

CONTENTS

PREFACE..... VII

PART ONE : ECONOMIC AND FINANCIAL MARKET CONSEQUENCES OF

GLOBAL AGEING 1

EXECUTIVE OVERVIEW 3

INTRODUCTION..... 9

SECTION 1 : GLOBAL DEMOGRAPHIC TRENDS AND FORECASTS 1950-2050 13

SECTION 2 : HOW IS AGEING LIKELY TO IMPACT ECONOMICALLY OVER
THE NEXT 50 YEARS : WHAT ARE THE MAIN TRANSMISSION
MECHANISMS ? 25

2.1 : EXPENDITURE PRESSURES ON THE PUBLIC FINANCES 26

2.2 : DEMOGRAPHIC CHANGE AND SAVINGS BEHAVIOUR 31

2.3 : LABOUR SUPPLY IMPLICATIONS 39

2.4 : CAPITAL ACCUMULATION AND TOTAL FACTOR PRODUCTIVITY..... 42

2.5 : INTEREST RATE, EXCHANGE RATE AND BALANCE OF PAYMENTS
DEVELOPMENTS..... 48

BOX 1: DEMOGRAPHIC CHANGE AND SAVINGS BEHAVIOUR :
THEORETICAL CONSIDERATIONS AND EMPIRICAL EVIDENCE..... 33

BOX 2: OVERVIEW OF THE BASIC THEORETICAL MECHANISMS IN THE
AGEING MODEL 51

SECTION 3 : GLOBAL CAPITAL MARKET DEVELOPMENTS, CURRENT
ACCOUNT IMBALANCES AND THE EVIDENCE FOR AGE-
RELATED INTERNATIONAL CAPITAL FLOWS..... 55

3.1 : EXTERNAL CAPITAL MOVEMENTS : AN HISTORICAL PERSPECTIVE 55

3.1.1 : GLOBAL TRENDS : 1870-2000 : HAS THE DEGREE AND
NATURE OF CAPITAL MARKET INTEGRATION CHANGED
OVER TIME ? 56

3.1.2 : COUNTRY SPECIFIC DEVELOPMENTS : OVERVIEW OF
CAPITAL MARKET INTEGRATION TRENDS FOR THE EU, US,
JAPAN, FAST AGEING AND SLOW AGEING COUNTRIES :
1970-1998 62

3.2 : DEMOGRAPHICS AND FOREIGN CAPITAL FLOWS : HAVE AGE-
RELATED CAPITAL MOVEMENTS BEEN A FEATURE OF RECENT
DECADES ? 73

3.3 : FUTURE TRENDS IN INTERNATIONAL CAPITAL MOVEMENTS 82

BOX 3: GROSS CAPITAL MOVEMENTS : INDICATOR OF DEGREE OF
CAPITAL MARKET OPENNESS 69

BOX 4 : TRACKING THE TREND EVOLUTION OF NET FOREIGN ASSETS : GLOBAL CAPITAL MARKET RESTRICTIONS AND THE GROWING CONCENTRATION OF CAPITAL FLOWS INTO THE US		84
SECTION 4 : GLOBAL AGEING SCENARIO 2000-2050		89
4.1 : MODEL ASSUMPTIONS		89
4.2 : KEY RESULTS		91
BOX 5: COMPARISON OF GROWTH RATES OF GDP, POPULATION AND LIVING STANDARDS FOR THE PERIOD 1950-2000 WITH THAT OF THE MODEL'S CENTRAL SCENARIO FOR 2000-2050		104
SECTION 5 : POLICY RESPONSE : HOW CAN THE EU AND THE WORLD AS A WHOLE EFFECTIVELY DEAL WITH THE CHALLENGES OF AGEING ?		109
5.1 : DEALING WITH AGEING – WHAT SHOULD BE THE FOCUS OF EU POLICY REFORMS ?		111
5.2 : DEALING WITH THE INTERNATIONAL FINANCIAL MARKET EFFECTS OF AGEING : MORE NOT LESS GLOBALISATION IS NEEDED		132
BOX 6 : EU BUDGETARY PRUDENCE : THE IMPORTANCE OF RESPECTING THE STABILITY AND GROWTH PACT.....		130
BOX 7 : INCOME CONVERGENCE : THEORETICAL AND EMPIRICAL EVIDENCE.....		138
DETAILED SUMMARY OF MAIN POINTS FROM PART 1		141
PART TWO : EU PENSION REFORM - AN OVERVIEW OF THE DEBATE AND AN EMPIRICAL ASSESSMENT OF THE MAIN POLICY REFORM OPTIONS		
EXECUTIVE OVERVIEW OF KEY POLICY CONCLUSIONS		161
INTRODUCTORY REMARKS		165
SECTION 1 : OVERVIEW OF THE PENSION REFORM DEBATE		169
1.1 : KEY ISSUES AND CONCEPTS		169
1.2 : MAIN DRIVING FORCES BEHIND THE GROWING CALLS FOR PENSION REFORM		173
1.2.1 : HISTORICAL ANALYSIS 1960-2000 : WHAT WAS THE ROLE OF DEMOGRAPHIC, LABOUR MARKET AND GENEROSITY FACTORS IN DETERMINING THE PAST GROWTH OF EU AND US PUBLIC PENSION EXPENDITURE ?		174
1.2.2 : FUTURE EVOLUTION 2000-2050 : WHAT ARE THE IMPLICATIONS OF AGEING FOR GROWTH AND PENSION EXPENDITURE TRENDS IN THE EU AND THE US ?		180
1.3 : WHAT ARE THE POSSIBLE POLICY SOLUTIONS ?		182
SECTION 2 : DESCRIPTION OF MODEL USED TO ASSESS THE PENSION REFORM OPTIONS		187
2.1 : MODEL'S CENTRAL SCENARIO OF THE GROWTH AND PENSION EXPENDITURE IMPLICATIONS IN THE EU OF AGEING POPULATIONS (2000-2050).....		187

2.2 : ASSESSING THE EXPLANATORY POWER OF THE AGEING MODEL : A COMPARISON WITH THE PENSION PROJECTIONS FROM THE EU'S ECONOMIC POLICY COMMITTEE	190
2.3 : CRITERIA FOR EVALUATING THE EFFECTIVENESS OF THE VARIOUS PAYG AND SYSTEMIC PENSION REFORM OPTIONS ANALYSED IN SECTIONS 3 TO 5	195
SECTION 3 : PAYG SYSTEM : ECONOMIC ASSESSMENT OF THE MAIN PARAMETRIC / LABOUR MARKET REFORM OPTIONS : WHAT IS NEEDED TO BRING THE SYSTEM BACK INTO EQUILIBRIUM ? ..	199
3.1 : CHANGES TO THE GENEROSITY OF THE PAYG SYSTEM (PARTIAL V FULL SHIFT FROM WAGE TO PRICE INDEXATION)	199
3.2 : AN INCREASE IN THE EFFECTIVE RETIREMENT AGE	201
3.3 : BROAD PACKAGE OF "PAYG" REFORMS : LABOUR MARKET + GENEROSITY + RETIREMENT AGE CHANGES	204
SECTION 4 : SYSTEMIC REFORM : 2 KEY FACTORS TO BE CONSIDERED : INTERNAL RATES OF RETURN + TRANSITION BURDEN	207
4.1 : FORECASTS FOR THE INTERNAL RATE OF RETURN OF THE PAYG + FUNDED PENSION SYSTEMS : 2000-2050 (CENTRAL SCENARIO + SENSITIVITY ANALYSIS)	207
4.2 : FORECASTS FOR THE TRANSITION BURDEN IN 2000 AND ITS EVOLUTION TO 2050 (CENTRAL SCENARIO + SENSITIVITY ANALYSIS).....	219
SECTION 5 : ECONOMIC ASSESSMENT OF A FULL / PARTIAL SHIFT TO FUNDING.....	225
5.1 : 100% SHIFT TO FUNDING : COMPULSORY SAVINGS OPTION.....	225
5.2 : 100% SHIFT TO FUNDING : VOLUNTARY SAVINGS OPTION.....	232
5.3 : PARTIAL SHIFT TO FUNDING + STABILISATION OF PAYG SYSTEM....	234
SECTION 6 : AN "OPTIMAL" EU PENSION REFORM STRATEGY	239
6.1 : BASIC POLICY OPTIONS WITH REGARD TO PUBLIC PENSION SYSTEMS.....	240
6.2 : OPTIMAL PACKAGE OF REFORMS + TWO STAGE TRANSITION PATH.....	243
BOX 1 : "OPTIMAL" POLICY STRATEGY : MAXIMISING THE GROWTH RATE EFFECTS FROM REFORM.....	246
DETAILED SUMMARY OF MAIN POINTS FROM PART 2.....	251
PART THREE : ANNEXES	261
ANNEX 1 : MEMBER STATES ANALYSIS	263
ANNEX 2 : DETAILED DESCRIPTION OF AGEING MODEL	277
ANNEX 3 : BASIC DATA ON SAVINGS, WEALTH HOLDINGS AND RETIREMENT INCOME FINANCING.....	291
ANNEX 4 : RESULTS OF COMPARABLE AGEING STUDIES.....	303
ANNEX 5 : PREFUNDING WITHIN THE PAYG SYSTEM : INTERGENERATIONAL EQUITY OBJECTIVE.....	307

LIST OF GRAPHS..... 309

LIST OF TABLES..... 315

REFERENCES 321

INDEX 337