Fiscal Policies Towards Unemployment and Growth
- Diploma Thesis -

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Reform of Financing the Austrian Pension System

Possible Ways of Financing:

- Pay-As-You-Go System

- Funded Pension System

- Multiply based System (Pillar System)

- Public General Pension Payment

Possible Measures of Reforming

- Raising Retirement Age
  - ➤ Reduction of lenght of retirment
  - ➤ Number of retirees per worker
  - ➤ More contributions to pension system
  - ➤ Raising of life expectancy is used in advantage for the system
- Investment Incentives
  - ➤ Encouraged labor force participation
  - ➤ Capital intensity↑ labor supply↑
- Less Generousity
  - ➤ Lowering replacement rate
  - ➤ Incentives for staying in workforce

The PAYG-System

- social security contributions
- of people employed
- are not saved and invested
- but given directly to retired people
- in order to finance their consumption
- ⇨ unpredictable developments!!!
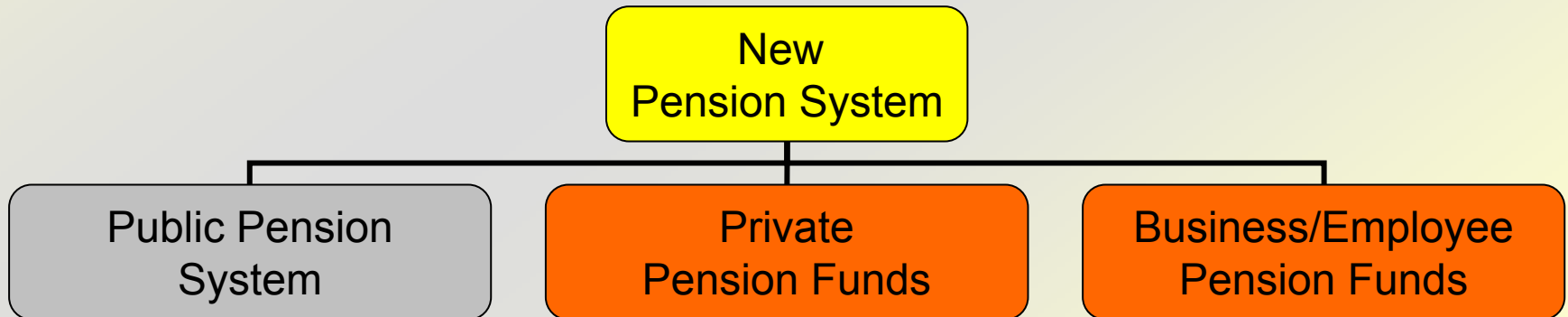 especially in demographic structures

Funded Pension System

- social security contributions
- paid by people employed
- are collectively saved
- pension payments are paid by revenues of the savings
- ⇨ developments on capital market!!!

Multiply based System

Perception of the Austrian Government:

- number of births ↑

- number of old people ↑

- gap of fairness ↑

- ⇨ establishing a **second** and a **third** pillar in addition to the **PAYG**

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                    ┌─────────────────┐
                    │      New        │
                    │ Pension System  │
                    └─────────────────┘
           ┌────────────────┼────────────────┐
┌────────────────┐ ┌────────────────┐ ┌────────────────────┐
│ Public Pension │ │    Private     │ │ Business/Employee  │
│    System      │ │ Pension Funds  │ │   Pension Funds    │
└────────────────┘ └────────────────┘ └────────────────────┘
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Recent Pension Reform

- Pension base calculated over extended period of 480 months (phased between 2003 and 2028)

- If less months of insurance time: pension base is calculated over accumulated months of insurance

Recent Pension Reform

im Jahr	Bemessungszeitraum in Monaten	in Jahren	im Jahr	Bemessungszeitraum in Monaten	in Jahren
2003	182 Mte.	15 J. u. 2 M.	2016	336 Mte.	28 Jahre
2004	192 Mte.	16 Jahre	2017	348 Mte.	29 Jahre
2005	204 Mte.	17 Jahre	2018	360 Mte.	30 Jahre
2006	216 Mte.	18 Jahre	2019	372 Mte.	31 Jahre
2007	228 Mte.	19 Jahre	2020	384 Mte.	32 Jahre
2008	240 Mte.	20 Jahre	2021	396 Mte.	33 Jahre
2009	252 Mte.	21 Jahre	2022	408 Mte.	34 Jahre
2010	264 Mte.	22 Jahre	2023	420 Mte.	35 Jahre
2011	276 Mte.	23 Jahre	2024	432 Mte.	36 Jahre
2012	288 Mte.	24 Jahre	2025	444 Mte.	37 Jahre
2013	300 Mte.	25 Jahre	2026	456 Mte.	38 Jahre
2014	312 Mte.	26 Jahre	2027	468 Mte.	39 Jahre
2015	324 Mte.	27 Jahre	2028	480 Mte.	40 Jahre

Recent Pension Reform

- Accumulation of 1,78% per 12 months of insurance

- No more early retirement (exception: long time of insurance)

Determinants of Pension Systems

4 Levels of Pension System

- System (Pension System itself)
- Society
- Individual
- Cultural Structure

Determinant: Pension System itself

- Payments of Employer
- Payments of Employee
- Pension Payment
- Government/Federation

Determinant: Society

- Health
- Taxes and Public Dues
- Social Policies of Austrian Provinces
- Nursing Allowence
- Transfers
- Productivity

- Private Insurance
- Labor Market
- Demography
- Market
- Business Cycle
- Migration
- GDP

Determinant: Individual

- Family Structures
- Livecycle Income
- Wealth
- Fertility
- Division of Labor between Gender
- Age at Retirement

- Perception of Fairness
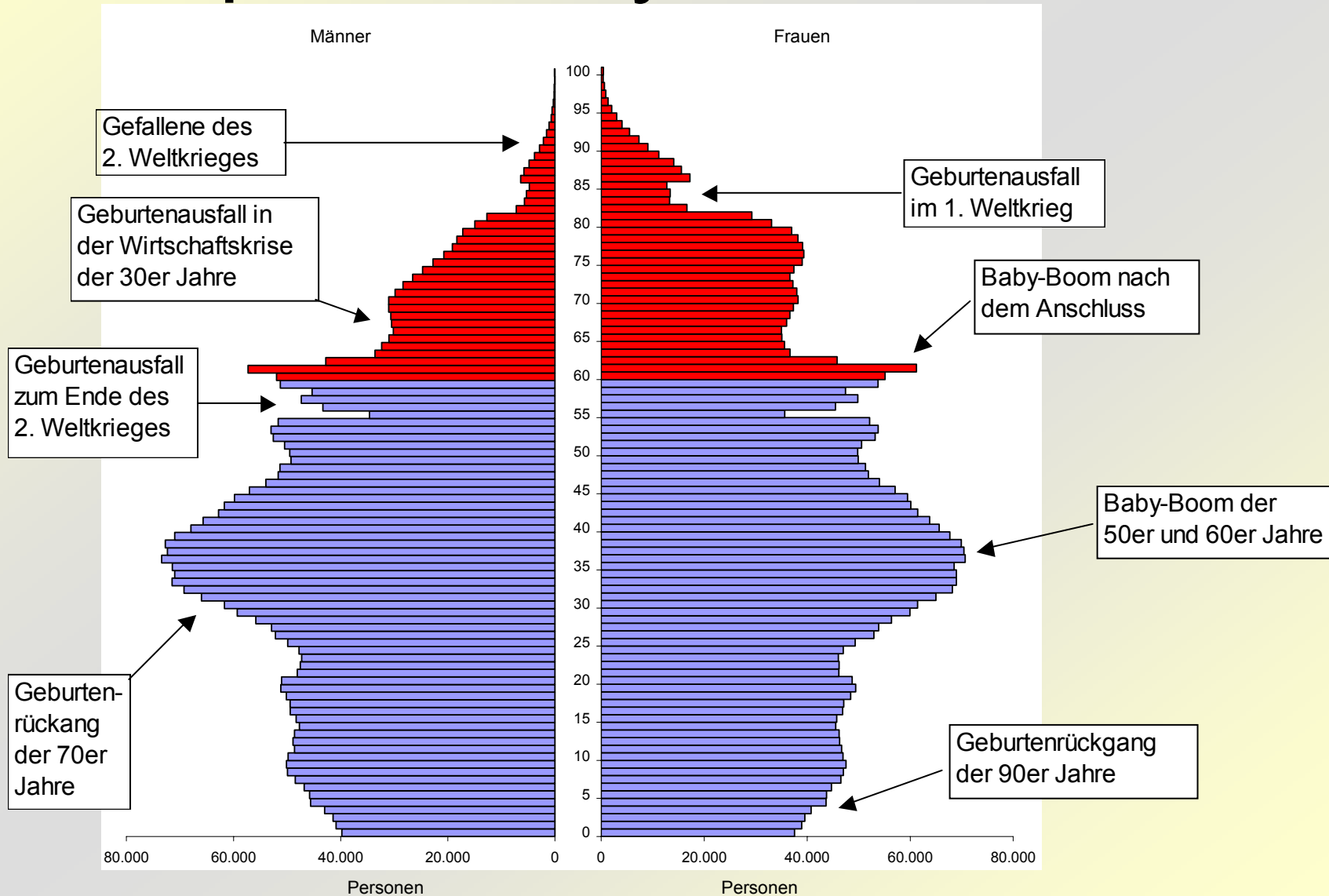- State of Health
- Trust in System
- Aspiration Level
- Caring
- Earnings

Determinant: Cultural Structure

- Politics
- Sociology
- Values
- Care
- Civil Society
- Economy
- Psychology
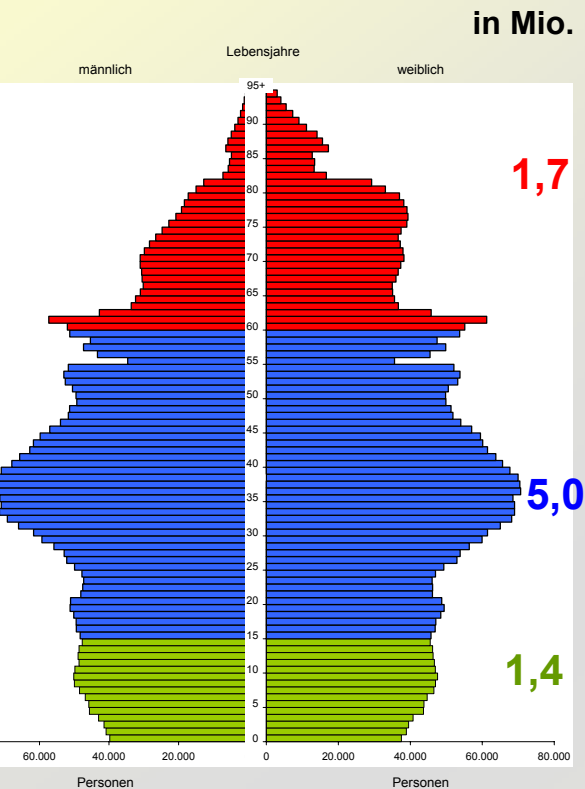- Gender

Empirical Evidence

- Wifo
- Statistik Austria
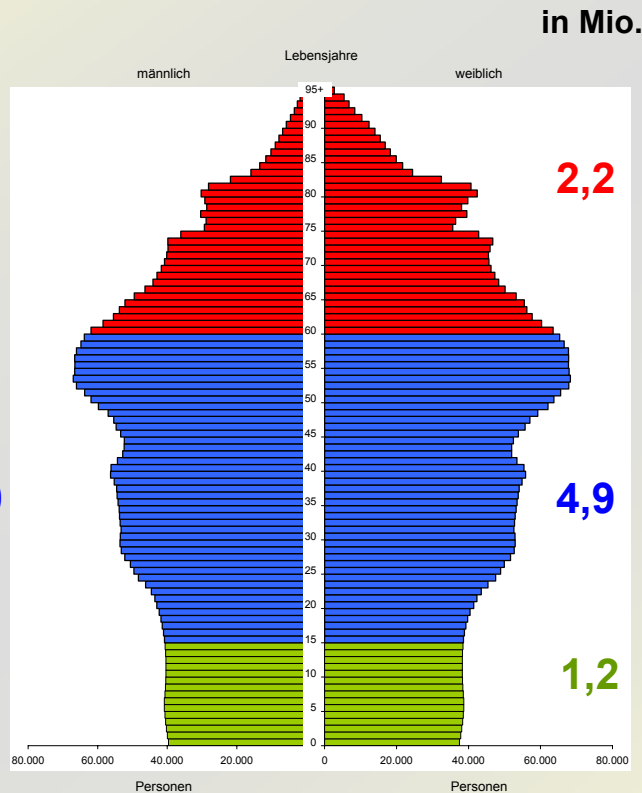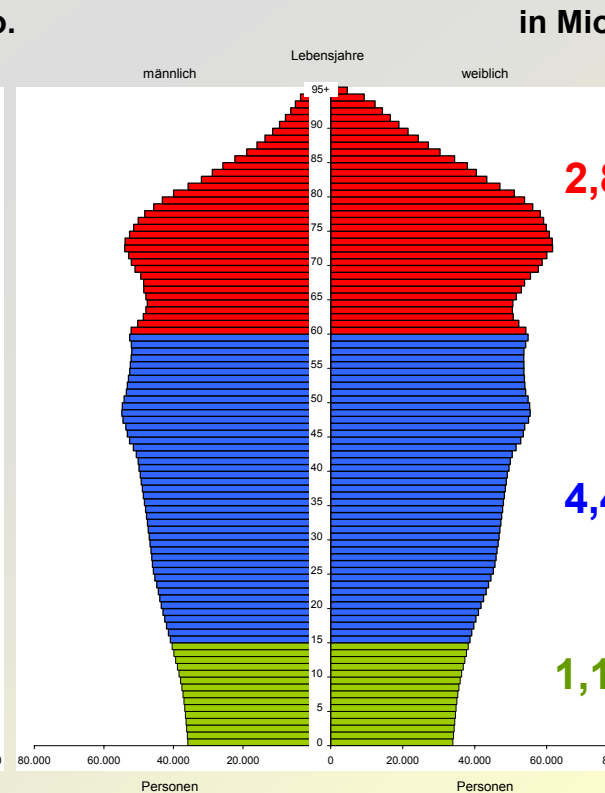
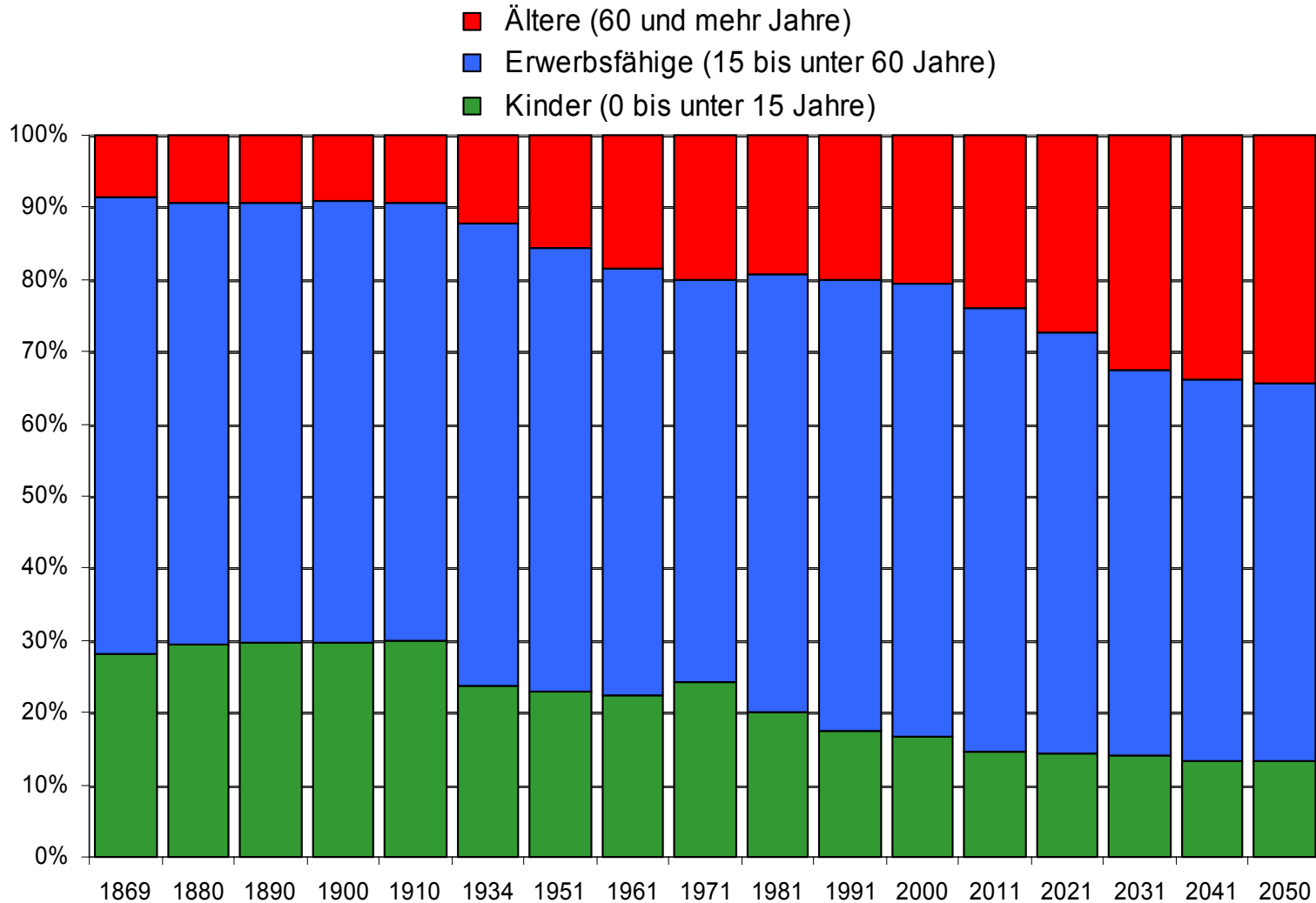# Population Pyramid 2001

Population Pyramid - Forecasts

2001   **2021**   **2041**

Children, Working, Old

Numbers of Births and Deaths
Past-Present-Future

Ratio: Children, Working, Old

Ältere (60 und mehr Jahre)
Erwerbsfähige (15 bis unter 60 Jahre)
Kinder (0 bis unter 15 Jahre)
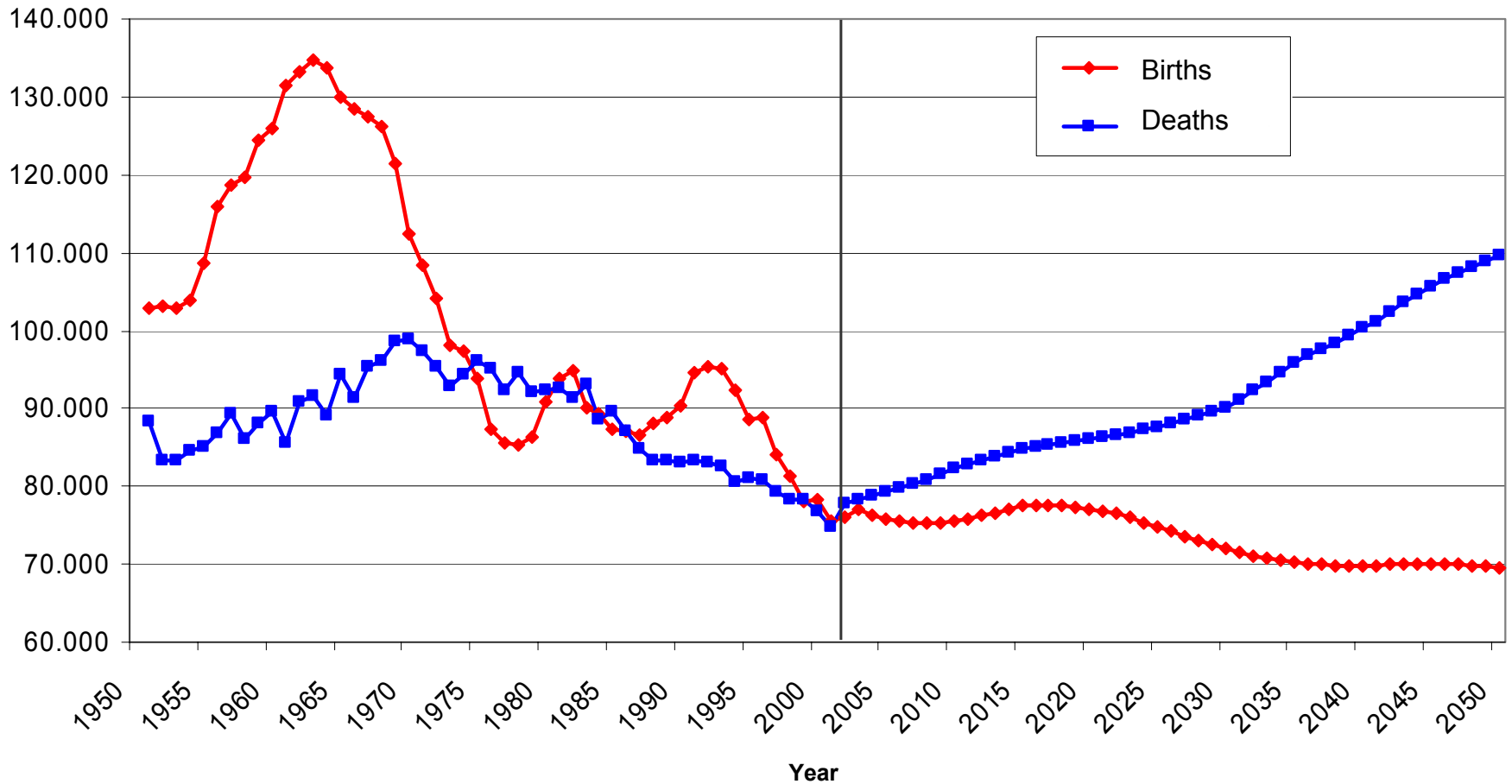
Retirement Rate & Employment Rate

Retirement Rate & Employment Rate
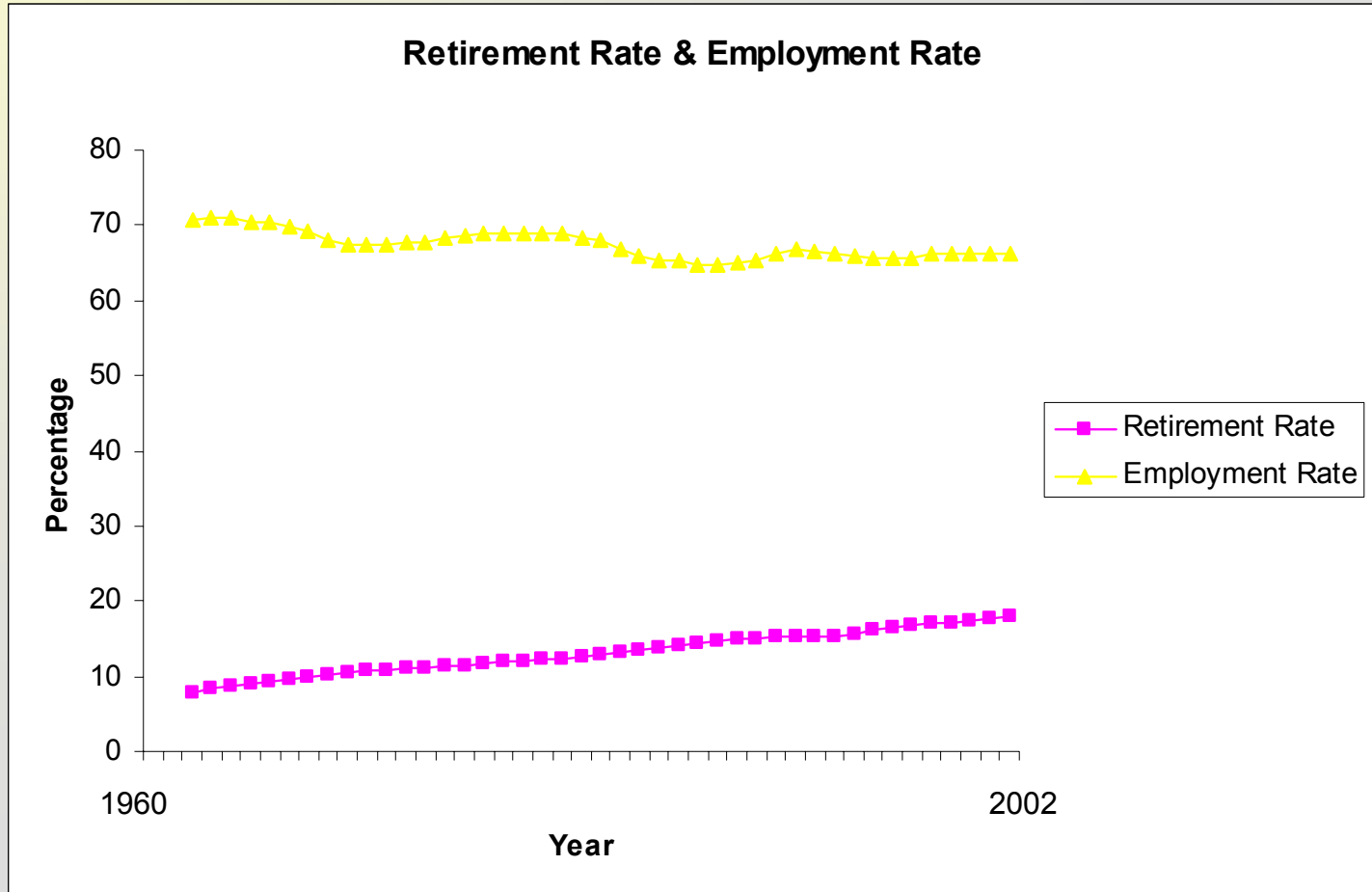
Employment Rate: (Employed+Unemployed)/Total Population*100

Retirement Rate: Number of Retirees/Total Population *100

Employment Rate Austria

- 1960-1999: Men (15-64)
  ↓ 87,3% to 76,3%
- 1960-1999: Women (15-64)
  ↑ 52,9% to 62,2%
- Today: EU average
- 1960-1999: Young (15-20)
  ↓ 59,9% to 44,4%
- 1960-1999: Old (55-60)
  ↓61,7% to 42,3%
- 1960-1999: Old (60-65)
  ↓41,3 to 10,5%
- Next 30 years: people 15-60 years ↓ by 16%
- Next 30 years: people 60+ ↑ by 66%

Table: Probability of Death

Genaues Alter (am x-ten Geburtstag) in Jahren	Geschlecht					
	Sterbe-wahrschein-lichkeit im Alters-intervall x bis x +1	Über-lebende im Alter x	Ge-storbene im Alters-intervall x bis x+1	Von den Überlebenden im Alter x		Fernere Lebens-erwartung im Alter x in Jahren
				bis x+1	insgesamt	
				noch zu durch-lebende Jahre		
x	q(x)	l(x)	d(x)	L(x)	T(x)	e(x)

Propability of Death - Men

Genaues Alter (am x-ten Geburtstag) in Jahren	Männliches Geschlecht					
	Sterbe-wahrschein-lichkeit im Alters-intervall x bis x +1	Über-lebende im Alter x	Ge-storbene im Alters-intervall x bis x+1	Von den Überlebenden im Alter x		Fernere Lebens-erwartung im Alter x in Jahren
				bis x+1	insgesamt	
				noch zu durch-lebende Jahre		
x	q(x)	l(x)	d(x)	L(x)	T(x)	e(x)
0	0,0084686	100000	847	99291	7248085	72,48
1	0,0005477	99153	54	99126	7148794	72,10
2	0,0004539	99099	45	99076	7049668	71,14
3	0,0003739	99054	37	99035	6950592	70,17
4	0,0003086	99017	31	99002	6851556	69,20

Propability of Death - Women

Genaues Alter (am x-ten Geburtstag) in Jahren	Weibliches Geschlecht						Genaues Alter (am x-ten Geburtstag) in Jahren
	Sterbe-wahrschein-lichkeit im Alters-intervall x bis x +1	Über-lebende im Alter x	Ge-storbene im Alters-intervall x bis x+1	Von den Überlebenden im Alter x		Fernere Lebens-erwartung im Alter x in Jahren	
				bis x+1	insgesamt		
				noch zu durch-lebende Jahre			
x	q(x)	l(x)	d(x)	L(x)	T(x)	e(x)	x
0	0,0067104	100000	671	99443	7904389	79,04	0
1	0,0005155	99329	51	99303	7804946	78,58	1
2	0,0004117	99278	41	99257	7705642	77,62	2
3	0,0003175	99237	32	99221	7606385	76,65	3
4	0,0002377	99205	24	99194	7507164	75,67	4

Thanks for your attention