European actuarial academy

an initiative of the 'Deutsche Aktuarvereinigung', the Dutch 'Actuarieel Genootschap', the 'Schweizerische Aktuarvereinigung' and the 'Aktuarvereinigung Österreichs'

The Development of the German Life Insurance Market
- How do the companies answer the new challenges ? –

Martin Balleer

X International Symposium on Insurance
Belgrade 11-14 June 2012

eaa

General trends in the German life insurance market

- *German insurance market is dominated by guaranteed with-profit life insurance products*
- *Increasing portion of annuities within new business generates higher biometric risks - stimulated by new criteria for tax preferation*
- *Low level of interest rates in the capital market generates challenges in financing capital guarantees*
- *Product innovation as a consequence of capital market and Solvency II*

Business development in German life insurance incl. pensions

	2005	2006	2007	2008	2009	2010
new business						
number of contracts (m)	7.8	8.5	7.9	6.9	6.4	6.3
premium sum (EUR bn)[1]	145.8	166.9	161.3	175.0	156.1	162.6
regular premium contracts[1]	136.5	154.4	148.6	162.1	135.3	135.8
single premium contracts	9.3	12.5	12.7	12.9	20.8	26.8
sum insured (EUR bn)	239.6	258.7	248.0	253.8	245.3	260.1
business in force						
number of contracts (m)	96.9	97.1	97.2	96.3	95.1	94.2
written gross premiums (EUR bn)[2]	75.2	78.5	79.0	79.6	85.2	90.4

Source: Statistical Yearbook 2011 of German Insurance

type of investment	2006	2007	2008	2009	2010
as %[1]					
bonds and debentures	81.8	82.3	85.3	87.1	87.1
mortgages	8.5	8.1	7.8	7.4	6.9
loans	24.4	24.6	25.0	25.6	24.7
loans to credit institutions	15.2	15.5	15.6	14.6	13.1
loans to states	7.5	7.7	7.8	9.5	9.9
loans to companies	0.7	0.5	0.7	0.8	0.9
policy loans	0.8	0.7	0.8	0.7	0.7
other	0.3	0.2	0.1	0.0	0.1
mortgage bonds	25.0	25.6	25.2	25.6	24.4
government bonds	3.6	3.0	2.4	2.9	3.5
corporate bonds	1.3	1.2	1.5	1.5	1.6
bonds and debentures included in funds	13.4	13.9	17.2	18.4	20.3
subordinated loans and profit participation rights	3.4	3.2	3.0	2.6	2.4
call money, time and fixed deposits	1.1	1.1	1.4	1.3	1.2
other bonds and debentures	1.1	1.5	1.8	1.9	2.1
shares	8.5	8.5	4.7	3.2	3.2
directly held	1.4	1.4	1.0	0.6	0.5
held in funds	7.1	7.1	3.7	2.6	2.7
participating interests	2.5	2.4	2.6	2.4	2.3
real estate	3.9	3.4	3.4	3.4	3.5
directly held	2.7	2.3	2.2	2.1	2.2
held in funds	1.2	1.2	1.2	1.3	1.3
other investments	3.3	3.4	4.0	4.0	3.9
total	100.0	100.0	100.0	100.0	100.0

Structure of the asset portfolio of German life insurance companies – in percentage

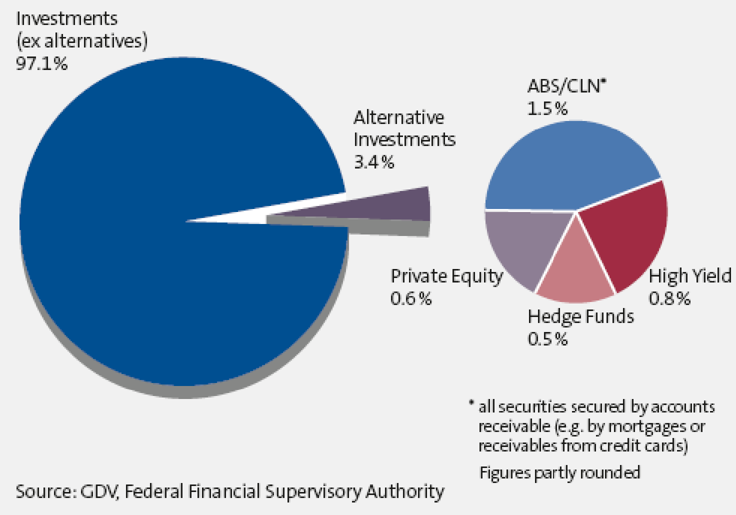
Bonds: 87,1 %

Shares: 3,2 %

Real estate: 3,5 %

Source: Statistical Yearbook 2011 of German Insurance

Alternative investments in the asset portfolio of German life insurers



New business in German life insurance by type of products

	numbers in 1,000 (share as %)					
	1995		2000		2005	
individual insurance contracts						
endowment insurance	2,768.5	(41.0)	1,486.5	(20.3)	962.4	(13.1)
unit-linked endowment insurance[1]	220.1	(3.2)	1,281.7	(17.5)	391.8	(5.3)
unit-linked annuities	°	°	°	°	857.0	(11.7)
term insurance	603.9	(8.9)	649.4	(8.9)	738.7	(10.1)
annuities and pension insurance	727.7	(10.8)	961.8	(13.2)	1,868.7	(25.5)
occupational disability insurance	38.8	(0.6)	184.4	(2.5)	323.6	(4.4)
long-term care insurance	4.2	(0.1)	0.1	(0.0)	5.3	(0.1)
other individual insurance[2]	6.8	(0.1)	6.1	(0.1)	73.0	(0.9)

	numbers in 1,000 (share as %)					
	2008		2009		2010	
individual insurance contracts						
endowment insurance	563.3	(8.4)	562.8	(9.1)	561.3	(9.2)
unit-linked endowment insurance	229.0	(3.4)	169.7	(2.8)	156.7	(2.6)
unit-linked annuities	1,584.5	(23.7)	1,135.5	(18.5)	982.0	(16.0)
term insurance	668.3	(10.0)	732.8	(11.9)	706.0	(11.5)
annuities and pension insurance	1,355.7	(20.3)	1,370.1	(22.3)	1,506.1	(24.6)
occupational disability insurance	324.0	(4.8)	374.0	(6.1)	403.3	(6.6)
long-term care insurance	10.7	(0.2)	11.7	(0.2)	14.0	(0.2)
other individual insurance[2]	71.0	(1.1)	244.2	(4.0)	309.1	(5.0)

Endowments:

- *1995 44,2 %*
- *2010 11,8 %*

Annuities:

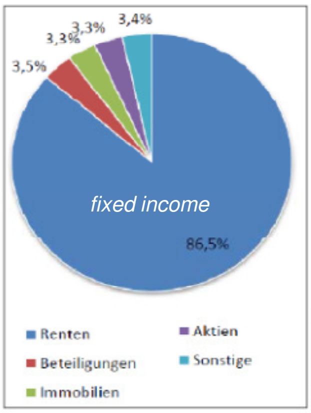
- *1995 10,8 %*
- *2010 40,6 %*

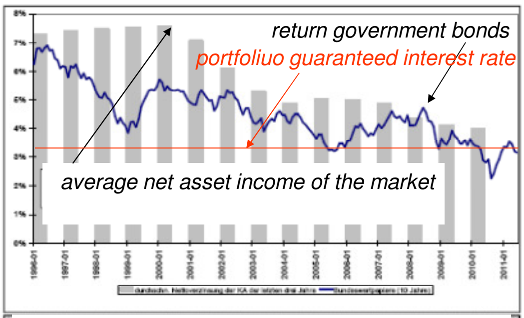
Source: Statistical Yearbook 2011 of German Insurance

The challenge in Germany: Financing guaranteed interest rates

- *Requirements for the calculation of interest rates for reserves = 60 % of the yield of government bonds according to EU-legislation following requirements for prudent calculation*
- *Consequences: Actual calculation interest rate of 1,75 % for new business*
- *But: Portfolio guaranteed interest rate is influenced by older policy generations with higher guaranteed interest rates (4,0 %, 3,5 %, 2,75 % etc.); on average the companies need around 3,4 % return in order to finance the guaranteed interest rates, that conflicts with the low level of interest rates in the bond market*

The challenge in Germany: Financing guaranteed interest rates





Conflict between asset income and guarantees

Source. Norbert Heinen, DAV-vor- Ort, Stuttgart, 2011

Consequences in the German market regarding product development

- *to change to unit-linked products (no risk transfer, lower risk capital)*

  → doesn't meet the interests of consumers and government

- *to finance the guarantees by hedging in the capital market (Variable Annuities)*

  → generates risks whether the capital market is able to offer the necessary instruments long-term

- *to implement flexible interest guarantees, i.e. by splitted levels of guarantees according to the durantion of the policy*

  → is the most prefered way to solve the problem; it also reduces risk capital

Life insurance and solvency in the German life insurance market

- *Solvency II quota can be fulfilled (QIS 5)*

	Medianwerte:	
Bedeckungsquote SI	174%	St.abw: 1,08
Bedeckungsquote QIS5	158%	St.abw: 2,31
Bedeckungsquoten QIS5/SI	86%	Korr: 0,14
Solvenzkapitalbedarf QIS5/SI	103%	Korr: 0,92
Eigenmittel QIS5/SI	84%	Korr: 0,97
Freie Eigenmittel QIS5/SI	68%	Korr: 0,58

Sourse: BaFin

- *The complexity of the system is an increasing problem*
- *The high volatility of the system doesn't correlate best practise with the long-term guarantees in the products*
- *Increasing biometric risks and the increasing duration gap (long durations of annuities) will require higher risk capital*

Thank you for your attention !

martin.balleer@actuarial-academy.com
+49 170 862 39 61