Investment Policies in Old Age Pension Schemes

- Considerations from the Point of View of a Statutory Pension Scheme –

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Agenda

1. Brief overview of the statutory pension scheme in Germany

2. Basic considerations for investment policies in statutory old age pension schemes

3. Specific aspects of some selected types of investments from the point of view of the BfA

4. Types of investments forbidden by law

Federal Insurance Institution for Salaried Employees (BfA), Germany

– contributors:	18 million
– pensioners:	10 million
– budget:	120 billion Euro
– staff:	30,000

for comparison:

– work force:	35 million
– federal budget:	250 billion Euro

1. Brief overview of the statutory pension scheme in Germany

Financing principles

- pay-as-you-go
- contributions paid by employers and employees
  50 : 50
- standard contribution rate: 19.5 % of gross income up to an
- annual remuneration ceiling
  - fixed by law
  - adjusted largely in line with the development of wages

Benefits

- retirement benefits
- disability benefits
- non-cash benefits (i.e. rehabilitation benefits)
- replacement rate: 48 % of average gross income
  70 % of average net income
  - assumptions:
    - 45 years at work
    - every year average income, i.e. average contributions paid
    - retirement age above 64 – otherwise: deduction in retirement benefits

Coverage

- everybody in the workforce, except:
  - civil servants
  - self-employed
  - craftsmen (who opted out)

Latest pension reform

- background: aging society
  - increasing number of pensioners
  - decreasing number of workers
  - consequence:
    - rising contributions and/or
    - declining benefits
- "solution":
  - lowering replacement rate to 40 % of average gross income
  - <u>promoting voluntary individual pension plans</u> via tax incentives, if specific conditions are met,e.g. benefits only in form of life annuities

2. Basic considerations for efficient Investment policies in statutory old age pension schemes

Investment guidelines

- **Security**
- **Liquidity**
- **Profitability**

- Security and liquidity are principles with
  - equal and
  - highest priority.
- Profitability
  - is of second priority.

Legally permissible types of investments

- Bank deposits with deposit insurance (fixed term deposits)
- Investment bonds
  - Government bonds
  - corporate bonds
  - mortgage bonds
  - Indexed bonds
- Shares of money market funds
- Shares of special funds with bonds
- Financial instruments
  - Derivatives (Options)

Basic Risks of an Investment

- Economic Cycle Risk
  - Risk of capital loss due to wrong time of acquisition
- Inflation Risk
  - Financial loss due to depreciation of currency
- Country specific and Transfer Risk
  - Political and administrative problems
- Currency Risk
  - Appreciation or depreciation risks
- Liquidity Risk
  - Sales not possible at cost value
- Market Risk
  - Stock market fluctuations due to speculations
- Tax Risk
  - Changes to tax laws
- Information Risk
  - Wrong decisions due to information deficits
- Cost Risk
  - Changes to administrative costs

General Prerequisites for a Secure Investment

- Regulated Money and Capital Market

  – Minimum requirement for market participants

    - who –

  – Clear, unambiguous "rules of the game"

    - how -

  – Minimum standards for traded products

    - what –

- Governmental regulatory authorities

- Deposit Guarantee Funds

Deposit Guarantee Funds

- EU member states
  - Mandatory for all banks
    - Minimum coverage 20,000 EURO per depositer
    - Co-insurance by the insured up to 10 %

      but
  - Exclusion of institutional investors from coverage

- Germany
  - Voluntary guarantee funds of the banks
  - Liability per depositor (privat or institutional) up to 30% of the equity capital of the bank
  - Publication of the liable equity capital
  - Financing of guarantee funds by the banks alone
  - State control of guarantee funds

Structuring of Investments according to

- Different debtors
- Different asset classes
- Different risk classes
- Regional and territorial borders
- Sociopolitical considerations
  - Promotion of investments in social capital (housing, infrastructure, environment, etc.)
- Congruency Rule
  - Assets and pensions should be in the same currency in order to rule out currency related risks

Investment Risks

- Different asset classes have different investment risks
- The risks of individual investments differ within an asset class
- Consequence:
  - Assessment of risks through independent ratings
  - Distribution of investments across different risk classes

Rating

- Instrument for assessing the <u>credit worthiness</u> of
  - assets and/or
  - debtors
- Liquidity and profitability of the investment are not considered

Basic Model of Assessment of Internationally Operating Rating Agencies:

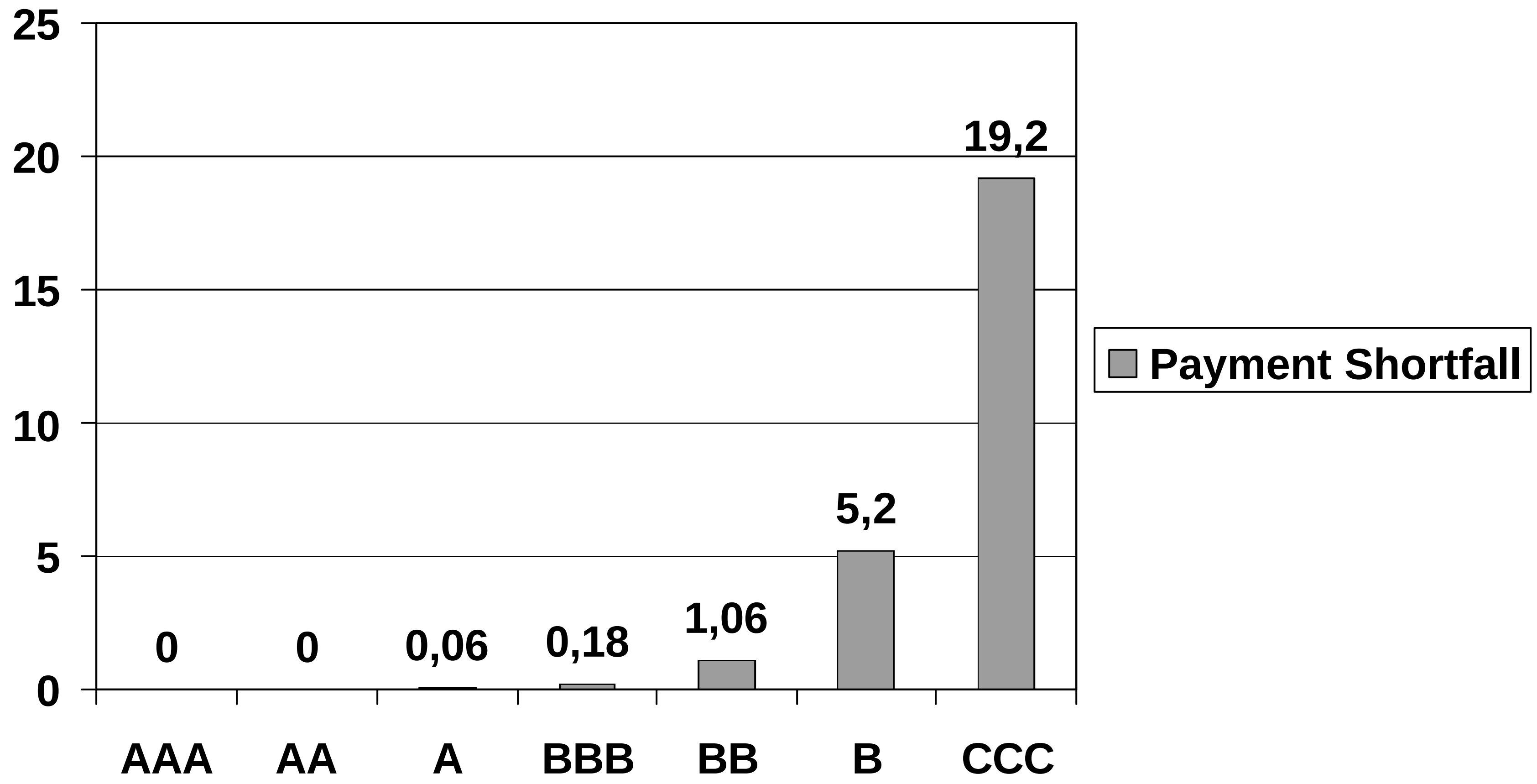
Investment Grade

– AAA = Highest creditworthiness, minimal risk of loss
– AA = Very good creditworthiness, very low risk of loss
– A = Good to satisfactory creditworthiness, low risk of loss
– BBB = Satisfactory creditworthiness, medium risk of loss

Non-Investment Grade

– BB = Satisfactory to sufficient creditworthiness, medium to high risk of loss
– B = Low creditworthiness, high risk of loss
– CCC = Very low creditworthiness, very high risk of loss
C/D

Risk of Loss in % in Different Rating Classes



Spreads in Rate of Return for Different Rating Levels

in Comparison with First-Class Government Bonds

EU member states

• AAA:	0 – 15	Base points
• AA:	15 – 30	Base points
• A:	30 – 60	Base points
• BBB:	50 – 90	Base points
• BB:	90 – 350	Base points
• B:	350 - 1000	Base points

3. Specific Aspects of Some Selected Types of Investments from the Point of View of the BfA

<u>Fixed Term Deposits</u>

- Distribution across different banks
- Minimum bank rating: AA
- Territorial restriction: Germany
- Maximum amount to be invested per bank:
  - respective deposit guarantee limit
- Benchmarks:
  - EONIA (Euro Overnight Index Average)
  - EURIBOR (Euro Interbank Offered Rate)
  - LIBOR (London Interbank Offered Rate)
- Daily documentation of financial investments with respective conditions
- Consistent separation of functions
- Additionally: monitoring by third parties (management)

Foreign Currencies

- Only permitted with hedging against exchange rate fluctuations
- Due to required hedging activities, no yield advantages in comparison with investments in own currency
- Investments in foreign currencies must be reported to the German Central Bank

Fixed-Interest Securities (Bonds)

- Stock exchange listed
- State guarantee, special coverage (i.e. German covered bonds or Pfandbriefe)
- Minimum rating: investment grade
- Duration under 3 years
- Comprehensive monitoring
- Benchmark:
  - Rate of return of fixed term deposits
  - LIBOR
  - EURIBOR
  - EONIA
  - REXP (**Re**ntenindex **P**erformance)
    (Performance of government bonds)

Corporate bonds

- Issuer: Registered office in EU member states
- Market listed or marketable
- Rating: at minimum investment grade (A)
- Additional or alternative guarantees:
  - State guarantee
  - Mortgage liens (negative pledge as applicable)
  - Guarantee statement by parent company
- Liquidity rule: short maturity
- Interest rule: due to higher risk there should be a significant higher interest

Yield Overview Germany

- Government Bonds to Corporate Bonds –

- Spreads to 5-year Government Bonds
  - AAA = 13 BP
  - AA = 21 BP
  - A = 49 BP
  - BBB = 57 BP

- Spreads to 10-year Government Bonds
  - AAA = 16 BP
  - AA = 22 BP
  - A = 63 BP
  - BBB = 69 BP

- Professional Monitoring
  - From BBB: watch list
  - From BB : sell
- Benchmark
  - Rate of return of fixed term deposits
  - LIBOR/EURIBOR
  - EONIA
  - REXP

Conclusion:

- Investments with relatively high risk
- Tight market in Europe

  therefore:
- No investments in these kinds of securities up to now

Commercial Paper

- Shortdated bond of public or private issuers (7 days – max. 2 years)
- Issuer: registered office in EU member state
- Not listable/marketable
- Market introduction by banks (Arrangeur and Plazeure)
- Interest through discounting
- Guarantee options:
  - Negative statement (no senior securities for other creditors)
  - First-class issuer rating (AAA – A)
  - State Guarantee

EURO-Covered Bonds

- Bonds of specialized banks with special coverage in case of insolvency
- Banks registered in EU member states
- Bonds covered through first-class mortgages or public receivables
- Generally higher interest than government bonds
- Due to large tranches (from 1 billion €), so-called jumbos, high market liquidity
- No bad debt loss since the introduction of the mortgage bond in Germany approx. 100 years ago

Special Fixed Income Fund

- Only for corporate bodies
- Max. 30 investors per special fund
- Investments in
  - bonds
  - covered bonds
  - corporate bonds
  - fixed term deposits, overnight money
- Principle of Risk Diversification
  - all allowed asset classes
  - maximum investment in cash: 49 %
- The investor only has to report the fund share price, not the single investment price
- Management by an investment company (KAG)
- Custodian in background

Advantages of a Special Fixed Income Fund

- Individual design of asset guidelines
  - Investor guidelines binding
  - Investor involvement through investment committee (chair, veto right)
  - Freely designable dividend policy
- Constant availability of shares !
- Only one investor per fund as appropriate
- Professional portfolio management by the investment company (KAG)
- Custodian jointly responsible
- Freely negotiable investment company and custodian commission
- Comparisons with specified benchmarks
  - Benchmarks freely definable by the investor
- Continuous risk control
- Annual audit report by government approved auditor

- Investment company regulation by government supervisory authorities
- Regular reporting on exchanges and performance
- The investor only has to report the fund share price, not the single investment price; that is, no losses in single investments are required to be reported, only the fund share price is to be reported.

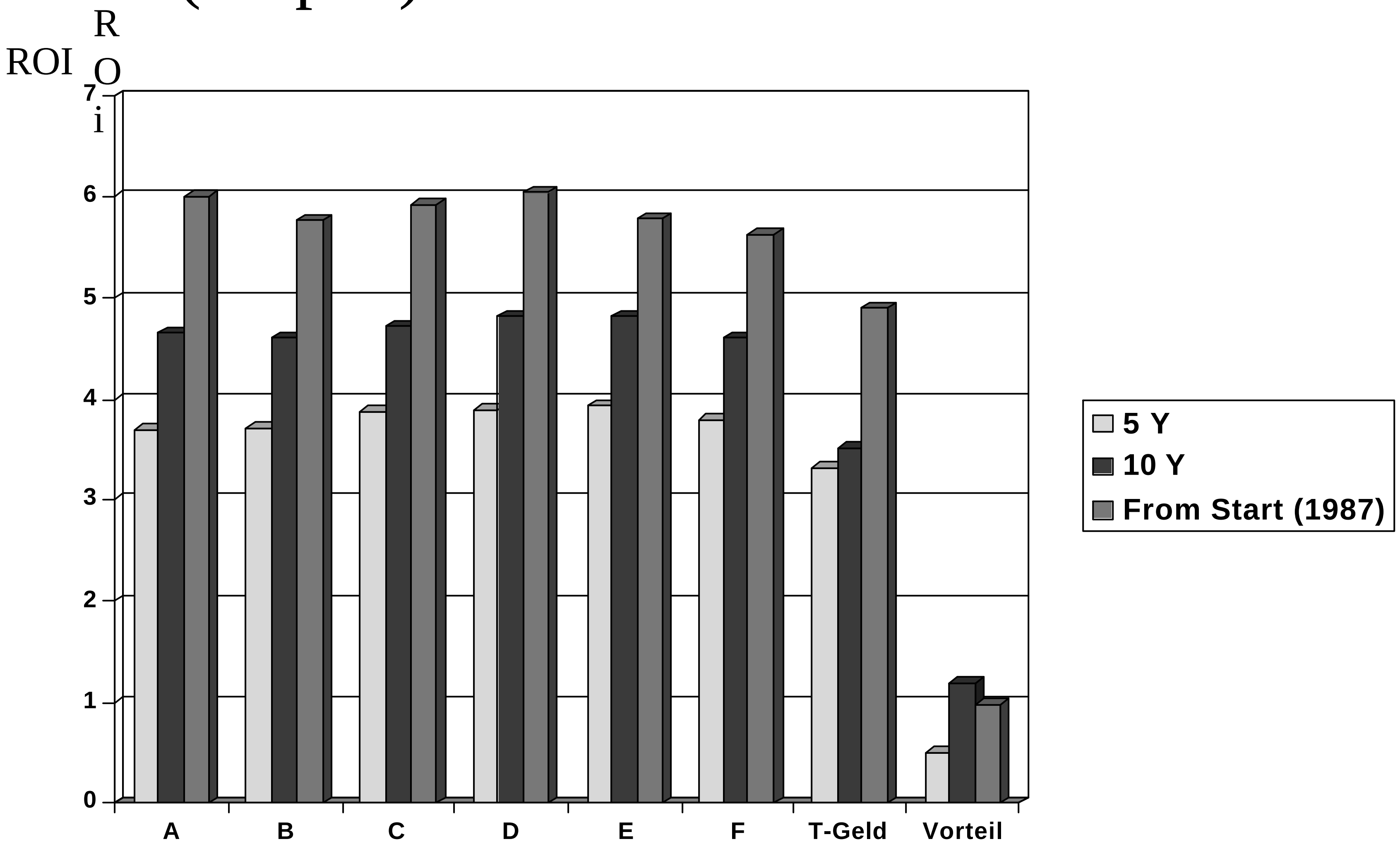
Disadvantages of a Special Funds

- administrative fees + depository fees + transaction costs
- In the case of several funds:
    - uniform, comparable reporting required
    - uniform indicators of performance assessment required
    - uniform benchmarks required
- possible result:
    - fund of funds required

Guidelines for Special Funds of the BfA

- Restriction of average duration of assets in the fund to a maximum of 1.5 years
- Maximum maturity of individual investments 3 years
- Only investments from issuers registered in EU member states
  - prior approval required from the BfA for non-German issuers
- Performance Assessments:
  - Own financial investments versus fund based on ROI
  - Fund versus REXP
  - Fund versus specialized, duration-weighted REXP
  - Funds versus each other

Performance of BfA Special Funds from 1987 – 2004 (% p.a.)



4. Legally Prohibited Investments

- Stocks
- Other company shares
- Funds with stock shares
- Convertible bonds

Reasons for Inadmissability

- High value risk due to share price fluctuations
- Acceptance of entrepreneurial risks
- Danger of conflicts of interest, such as:
  - Participation of a health insurance company in pharmaceutical industry or
  - Liquidity demand versus investment strategy
- Difficult to plan income return
- Risk of government influence