR BY REGION AND AGE (IN 2001)------------------------------------- 145
FIGURE 3: PREVALENCE RATES BY AGE ACCORDING TO DIFFERENT SCENARIOS, FOR BELGIUM IN 2050----------- 152
FIGURE 4: PROJECTIONS OF DEPENDENCY PREVALENCE RATES AT NATIONAL LEVEL, FOR PEOPLE AGED OVER 60 AND OVER 75 AND ACCORDING TO DIFFERENT SCENARIOS ----------------------------------------------- 153
FIGURE 5: PROJECTIONS OF DEPENDENCY PREVALENCE RATES BY REGION, FOR PEOPLE AGED OVER 60 AND OVER 75 USING THE CENTRAL SCENARIO ----------------------------------------------- 155
FIGURE 6: PROJECTIONS OF DEPENDENCY PREVALENCE RATES BY SCENARIO AND REGION USING THE LEAST RESTRICTIVE INDICATOR AND FOR PEOPLE AGED OVER 75 ----------------------------------------------- 158
FIGURE 7: PROJECTIONS OF DEPENDENCY PREVALENCE RATES BY SCENARIO AND REGION USING THE LEAST RESTRICTIVE INDICATOR AND FOR PEOPLE AGED OVER 60 ----------------------------------------------- 159
FIGURE A.1: SUPERVISION AND CONTROL OF THE FLEMISH INSURANCE ----------------------------------------------- 179
TABLES

EARLY CESSATION OF ACTIVITY IN THE LABOUR MARKET: IMPACT OF SUPPLY AND DEMAND FACTORS

TABLE 1: RATIO OF THE POPULATION AGED 65 OR OVER TO THE TOTAL POPULATION AND THE POPULATION AGED 15-64

TABLE 2: TOTAL FERTILITY RATES

TABLE 3: MALE AND FEMALE LIFE EXPECTANCY AT AGE 65

TABLE 4: MALE AND FEMALE EFFECTIVE AGE OF RETIREMENT

TABLE 5: EFFECTS OF AN ADDITIONAL YEAR OF WORK ON SSW

TABLE 6: EMPLOYER BARRIERS REGARDING HIRING AND RETENTION IN EMPLOYMENT OF SENIORS

TABLE 7: TRANSITIONAL PROGRAMMES IN THE LABOUR MARKET

TABLE 8: EXEMPTIONS FROM LOOKING FOR WORK FOR OLDER UNEMPLOYED WORKERS

TABLE 9: MEANS OF SELECTED VARIABLES (STANDARD DEVIATIONS)


TABLE A.1: INSTITUTIONAL STRUCTURE OF THE PENSION SYSTEM

TABLE A.1: CONTINUED


TABLE A.3: PRE-PENSION SCHEMES

TABLE A.4: TEST FOR NATIONAL DIFFERENCES (COMPARED TO BELGIUM) USING THE T-TEST STATISTIC

OVEREDUCATION ON THE BELGIAN LABOUR MARKET

TABLE 1: STUDIES ON THE INCIDENCE OF OVEREDUCATION

TABLE 2: MEANS OF SELECTED VARIABLES (STANDARD DEVIATIONS)

TABLE 3: AVERAGE ACCORDING TO 3 GROUPS OF WORKERS

TABLE 4: DISTRIBUTION (IN %) ACCORDING TO 3 GROUPS OF WORKERS

TABLE 5: CHARACTERISTICS INFLUENCING OVEREDUCATION (FOR THE WHOLE POPULATION)

TABLE A.1: SKILL LEVELS REQUIRED FOR EACH ISCO-88 MAJOR GROUP

TABLE A.2: RESULTS FOR THE WHOLE POPULATION WHEN THE TABLE OF EQUIVALENCE IS USED TO DEFINE OVEREDUCATION

TABLE A.3: RESULTS FOR THE WHOLE POPULATION WHEN THE MODE IS USED TO DEFINE OVEREDUCATION

TABLE A.4: RESULTS FOR WOMEN WHEN THE TABLE OF EQUIVALENCE IS USED TO DEFINE OVEREDUCATION

TABLE A.5: RESULTS FOR WOMEN WHEN THE MODE IS USED TO DEFINE OVEREDUCATION

TABLE A.6: RESULTS FOR MEN WHEN THE TABLE OF EQUIVALENCE IS USED TO DEFINE OVEREDUCATION

TABLE A.7: RESULTS FOR MEN WHEN THE MODE IS USED TO DEFINE OVEREDUCATION
REGIONAL INEQUALITIES IN TERMS OF DEPENDENCY IN BELGIUM: LONG-TERM PROSPECTS

TABLE 1: GENERAL LIFE EXPECTANCY (GLE), HEALTHY LIFE EXPECTANCY (HLE), DISABILITY-FREE LIFE EXPECTANCY (DFLE) AND MENTAL LIFE EXPECTANCY (MLE) BY REGION IN BELGIUM, 1997 (1989-1990) ........................................ 136

TABLE 2: EVOLUTION OF THE NUMBER OF DEPENDANTS BETWEEN 2001 AND 2050 (GROWTH RATES IN %) ------- 160

TABLE 3: NUMBER OF DEPENDANTS (CENTRAL SCENARIO) .................................................................................. 164

TABLE 4: COST OF A LONG-TERM CARE INSURANCE SCHEME IN WALLONIA (IN EUROS) .......................... 166

TABLE A.1: NUMBER AND DISTRIBUTION OF THE VLAAMSE ZORGVERZEKERING’S AFFILIATES BY REGION AND CARE INSURANCE FUND .................................................................................. 180

TABLE A.2: APPLICATIONS SUBMITTED BY THE VLAAMSE ZORGVERZEKERING’S AFFILIATES AND APPROVAL BY REGION AND CARE INSURANCE FUND (31/12/2002) ........................................ 181

TABLE A.3: GRANT BY CARE INSURANCE FUND FOR SUPPORT/ASSISTANCE IN 2002 (IN EUROS) ............... 184

TABLE A.4: GRANT BY CARE INSURANCE FUND FOR START-UP COSTS IN 2001 (IN EUROS) ....................... 185

TABLE A.5: FINAL/DEFINITIVE GRANTS, ADVANCES ON GRANTS AND BALANCE BY CARE INSURANCE FUND FOR OPERATION IN 2002 (IN EUROS) ....................................................................... 186

TABLE A.6: 2001 BUDGET (IN THOUSANDS OF EUROS) .................................................................................... 188

TABLE A.7: 2002 BUDGET (IN THOUSANDS OF EUROS) .................................................................................... 190

TABLE A.8: 2003 BUDGET (IN THOUSANDS OF EUROS) .................................................................................... 191

TABLE A.9: ADJUSTED BUDGET FOR 2004 (IN THOUSANDS OF EUROS) ....................................................... 193

TABLE B.1: PEOPLE AGED 65 AND OVER WITH PHYSICAL LIMITATIONS (%) .................................................. 194

TABLE B.2: PEOPLE AGED 65 AND OVER CONSIDERING THEIR HEALTH STATUS AS VERY POOR TO MEDIUM (ACCORDING TO THE SUBJECTIVE SURVEY %) ........................................................................ 194

TABLE B.3: PEOPLE AGED 65 AND OVER HAVING AN OFFICIALLY RECOGNIZED DISABILITY OR HANDICAP (%) .................................................................................................................. 195

TABLE B.4: PEOPLE AGED 65 AND OVER HAVING AT LEAST ONE OF THE SOCIAL FRANCHISE AND CHRONIC DISEASE PACKAGES ON THE BASIS OF ADMINISTRATIVE DATA (%) ........................................................................ 195

TABLE C.1: SURVIVAL TABLE AND CALCULATION OF LIFE EXPECTANCY ACCORDING TO THE SULLIVAN METHOD (2001) ........................................................................................................... 196