FMR Frankfurt Main Research AG

» Insurance «

DFV Deutsche Familienversicherung AG

WKN: A2NBVD | ISIN: DE000A2NBVD5 | Bloomberg: DFV GY

Published: 7th February 2019

BUY

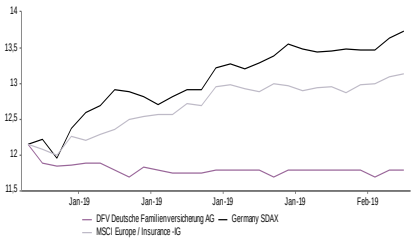
Old rec.: -

» Initial Coverage «

Price target **EUR 15.00** (-)
Price* EUR 11.63

*XETRA trading price at the close of the previous day

Initial data	2018e	2019e	2020e
Sales	36.1	41.2	55.4
EBIT	-0.8	-3.1	4.7
EPS	-0.10	-0.17	0.26



Source: Factset

Share Data

Shares (millions)	13.26
Free Float (%)	38.18%
Market Cap (EURm)	149.9
Daily turnover (Ø)	500
High (EUR, 52 weeks)	12.0
Low (EUR, 52 weeks)	11.5

Shareholders

Dr. Stefan Knoll	17.63%
Heirs & Supervisory board	23.12%
Luca Pesarini	23.83%
Free float	35.42%

Company events

ODDO BHF Small & Mid Cap	20.02.2019
Annual Report 2018	11.04.2019

The squeeze of classical insurance

DFV Deutsche Familienversicherung AG (DFV) has positioned itself as a risk-carrier that serves clients based on a proprietary digital insurance platform allowing the company to process business transactions in real time.

On 4 December 2018, DFV's stock started trading in the Prime Standard segment of the Frankfurt Stock Exchange. On the IPO, the company raised gross proceeds of approx. € 52m.

The acquired funds enable the company to accelerate corporate growth and improve profitability. Whereas growth is expected to be stimulated by intensified sales and marketing activities, the anticipated improvement in profitability is related to the fact that through a strengthened regulatory capital, the dependency on reinsurers decreases in the short- to mid-term range.

A technological opportunity with deep shareholder value

DFV's success so far is because the company effectively combines the business model of a direct insurer while using digital technologies, making it one of the first insurance companies in Europe to be almost completely digitised.

Based on its scalable IT infrastructure, the company has successfully digitised its business processes, hereby enhancing efficiency by automating personnel-intensive workflows. Further, given the scalable IT infrastructure and the ability to expand insurance offerings by providing new and innovative products and services with a short time-to-market, the company is well prepared to counter competitive forces.

Taking into account DFV's rapid historic growth and the prospective business strategy, we anticipate gross written premiums to increase from € 86.2m in 2019e by 108.8% to €180.0m in 2022e, corresponding to a CAGR of 27.8%. The expected growth is primarily driven by the supplementary health and long-term care segment. Here, we expect a customer contract growth of +80,000 in 2019e (management target: +100,000).

During the forecast period, total income is forecasted to increase from € 41.2m in 2019e to € 90.4m in 2022e (CAGR: 29.9%). Taking into account the disproportional low increase of total expenses, we expect DFV's operating result (EBIT) to increase from -€ 3.1m in 2019e to € 13.8m in 2022e.

Based on our DCF model, we calculate a fair value per share of € 14.32. Our peer group comparison indicates a fair value of € 17.62 per share**. We initiate our Coverage with a BUY recommendation with a Price Target of € 15.00 per share.** Our scenario analysis shows that the fair value per share rises to € 16.98 (best case) if we slightly increase the average premium per insurance contract per year and adapt our expected contract growth to match the management case.

FY End: 31.12. in EURm	CAGR (17-20e)	2015	2016	2017	2018e	2019e	2020e
Gross written premium	17.2%	63.2	64.1	70.7	75.0	86.2	113.9
Total income	18.8%	28.4	28.1	33.1	36.1	41.2	55.4
EBIT	30.4%	0.7	2.0	2.1	-0.8	-3.1	4.7
EBIT margin		2.5%	7.2%	6.4%	-2.3%	-7.5%	8.5%
Net income	55.7%	0.7	1.5	0.9	-1.4	-2.3	3.5
Net margin		2.4%	5.3%	2.8%	-3.8%	-5.6%	6.4%
EPS	53.4%	0.05	0.12	0.07	-0.10	-0.17	0.26
Dividend per share		0.00	0.00	0.00	0.00	0.00	0.00
Price/Book		-	-	-	3.1	3.3	3.1
Combined ratio		96.8%	86.8%	93.2%	85.3%	99.1%	90.3%
Equity ratio		30.8%	25.5%	20.6%	39.7%	35.1%	29.8%

Source: DFV, FMR

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In cooperation with

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Investment Thesis

High degree of digitalised business processes

Deutsche Familienversicherung (DFV) is a German insurance technology (insurtech) company with a high degree of digitalised business processes. Approximately 80% of gross written premiums are generated through digital distribution channels. DFV's experienced management team orchestrates the development and distribution of its own insurance products. Besides analysing and identifying opportunities within the insurance industry, the company also calculates premiums based on accepted actuarial methods for the newly developed insurance products and adheres to a strict risk management process.

Proprietary, scalable and event-driven IT infrastructure

Based on the proprietary, scalable (capacity of approx. 10x the current client base) and event-driven IT infrastructure, the company successfully digitised its business processes, hence enhancing efficiency by automating a personnel-intensive workflow. Between 2014 and 2017, gross premiums earned increased by roughly 42% (CAGR: 12.33%). Simultaneously, the number of employees was reduced by nearly 50% from above 200 to currently 109.

Award winning products and services underline quality.

Corporate growth, competition and regulation steadily increased the need and importance of efficient business operations. Since its inception 11 years ago, the company has focused on digitising and automating the traditional way of selling, distributing and managing insurance products. All insurance products and services offered by DFV are clearly structured and easy to understand. This is a crucially important characteristic because only easy-to-understand and uncomplicated insurance products and services can be processed by fully digitalised business processes. Over the past 10 years, DFV has won over 130 different awards for its insurance products and received credit for its comprehensive and easy-to-understand product structuring, which in turn enables less personnel-intensive business operations.

IPO proceeds feed expected growth.

DFV has experienced impressive growth so far, especially in the supplementary health and long-term health care product segment (SHC). Through the recent IPO and capital increase, the company has reached two important requirements for further growth. First, regulatory risk-bearing capacity has increased significantly and will take several years to reach a level before the capital measure (solvency ratio in 2017: 214%) depending on the realised corporate growth going forward. Second, a significant portion of the gained cash proceeds will be expensed for sales and marketing initiatives (~ €30m), which should boost gross written premiums and the number of contracts significantly in the years ahead.

Market tailwind

According to market researchers, in Germany, the potential for supplementary insurance products amounts to approximately 120 million contracts, encompassing supplementary insurances for long-term care, nursing care and dental insurance products. The company has high aspirations to grab at least 1% of that potential in the mid- to long-term range. In addition, the company benefits from demographic trends that put a financial strain on the German statutory health system. Market research reveals that in the medium term, statutory health insurance funds will be forced to restrict their treatment catalogue. However, although statutory health insurers' treatment catalogues will only cover the most vital health and care treatments, a growing number of treatments will be covered by private supplementary health and long-term care insurance products. This is what drives DFV's growth in the medium- to long-term range.

SHC: DFV's growth engine

Regarding the SHC segment, we anticipate gross written premiums to increase by 114%, going from €79.92m in 2019e to €171.12m in 2022e, corresponding to a CAGR of 28.9%. Within the property and accident insurance segment (PAI), the negative development observed in the past is projected to continue until the end of the current fiscal year 2019e. From 2020e onwards, our model depicts rising gross

written premiums within the PAI segment again. In our model, gross written premiums rise by 41%, going from €6.3m in 2019e to €8.9m in 2022e, corresponding to a CAGR of 12.3%.

EBIT 2019e: -€3.1m

During the forecast period, the total income increases from €41.2m in 2019e to €90.4m in 2022e (CAGR: 29.9%). Taking into account the disproportionately low increase of total expenses, we expect the operating result (EBIT) to increase from -€3.1m in 2019e to €13.8m in 2022e. The negative EBIT in 2019e is expected to be caused by customer acquisition costs. On average, the company pays a sales commission of 12 monthly premiums for each new customer. Because customers are acquired throughout the fiscal year, a growth in gross written premiums must be accompanied by a disproportional high increase in sales and marketing expenses because each customer delivers a positive contribution margin only after 12 months.

Sinking claims ratio

Regarding the disproportionately low increase of total expenses from 2020e onwards, there are two critical assumptions to be considered. First, growth in gross written premiums is accompanied by a disproportionately low increase in reinsurers' shares in gross written premiums. This should lead to a disproportionately high increase in DFV's total income (leverage effect).

Second, the disproportionately low increase in total expenses is also driven by our assumption of a steadily decreasing claims ratio going forward. We think that the suspension of electronics insurance combined with a continuously shrinking share of written premiums in the PAI segment is going to subdue both the volatility and yearly increase of benefits paid to customers.

Forecasted combined ratio within targeted range

Opposed to the assumptions for the claims ratio, we suggest that the expenses for insurance operations are going to be above the levels seen in prior years, which is first and foremost linked to DFV's intensified sales and marketing activities. Consequently, our estimates for the coming years imply a strong uplift in the expense ratio before shrinking to more representative levels at the end of the forecast period. All in all, our projections for the company's income statement lead to a net combined ratio that – apart from the current fiscal year 2019e – evolves within the 80–95% range targeted by DFV's management.

Price target: €15.00 per share; Recommendation: BUY

Based on our DCF model, the fair value per share amounts to €14.32. Our peer group comparison indicates a fair market value for the company of €233.72m and a fair value of €17.62 per share. We set a price target of €15.00 per share and initiate our coverage with a BUY recommendation.

Scenario analysis encompasses value range between €16.98…

We also performed a scenario analysis to show how changes in our base case estimates change our fair value for the stock. In our upside scenario, we adapt our projections regarding the newly acquired contracts within the SHC segment to match the management case. Consequently, our fair value for the stock increases to €15.74 per share. Assuming an additional and more favourable average premium per contract generated each year, we derive a fair value of €16.98 per share.

…and €8.62 per share

In our downside scenario, we reduce our projections regarding the newly acquired contracts to 60,000 for 2019e (base case minus 20,000 for the following fiscal years). Consequently, our fair value for the stock decreases to €12.90 per share. Additionally, assuming a less favourable average premium per contract generated each year, we derive a fair value of €11.90 per share that roughly equals the current share price for the stock. Further, important assumptions of our base case estimates are the assumed reduction of the share of reinsurers in gross written premiums and the projected shrinkage of the relation of benefits paid to clients as a portion of gross written premiums. If both assumptions do not materialise in the same amount as expected, our fair value would decrease further to €8.62 per share.

SWOT

SWOT

Strengths

- Experienced management team combining knowledge in the field of classic insurance with technology-driven customer-oriented solutions
- Visionary business strategy/business model aligned with digitalisation
- Proprietary, Java-based and event-driven digital insurance platforms that perform in real time, allowing for innovative product launches
- Scalable IT infrastructure with potential to process 10 times the current customer base at low incremental costs
- A high degree of digitalisation that enables automation and reduces operational costs, which enhances competitiveness (degree of dark processing at 80%)
- Short time-to-market for new insurance products
- Development of own insurance products and distribution thereof (no insurance brokerage)
- Award-winning products (more than 130 awards)
- Strong distribution network of intermediaries and agents
- Steady growth of written premiums within the health care segment, DFV's growth engine
- DFV operating on solid profitable ground
- Strong equity-base after successful IPO/strong regulatory capital

Weaknesses

- Reinsurance activity that enables growth but burdens profitability
- Cooperation with reinsurers being necessary for further growth
- Corporate growth primarily generated in the supplementary health care segment still subdued by the discontinued and receding property insurance business (e.g., electronics insurance, household insurance)
- Relatively high average costs for sales and distribution of insurance products (up to 12 monthly premiums to acquire a new customer)
- Low customer loyalty, especially within the damage/accident segment
- Personnel-intensive claims handling within the damage/accident segment
- No international footprint yet

Opportunities

- The need and demand for supplementary health care and long-term care insurance products in Germany is driven by demographic trends and associated financial strain on statutory health insurers.
- Being a first mover and role model as digitised insurance technology company (insurtech) could generate new strategic partnerships within Germany and abroad, accelerating corporate growth.
- Through the existing strategic partnership with KKH (Kaufmännische Krankenkasse) and IG BCE Bonusagentur, DFV is positioning itself at an early stage to structure adequate private supplementary insurance products and to cover the growing demand for supplementary health insurance and long-term care insurance in Germany.
- The recently announced product launch of HealthCareFlex (a supplementary long-term care insurance) in cooperation with Henkel AG & Co. KGaA and the trade union IG BCE (Industriegewerkschaft Bergbau, Chemie, Erden) could inspire and incentivise other companies to also offer their employees supplementary health care insurances.
- Accident insurance with the possibility to situationally adapt risk coverage could develop better than anticipated in our projections, especially regarding international business expansion that has not been considered in our forecast yet.
- The integration of digital language assistants into IT infrastructures and the Internet is still a niche product for many. According to market observers, however, chatbots are spreading rapidly to connect people to Internet services, and this could help make life more comfortable and transparent, leading to unexpected growth impulses for first movers.

Threats

- Insurance products with the possibility of daily cancellations could lead to a large number of contract cancellations within a short period of time.
- Focus on digital-affine customers bear the risk of losing ties to more traditionally acting clients, which are still the dominant customer group in the German insurance market.
- Operating with an almost completely digitised business model and distributing/generating the majority of its products and services via digital distribution channels carries the risk of system shutdowns induced by IT security gaps.
- According to data published by Eurostat, in 2018, approximately 92% of Germans between 16 and 74 have been connected to the Internet. Whereas some prefer to use the Internet via mobile devices, others have access only via personal computers. DFV has developed its digital customer portal for stationary and mobile devices and hence has perfect access to potential clients but could fail to introduce insurance products aligned to the changing needs of the digital customer of tomorrow.

Valuation

DCF valuation

Discounted cash flow analysis

To determine DVF's intrinsic value, we performed a Discounted Cash Flow (DCF) analysis and included judgements about DFV's unique business prospects that are hardly captured by market-based valuation techniques. The value is derived by the sum of the projected free cash flows, which reflect assumptions about the company's growth rates, profit margins, CAPEX and working capital requirements.

Earned net premiums

To project DFV's free cash flows, we first start by projecting the earned net premiums. Earned net premiums are defined as the net written premiums (which equals gross written premiums minus reinsurers' share) adjusted by the net change in unearned premiums. Over the period 2018e–2027e, earned net premiums are forecasted to increase by an average of 18.3% each year, which is well above the growth rate observed between 2015 and 2017 (CAGR: 4.93%). We argue that the above average growth of earned net premiums is justified by the expectation that the share of reinsurers in gross written premiums will shrink significantly as a result of the IPO and strengthened regulatory capital. A reduced share of reinsurers in gross written premiums acts like a lever for the growth of earned net premium, with all else being equal. Furthermore, equipped with fresh funds, the company now has the power to accelerate growth by intensifying sales and marketing activities. Both effects, when combined, should positively impact the earned net premiums significantly in the years ahead.

Operating margin

Regarding the operating margin for 2027e, we anticipate a level that is above the highest level observed in the past (2016: 7.11%). In our DCF model, we forecast an upward movement reaching the maximum in 2022e (15.8%), followed by a downtrend pressing operating margins down to 11% in 2027e. The scalability of DFV's IT infrastructure and a shrinking relation of benefits paid to clients to gross written premiums as a consequence of the expected disproportional increase of supplementary long-term health care insurances are important justifications that will have to be proven as true in the mid- to long-term range. Moreover, the above-mentioned anticipated decline in reinsurers' share in gross written premium is an additional factor that supports our positive view on the evolution of the operating margin.

CAPEX/depreciation

Depreciation is fixed at €0.75m, with capital expenditures approaching depreciation at the end of the projection period. The outlier in capital expenditures in 2020E can be attributed to the planned foundation of two new entities; the company has plans to separate the segment of supplementary health and long-term care insurance by founding its own health insurance company. In addition, DFV strives to establish a second foundation that will act as a holding company in the new corporate structure, enabling DFV to launch new products for which the company itself cannot be approved. The separation and foundation of these new subsidiaries and their associated investments will create the prerequisite to initiate internationalisation and require additional investments of an expected €7m.

WACC 8.50%

Weighted average cost of capital (WACC): Based on the expected long-term yields of German federal bonds, we set the risk-free rate at 2.0%. We assumed an equity risk premium of 6.0%. Because the company's stocks have started to float recently, we do not have enough data to reliably calculate the empiric beta. Therefore, we decided to set the beta at 1.3, trying to reflect the potential risk and return in the stock adequately. We furthermore assume a long-term target equity ratio of 80%. Currently, the company operates without interest-bearing debt. All liabilities existent are intertwined with business operations and cannot be reduced by paying them back. That is, most of the liabilities are prospective, uncertain claims from insured

customers that will be settled by the company and its reinsurers. These premises lead to a WACC of 8.50%.

Based on these assumptions, we derive an enterprise value of €146.2m. Taking into account DFV's net cash in the amount of €43.7m, we calculate a fair value of equity of €189.9m. Then, the fair value per share amounts to €14.32.

DCF model results in a fair value per share of €14.32

Discounted cash flow model

	PHASE 1			PHASE 2							PHASE 3
EURm	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	∞
Earned net premiums	36.44	40.89	54.23	69.35	87.18	104.61	120.31	135.95	150.90	164.48	
growth YoY in %	-99.9%	12.2%	32.6%	27.9%	25.7%	20.0%	15.0%	13.0%	11.0%	9.0%	
Operating result	-0.83	-3.07	4.70	9.32	13.80	14.56	15.36	16.20	17.09	18.03	
Margin in % of earned net premiums	-2.3%	-7.5%	8.7%	13.4%	15.8%	13.9%	12.8%	11.9%	11.3%	11.0%	
Income tax on operating result	0.21	0.77	-1.18	-2.33	-3.45	-3.64	-3.84	-4.05	-4.27	-4.51	
Depreciation and amortisation	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	
Change in net working capital	0.87	-0.08	0.44	0.19	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	
Net capital expenditure	-1.50	-1.50	-8.50	-1.50	-1.50	-1.31	-1.14	-0.99	-0.86	-0.75	
Free cash flow	**-0.5**	**-3.1**	**-3.8**	**6.4**	**9.5**	**10.3**	**11.1**	**11.9**	**12.7**	**13.5**	
Present values	**-0.5**	**-2.9**	**-3.2**	**5.0**	**6.9**	**6.9**	**6.8**	**6.7**	**6.6**	**6.5**	**107.5**

Present value Phase 1	-6.6	-6%
Present value Phase 2	45.3	31%
Present value Phase 3	107.5	74%
Total present value	**146.2**	100%

Risk free rate	2.0%	Target equity ratio	80.0%
Equity risk premium	6.0%	Tax shield	25.0%
Debt risk premium	2.0%	Beta (fundamental)	1.30
CAGR Sales Phase 2	15.5%	**WACC**	**8.50%**
Ø EBIT-margin Phase 2	12.9%	**Terminal growth**	**2.0%**

+ Net Cash	43.7
- Minority interest (est. market value)	0.0
Fair value of equity	**189.9**
Number of shares (m)	13.3
Fair value per share (EUR)	**14.32**

Sensitivity analysis

		Terminal growth (Phase 3)				
		1.0%	**1.5%**	**2.0%**	**2.5%**	**3.0%**
	7.5%	14.35	15.06	15.89	16.90	18.12
	8.0%	13.35	13.93	14.61	15.41	16.38
WACC	**8.5%**	12.48	12.97	**14.32**	14.18	14.95
	9.0%	11.73	12.14	12.61	13.14	13.77
	9.5%	11.07	11.41	11.81	12.25	12.77

Source: FMR

Market multiple valuation

Market-oriented approach with four subcategories

To include a market-oriented approach in our valuation, we used a multiple valuation approach based on an international and operationally diversified peer group. First, we have defined four subcategories representing the key elements of DFV's business model. In the next step, the identified peers have been allocated to one of the four predefined subcategories by considering their business focus. The rationale behind this approach is the fact that it is hard to find perfect matches.

Subgroup insurance brokerage

The first subgroup consists of companies that primarily provide insurance brokerage services. For instance, besides providing insurance-related services, including third-party claims administration and comprehensive medical utilisation management services, in 2017 Brown & Brown lion's share of commissions and fees was generated with insurance brokerage services and casualty insurance underwriting services.

Subgroup insurance software and consulting

The second subgroup combines companies that specialise in the provision of software solutions or consulting services for the insurance industry. Although Aon provides consulting services to insurance and reinsurance companies, Sapiens and Guidewire are connected to the insurance sector through the sale of insurance software solutions that insurance companies rely on to run their businesses.

Subgroup online distribution

The third subcategory of peer group companies puts an emphasis on companies that distribute their products and services primarily via online distribution channels.

Subgroup banking and financial services

The fourth subgroup comprises enterprises that provide online (Internet-based) banking and financial services to private and commercial customers.

Our peer group valuations range between €120.85m and €280.49m (see the table on the next page). Price-to-book multiples (P/B) are commonly used for valuing insurance companies. Therefore, we narrow our range of multiples and use the expected P/B multiple for 2020e to value DFV. Our peer group comparison indicates a fair market value for the company of €233.72m and a fair value of €17.62 per share.

Peer group valuation

Peer Group: Insurance brokerage	Market cap.	EV	Price/Book 2019e	Price/Book 2020e	EV/EBITDA 2019e	EV/EBITDA 2020e	EV/EBIT 2019e	EV/EBIT 2020e	EV / Sales 2019e	EV / Sales 2020e
Arthur J Gallagher Co	12675.8	13939.3	2.4x	2.1x	12.5x	11.3x	24.0x	20.5x	2.2x	2.0x
Brown & Brown	6865.2	7492.0	2.4x	2.2x	12.2x	11.6x	15.7x	14.4x	3.7x	3.4x
Goosehead Insurance	902.0	268.3	-	-	13.0x	8.5x	13.6x	-	3.6x	2.4x
Willis Towers Watson	18997.8	22332.3	2.0x	1.9x	11.5x	10.8x	12.7x	13.0x	2.9x	2.8x
Average	**9,860**	**11,008**	**2.3x**	**2.1x**	**12.2x**	**9.6x**	**13.2x**	**13.0x**	**3.2x**	**2.6x**
Median	**9,770**	**10,716**	**2.4x**	**2.1x**	**12.2x**	**9.6x**	**13.2x**	**13.0x**	**3.2x**	**2.6x**

Peer Group: Insurance software & consulting	Market cap.	EV	Price/Book 2019e	Price/Book 2020e	EV/EBITDA 2019e	EV/EBITDA 2020e	EV/EBIT 2019e	EV/EBIT 2020e	EV / Sales 2019e	EV / Sales 2020e
Guidewire Software	6622.3	5937.0	4.9x	4.8x	48.0x	41.5x	60.5x	48.2x	9.3x	8.1x
Ebix	1577.7	2038.4	-	-	11.7x	9.4x	12.6x	9.9x	3.9x	2.7x
Sapiens International	557.7	570.1	-	-	13.5x	12.2x	15.5x	13.2x	2.1x	2.0x
Symbility Solutions	-	-	-	-	-	-	-	-	-	-
Aon	35633.9	41075.7	8.1x	6.6x	14.9x	13.8x	15.5x	14.5x	4.1x	3.9x
Marsh & McLennan	40064.0	44226.2	-	-	12.5x	11.7x	15.1x	13.6x	3.2x	3.0x
Average	**16,891**	**18,769**	**6.5x**	**5.7x**	**13.6x**	**12.6x**	**15.4x**	**13.8x**	**3.1x**	**3.0x**
Median	**6,622**	**5,937**	**6.5x**	**5.7x**	**13.5x**	**12.2x**	**15.5x**	**13.6x**	**3.2x**	**3.0x**

Peer Group: Online Distribution	Market cap.	EV	Price/Book 2019e	Price/Book 2020e	EV/EBITDA 2019e	EV/EBITDA 2020e	EV/EBIT 2019e	EV/EBIT 2020e	EV / Sales 2019e	EV / Sales 2020e
Moneysupermarket.com Grp	1902.2	1870.4	7.0x	6.0x	11.6x	10.8x	13.2x	12.1x	4.3x	4.0x
Gocompare.com Group	363.7	447.2	-	-	7.4x	6.9x	7.9x	7.1x	2.4x	2.3x
QuinStreet	815.7	755.0	-	-	17.9x	13.4x	30.6x	19.8x	1.8x	1.6x
eHealth	1124.6	1107.1	-	-	26.5x	18.4x	- 42.6x	24.6x	4.2x	3.5x
iSelect	104.9	85.2	-	-	-	-	- 12.8x	9.3x	0.7x	0.7x
Average	**862**	**853**	**7.0x**	**6.0x**	**22.2x**	**15.9x**	**28.7x**	**17.9x**	**2.2x**	**1.9x**
Median	**816**	**755**	**7.0x**	**6.0x**	**22.2x**	**15.9x**	**30.6x**	**19.8x**	**1.8x**	**1.6x**

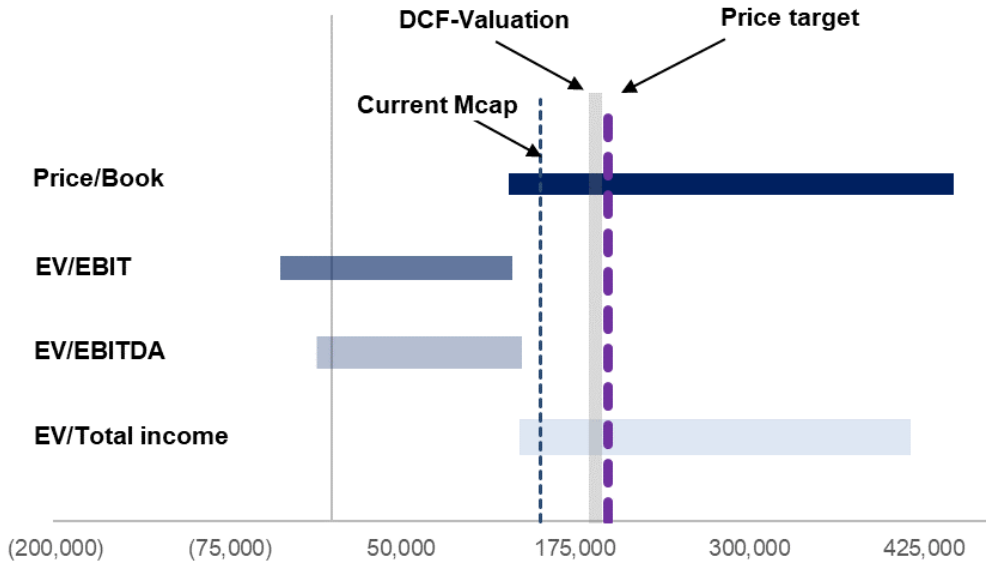
Peer Group: Online Banking and financial services	Market cap.	EV	Price/Book 2019e	Price/Book 2020e	EV/EBITDA 2019e	EV/EBITDA 2020e	EV/EBIT 2019e	EV/EBIT 2020e	EV / Sales 2019e	EV / Sales 2020e
1st Source	1039.9	1244.9	1.4x	1.3x	-	-	10.5x	9.8x	4.3x	4.1x
Hypoport	1146.1	1154.4	6.7x	5.5x	22.4x	19.2x	28.8x	23.5x	3.7x	3.3x
Sparebank 1 Ringerike	329.3	916.9	0.9x	0.8x	-	-	- 18.0x	17.4x	10.6x	10.2x
Kakaku.com	3448.8	3266.0	8.1x	6.8x	14.2x	13.2x	14.6x	13.7x	6.8x	6.3x
Average	**1,491**	**1,646**	**4.3x**	**3.6x**	**14.2x**	**13.2x**	**16.3x**	**15.5x**	**8.7x**	**8.3x**
Median	**1,093**	**1,200**	**4.1x**	**3.4x**	**14.2x**	**13.2x**	**16.3x**	**15.5x**	**8.7x**	**8.3x**
Weighted average			**4.4x**	**3.8x**	**16.7x**	**14.2x**	**20.2x**	**16.7x**	**4.1x**	**3.7x**

	EURm, except EPS (EUR)	Book 2019e	Book 2020e	EBITDA 2019e	EBITDA 2020e	EBIT 2019e	EBIT 2020e	Sales 2019e	Sales 2020e
DFV: Financial estimates by FMR		63.67	61.36	-2.32	5.45	-3.07	4.70	41.19	55.43
Applied multiples: Peer group Price/Book 2020e		4.4x	3.8x	16.7x	14.2x	20.2x	16.7x	4.1x	3.7x
Enterprise value (derived)				**-38.69**	**77.17**	**-62.18**	**78.67**	**168.74**	**204.77**
Financial net debt & minority interests	43.7								
Market capitalisation (derived)		**280.49**	**233.77**		**120.85**		**122.36**	**212.42**	**248.45**
Price/Book 2020e	**233.77**								
Premium (discount) vs. Peer Group	0%								
Fair market capitalisation	**233.77**								
Number of shares (m)	13.3								
Fair value per share (EUR)	**17.63**								

Source: FactSet, FMR

The table below summarises our valuation results. As depicted, our price target is slightly higher than the fair value derived by our DCF model. The EV/EBIT and EV/EBITDA multiples indicate negative or no market values at all for the company. Therefore, we excluded them from our calculations. As shown by the graph, both our DCF value and the price target are encompassed by the most relevant P/B multiple and the EV/Total income multiple.

Valuation summary vs. Current market capitalisation



Source: FMR

Scenario Analysis

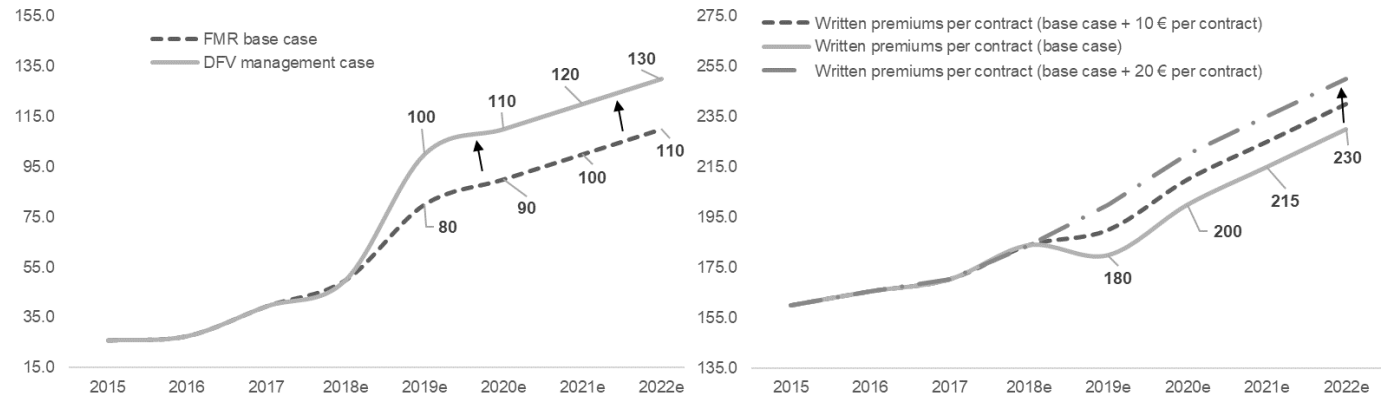
Upside scenario

Base case reflects conservative assumptions.

Our base case estimate assumes that in the current fiscal year 2018e, the company gained roughly 50,000 new clients within the supplementary health and long-term care insurance segment. For 2019e, we assume that 80,000 new clients will be added to the existing client base instead of the 100,000 contracts that management is targeting. Going forward, our projections for the newly acquired customers stay at 20,000 contracts below the management case but show the same growth in absolute terms (left chart below).

A similar approach is used to model a second variable that measures the average premium per insurance contract per year (right chart below). We model three price scenarios for 2019e and from then on assume a parallel upward movement in the average premium per insurance contract per year.

DFV management case vs. FMR base case



Source: FMR

Better than expected business development justifies a fair value per share of more than € 16.98

If we increase our projections regarding the newly acquired contracts to match the management case, our fair value for the stock increases to €15.74 per share. Assuming an additional and more favourable average premium per contract generated each year, we derive a fair value of €16.98 per share.

Fair value matrix – Upside potential

	Upside Fair value	Average premium per contract per year (base case 2019e: 180 €/contract)		
		0	**+10**	**+20**
Assumed customer growth in 2019e	**80,000**	14.32	14.88	15.44
	100,000	15.74	16.36	16.98

Source: FMR

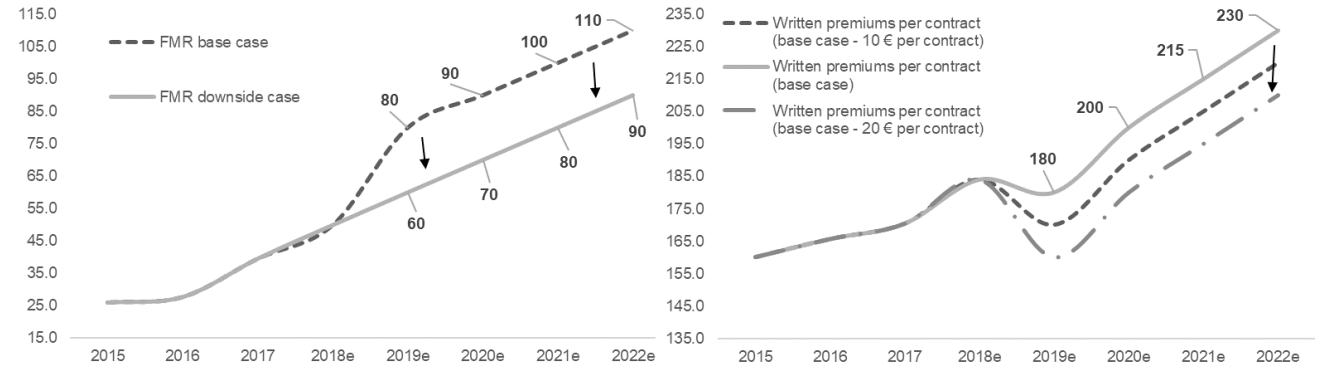
Downside scenario

Significantly lower number of newly acquired contracts in the downside scenario

In our downside scenario, we consider some even more conservative assumptions than reflected in our base scenario estimates. First, for fiscal year 2019e, we reduce the number of newly acquired contracts to 60,000. Going forward, the newly acquired customers stay 20,000 contracts below the base case but show the same growth in absolute terms (left chart below).

A similar approach is used to model a second variable that measures the average premium per insurance contract per year (right chart below). We model three price scenarios for 2019e and from then on assume a parallel upward movement in the average premium per insurance contract per year.

FMR base case vs. FMR downside case



Source: FMR

Conservative scenario shows fair value of € 11.90 per share, which roughly equals the current share price.

If we reduce our projections regarding the newly acquired contracts to match to 60,000 for 2019e (base case minus 20,000 for the following fiscal years), our fair value for the stock decreases to €12.90 per share. Assuming an additional and less favourable average premium per contract generated each year, we derive a fair value of €11.90 per share that roughly equals the current share price.

Fair value matrix – Upside potential

	Downside Fair value	Average premium per contract per year (base case 2019e: 180 €/contract)		
		0	-10	-20
Assumed customer growth in 2019e	80,000	14.32	13.76	13.20
	60,000	12.90	12.40	11.90

Source: FMR

Doom scenario: € 8.62 per share

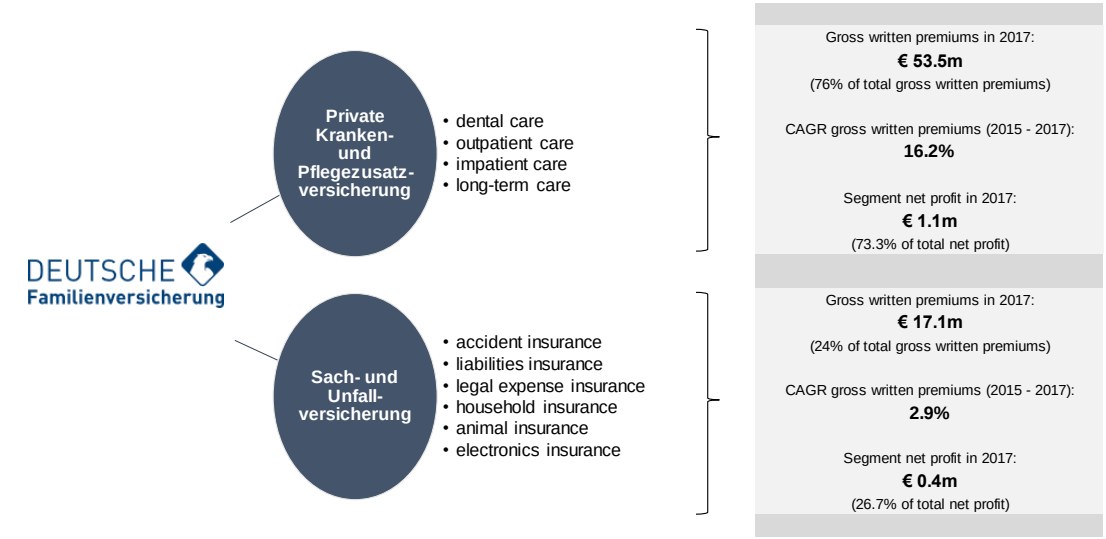
Furthermore, important assumptions of our base scenario estimates are the reduction of the share of reinsurers in gross written premiums and the projected shrinkage of the relation of benefits paid to clients as a portion of gross written premiums. If both assumptions should not materialise in the same amount as expected, our fair value would decrease further to €8.62 per share.

The Company

High degree of digital business processes

Deutsche Familienversicherung (DFV) is a German insurance technology (insurtech) company with a comparatively high degree of digitalised business processes. DFV was incorporated in 2007 and since then has experienced decent growth by offering supplementary insurance protection against financial losses in the event of illness and the need for care, as well as accident and property insurance for natural persons and tangible assets in Germany. In fiscal year 2017, the entity gained a net profit of around €1.5m and generated gross written premiums of roughly €71m based on approximately 420,000 existing insurance contracts.

DFV - Business snap shot

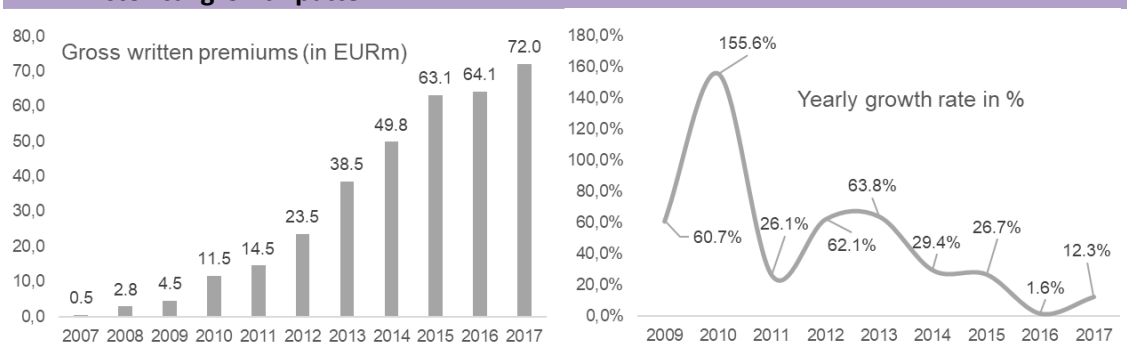


Source: DFV Deutsche Familienversicherung AG, FMR

IPO proceeds for further growth

On 4 December 2018, DFV's shares have started trading in the Prime Standard segment of the Frankfurt Stock Exchange. In the course of the IPO, the company placed 3.8m newly issued shares that flushed gross proceeds of €52m into the company. The acquired funds are intended to finance further corporate growth by penetrating more digital distribution channels. The utilisation of these digital distribution channels in combination with customised and easy-to-understand insurance products is what has driven corporate growth so far.

DFV - Historical growth pattern



Source: DFV Deutsche Familienversicherung AG, FMR

Digital distribution channels empower automation

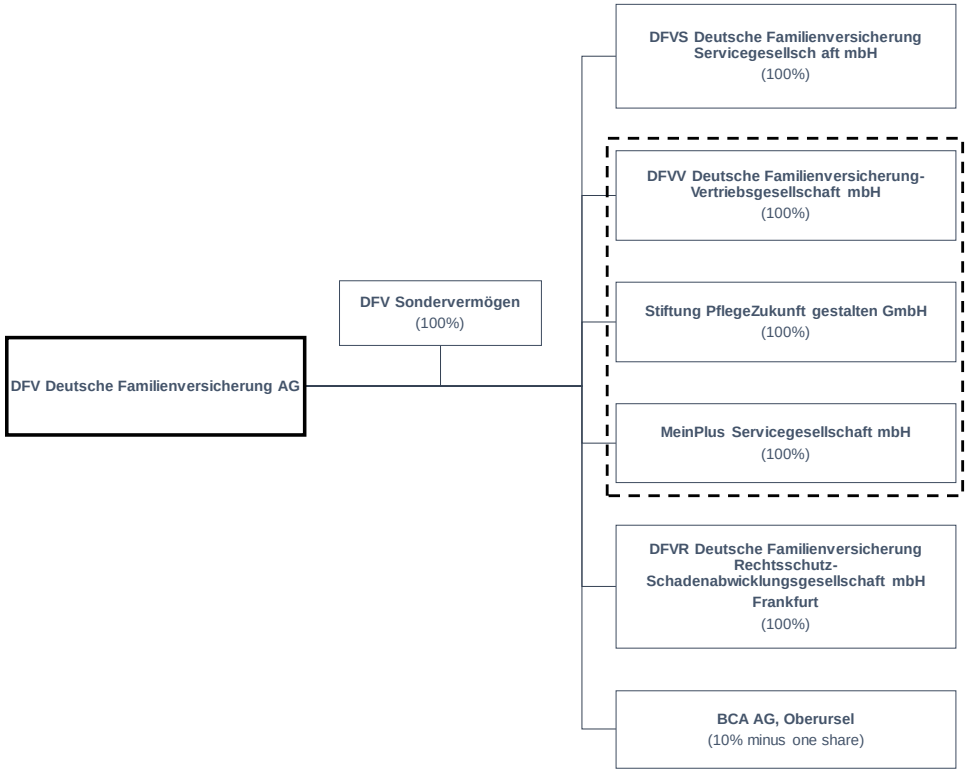
Backed by a proprietary IT system developed in 2014, DFV strives to attract potential clients primarily via digital channels because of the higher degree of automated business processes associated with digital sales channels. An intensified automation implies higher business efficiency through operational cost savings. In turn, this strengthens DFV's competitiveness and protects against human error susceptibility related to internal administrative and product-handling processes.

Corporate structure

DFV Sondervermögen – a yield generating business unit

DFV is the parent company within a group structure that consists of five additional operational subsidiaries. Apart from the minority stake in BCA AG acquired via a share purchase and transfer agreement from bbg Betriebsberatungs GmbH on 28 June 2018, all other legal entities are fully owned and consolidated into the DFV group. As can be seen from the chart below, the group structure also comprises one special fund with a registered office in Luxembourg named DFV Sondervermögen. This special investment fund is integrated into the group structure and serves as a yield-generating unit investing in net written premiums from completed insurance contracts that have not been used to pay benefits yet.

DFV – Corporate structure



Source: DFV Deutsche Familienversicherung AG, FMR

DFVS – contracts, claims and benefits processing

DFVS Deutsche Familienversicherung Servicegesellschaft mbH, Frankfurt am Main, Germany is DFV's service company that processes all insurance contracts ,as well as claims and benefits, based on an outsourcing agreement with the company.

DFVV – coordinating the sales activities

DFVV Deutsche Familienversicherung-Vertriebsgesellschaft mbH, Frankfurt am Main, Germany is the company's sales company that primarily brokers insurance contracts for supplementary health insurance products, in particular supplementary long-term care insurance. Based on an outsourcing agreement and a profit transfer agreement, this business entity combines and coordinates the intermediary sales activities characterised by a heterogeneous sales channel that comprises brokerage and agency sales activities and cooperation sales channels. Whereas brokerage and cooperation sales activities are primarily generated through direct cooperation with insurance brokers, brokerage pools and VPV Lebensversicherungs-AG, agency sales are first and foremost induced by cooperation with companies such as IG BCE Bonusassekuranz GmbH, Siemens Financial Services or BMW. Moreover, as of 23 August 2018, Stiftung PflegeZukunft gestalten GmbH and MeinPlus Servicegesellschaft mbH were merged into DFVV.

DFVR – claims settlement for legal expenses insurance

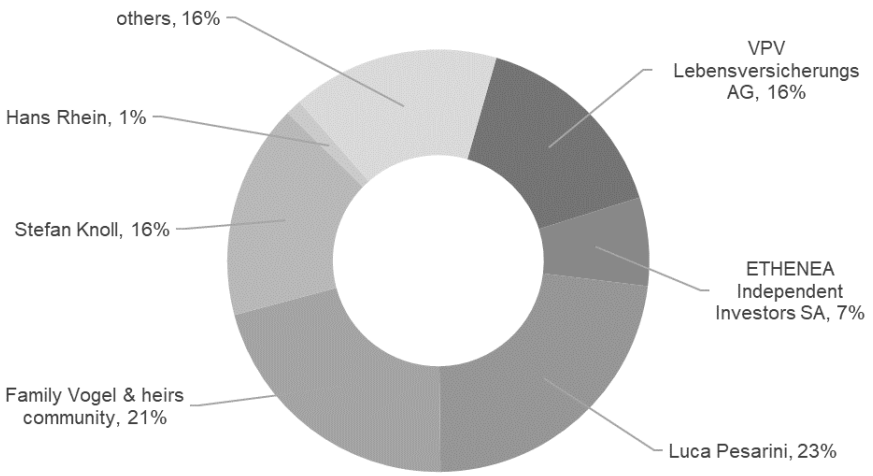
Based on a function outsourcing agreement, DFVR Deutsche Familienversicherung Rechtsschutz-Schadenabwicklungsgesellschaft mbH, Frankfurt am Main, Germany is the DFV's claims settlement company for the business line of legal expenses insurance.

Shareholder structure

Initial share price of €12

As part of the IPO, 3.8 million new ordinary bearer shares with a nominal value of €2 were issued. In addition, 507,745 shares were placed by way of over-allotment (greenshoe). The new shares were placed with new investors at a price of €12.

Shareholder structure (post IPO)



Source: DFV Deutsche Familienversicherung AG, FMR

13.26 million outstanding shares

The above chart shows the shareholder structure after the IPO. Around 62% of the outstanding shares (13.26 million) are held by insiders and stakeholders. In addition to CEO and co-founder Dr. Stefan Knoll, these include members of the Supervisory Board (Hans Rhein and Luca Pesarini) as well as the Vogel family and heirs.

Free float 38%

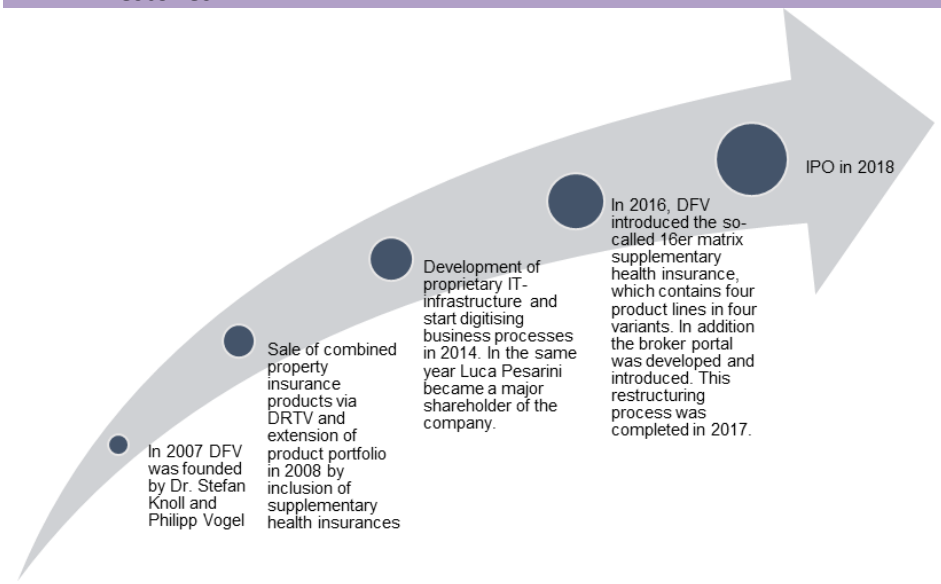
Taking into account the outstanding shares held by institutions such as VPV Lebensversicherungs-AG, ETHENEA Independent Investors SA and others, the free float for the share is 38%.

Corporate history

Inception in 2007

After its inception in 2007, DFV primarily acted as a risk carrier and direct insurer. The distribution of insurance products took place via sales partners and DRTV (Direct Response Television). In its early stage, the firm offered combined property insurance products for a fixed price and broad coverage of independent risks. In addition to accident, household contents and glass insurance, "KombiVersicherung 5 plus", which is still offered today, also combines private liability and traffic legal protection in one insurance product.

DFV - Milestones



Source: DFV Deutsche Familienversicherung AG, FMR

Rapid growth

Over time, DFV grew and streamlined its product portfolio to service clients with easy-to-understand insurance products. In 2008, the company added supplementary health insurance, cost insurance and other combined products into its offerings. In parallel, DFV attracted new distribution partners such as company health insurance funds, spurring further growth. Between 2008 and 2012, DFV expanded business operations by an average growth rate of roughly 70% each year.

Continuous investments into business processes

The subsequent growth phase from 2012–2017 was also accompanied by the addition of new insurance products. In addition to supplementary long-term care insurance, DFV started operating as a reinsurer (reinsurance business no longer in operation since 2017). Although growth during this second phase slowed somewhat, business expansion still showed a comparatively impressive CAGR of roughly 26%. To comply with prerequisites for further business growth, during the aforementioned growth phases, DFV – together with strategic and financial partners – continuously invested in its business processes.

Early focus on digital distribution channels

Corporate growth, competition and regulation steadily increased the need and importance of efficient business operations. Since its inception 11 years ago, the company has focused on digitising and automating the traditional way of selling, distributing and managing insurance products. In accordance with this, DFV's business model has continuously transformed to become one of the first fully digitised German insurance companies. Whereas today most insurance products and services are still marketed via conventional distribution channels (e.g., personal advisers, telephone, etc.), DFV executes its sales activities primarily over digitalised distribution channels.

Business Model

The importance of adequately calculated premiums

Traditional insurance companies take risks and in return receive a premium for protecting individuals or legal entities from adverse effects caused by uncertain events. For example, liability insurance protects the insured individuals from liabilities imposed by lawsuits and similar claims resulting from injuries and damage to people and/or property. One key element of all insurance companies is the pricing of risks, that is, calculating adequate premiums for different kinds of risks. If premiums are too low, insurers will suffer losses as claims exceed accumulated premiums. On the downside, if insurers wrongly anticipate too many adverse events within a certain period of time, premiums would be too high, and competitive forces would shift demand away from expensive and greedy insurers.

Creation of new, own and marketable insurance products

DFV initially started as a mere broker of insurance products and, over time, successively integrated further value-added steps into the business model. Today, based on the extensive practical experience gained in the insurance industry, DFV's management team orchestrates the development and distribution of its own insurance products. Besides analysing and identifying opportunities within the insurance industry, the company also calculates premiums based on accepted actuarial methods for the newly developed insurance products and adheres to a strict risk management process.

Prudent product structuring and risk sharing

Similarly, to limit the risk of permanent underwriting losses, all DFV insurance products include the right to adjust premiums in case of permanent changes of actuarial business risks. As mentioned before, calculating appropriate premiums and evaluating changing societal risks is crucial for operational profitability (generating a positive underwriting income) and business growth (rising written premiums). Between 2015 and 2017, DFV experienced profitable growth each year. This operational performance differentiates the company's business model from other national and international insurtechs that grow their businesses in deep red. Further, this supports the view that DFV is executing an appropriate premium calculation and underwriting policy that enhances competitiveness and paves the way for steady corporate growth. Besides this, the company diversifies its insurance portfolio by transferring significant portions of its portfolio risks to reinsurers, allowing DFV to remain solvent by recovering some amounts paid to claimants. Further, engaging in reinsurance protects the company's equity and solvency and stabilises operational results when unusual and major events occur.

Successful digitalisation of business operations replaced personnel-intensive workflow

Since its inception 11 years ago, DFV has successfully broadened its insurance product portfolio and tapped into the market share. Until 2014, the year when DFV's business model switched from partly analogue to almost fully digital, gross premium growth was accompanied by a rising number of employees. Then, with the build-up and integration of the proprietary Java-based digital inventory system into DFV's business operations, this historical correlation ended. The gross premiums earned between 2014 and 2017 increased by roughly 42% (CAGR: 12.33%). Simultaneously, the number of employees dropped by nearly 50% from above 200 to the current 109. Based on a centrally controlled, scalable (capacity of approx. 10x the current client base) and event-driven IT system, the company successfully digitised its business process, enhancing efficiency by automating its personnel-intensive workflow. For instance, the input management system replaced manual inbox processing with subsequent archiving and an electronic inbox procedure. Complemented by an output management system (compilation of policies and letters for regulatory purposes) and a number processing and bookkeeping system, customer application acceptance and processing today is fully automated and in real time. Additionally, changes and adjustments of underwritten products can be processed easily in real time. Hereby, DFV provides customers with the flexibility to

adapt their insurance coverage of accident insurances situationally whenever required, which is a unique product feature in the insurance industry.

Online sales channel accounts for 80% of total sales

DFV distributes its insurance products and services via direct sales (cross-selling and up-selling with existing customers via Amazon Echo and Google Home), the Internet (DFV's strongest sales channel; accounts for 60% of new business), as white-label products via television (DRTV) and through cooperation and distribution agreements with intermediaries. Approximately 80% of DFV's gross written premiums are generated through sales and marketing activities related to the Internet (search engine marketing with Google Ads and Bing Ads, search engine optimisation for Google and Bing searches, as well as affiliate marketing with over 3,400 affiliate partners) and telephone or television (cooperation with Germany's largest private broadcasting group ProSiebenSat.1 Media SE).

Customer acquisition costs of € 16.64m in 2017

Cooperation agreements with partners such as IG BCE Bonusagentur GmbH (subsidiary of Industriegewerkschaft Bergbau, Chemie, Energie), Siemens Financial Services or BMW contribute to roughly 15% of gross written premiums. The remaining 5% of gross written premiums are generated by intermediaries that are independently operating insurance brokers posing a comparatively expensive distribution channel. DFV usually spends up to 12 monthly premiums to acquire a new customer. In 2017, the company spent €16.64m in customer acquisition costs, down from €19.37m two years before.

Products and services

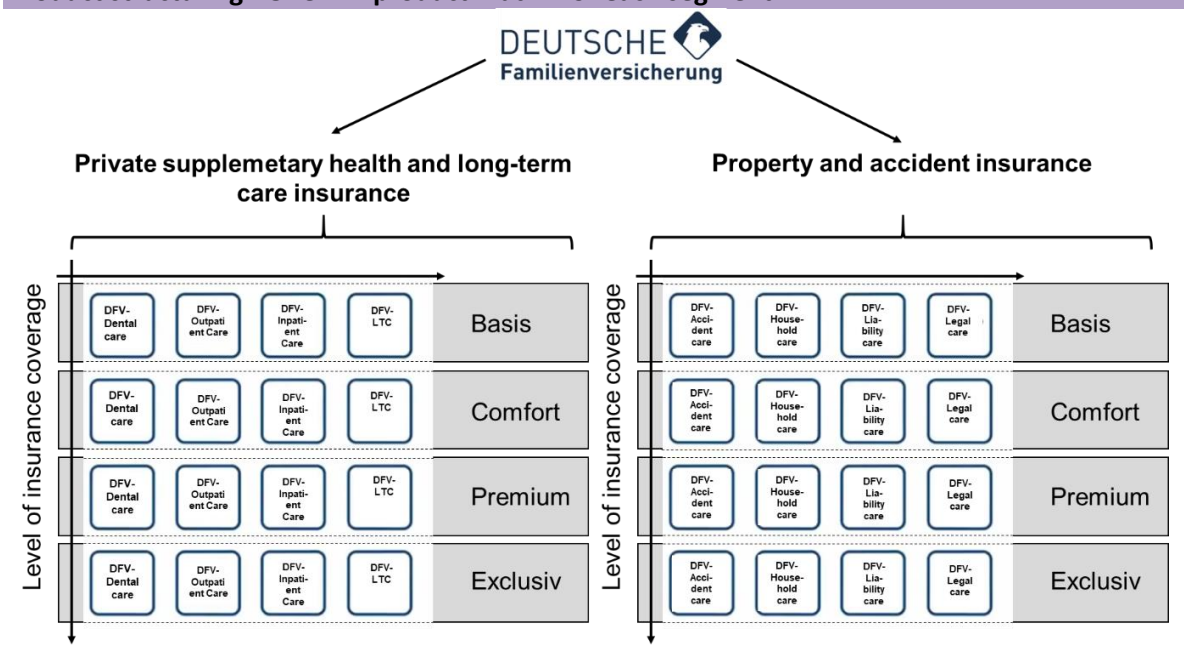
Supplementary health and long-term care insurances are the growth engine

DFV's business activities are divided into two segments. Whereas the sales of private SHC are represented by the first segment, gross written premiums generated by PAI are related to the second segment. Between 2015 and 2017, the SHC segment not only increased its revenue contribution steadily from 62.6% to 75.7%, but also showed disproportional growth (SHC CAGR: 16.17%) compared with the PAI segment (PAI CAGR: 2.92%). However, the dampened development of PAI gross written premiums was impacted by the management's decision to exit electronics insurance in 2015 and to terminate a coinsurance contract with a cooperation partner related to household insurance. This caused the number of insurance contracts (duration > 1 year) within the PAI segment to decrease from 298,817 in 2015 to 150,261 in 2017 (-49.71%). Simultaneously, gross written premiums per contract in the PAI segment increased from €79.15 in 2015 to €114.04 in 2017 (+44.1%), so the positive price effect almost compensated for the regressing number of insurance contracts.

Clearly structured and easy to understand insurance

All insurance products and services offered by DFV are clearly structured and easy to understand. This is a crucially important characteristic because only easy-to-understand and uncomplicated insurance products and services can be processed by fully digitalised business processes. DFV aims to offer insurance products that understandably expound the insurance coverage while increasing the comprehensibility by the policyholder. Adhering to this product and customer approach, DFV minimises the risk of legal disputes and reputational risks by aligning customers' expectations with insurance product characteristics. Moreover, customers are allowed to terminate insurance on a daily basis. Regarding DFV's accident insurance, customers are also equipped with the right to add or reduce the level of risk protection situationally or include family members in their insurance coverage on request and with an immediate effect.

Product structuring - One 4x4 product matrix for each segment



Source: DFV Deutsche Familienversicherung AG, FMR

A streamlined product structure in matrix form

Over the past 10 years, DFV has won over 130 different awards for its insurance products. For example, Stiftung Warentest, a German public and independent product testing foundation, ranked the company's dental supplementary insurance since 2014 as the top insurance product. The company not only received additional awards for other insurance products (e.g., accident insurance, supplementary long-term care insurances, inpatient care, etc.), but also received credit for its comprehensive and easy-to-understand product structuring. As depicted by the chart above, the product offerings within the two segments are summarised in a matrix format. The columns represent the different insurance product families, whereas the rows determine the degree of risk coverage (basis = lowest risk coverage; exclusive = highest risk coverage). The introduction of the 4x4 product matrix reduced the number of insurance products from above 200 to only 16 for each segment. Hereby, the complexity and cost of installing and operating insurance products reduced significantly. In parallel, customers' understanding of how insurance products are structured and what protection levels are associated with each of them has increased.

The customer digital journey

Product comprehensibility is an important prerequisite for distributing non-consulting-intensive insurances via the Internet. Equally important is a customer-friendly contracting process that preserves the personnel cost savings obtained by the supply of easy-to-understand insurance. For insurance products sold over the Internet, DFV offers a purely digital process of contract conclusion via its own homepage or a project-related landing page. By adhering to digitalised business processes, the company has also taken the opportunity to integrate digital language assistants like Amazon's Alexa as an alternative communication channel into its IT infrastructure. Digital language assistants facilitate customer-friendly add-on features that advise/support clients during product selection or contract conclusion processes orally. The same is true for DFV's electronic payment system, which has the potential to speed up payment transactions depending on the chosen payment method. In addition to classic payment methods such as invoicing and pre-payment, Amazon Pay, Google Pay and PayPal enable the digital application process to be completed within a few minutes. The possibility of fast electronic payments is also

relevant for the situational adaption of insurance coverage via mobile devices, providing customers with the opportunity to adapt their insurance contracts while on the move. DFV's insurance app, the mobile version of the customer portal, enables clients to make changes to address or adapt the preferred payment method and access information on the covered risks without accessing a PC.

Fast claims settlement

To further promote paperless document management, DFV transfers all relevant documents to the customer by e-mail, including an electronic wallet card that replaces the classic paper or plastic insurance customer card. This electronic wallet card contains all parameters (customer number, insured person, product name, etc.) required for submitting claims or benefit cases via mobile devices, telephone or a PC. The fastest claim settlement takes 45 seconds, whereas the average health claim is settled in six minutes.

Paper-based contracting hampers dark processing

However, paper-based contracting is still possible and preferred by intermediaries such as insurance brokers, which account for roughly 5–10% of DFV's total gross written premiums. Because paper-based contracting is staff intensive and breaches digital processes, it collides with the upmost goal of ongoing digitalisation. This in turn increase operational costs and is opposed to DFV's strategic target of the rising share of dark processing. Here, dark processing is defined as a fully digitalised process and document chain encompassing the conclusion of the contract to the situational adjustment of the insurance coverage to the digitalised claims settlement and payment processing.

Automated claims handling based on AI

An important pillar to reach total dark processing is the capability of settling claims automatically. Claims handling related to supplementary health insurance allows for automated processing opposed to the property insurance segment, where the probability of fraud is quite high. This is a consequence of the unequivocal assignment of ICD (International Statistical Classification of Diseases and Related Health Problems) codes for diseases or injuries based on medical invoices ascertained by medical doctors. According to management, artificial intelligence (AI) helps decide which insurance claims are justified and which are not.

To put it differently, based on the proprietary inventory management system, a predefined sequence of programmed algorithms works through the submitted claims by a combined analysis of stored customer data and a catalogue of ICD codes to determine whether the insurance claims are covered by the existing insurance contract or not. By contrast, claims handled in the property insurance segment are checked manually because of the high probability of fraud. However, as fraudulent subcategories of the property insurance segment (e.g., electronics insurance) are suspended, the share of manual claims handling should drop over time.

Strategic Outlook and Vision

The emergence of insurtechs

The Internet has had a deep impact on the market structures of telecommunication, television broadcasting and retail. Whereas corporations active in the telecommunication and television broadcasting sector have started to compete through the convergence of the transmission channel, the retail industry was heavily disrupted by e-commerce companies like Amazon. The same forces have emerged within the financial industry and spawn new competitive forces called fintechs. Insurtechs emerged around 2010 as an offshoot of fintechs. Although still a small part of the insurance space, insurtechs are growing rapidly, and many traditional insurance companies are beginning to invest not only in start-up ventures, but also in developing their own technologies.

Among the first fully digitised insurance companies

DFV has positioned itself as a risk carrier operating and serving clients based on a proprietary digital insurance platform that allows the company to process business transactions in real time. DFV's successful development so far can be attributed to the fact that the company effectively combines the business model of a classic direct insurer with the usage of digital technology, thus classifying it as one of the first almost fully digitalised insurance companies in Europe. In contrast to mere online broker platforms, the company develops and distributes its own insurance products and services, which primarily consist of supplementary health insurance and property–casualty insurance.

Highly scalable IT platform & innovative product offerings

Today, the company is characterised by many features that are typical of insurtech companies. The most evident attribute is DFV's proprietary Java and event-based IT platform with its flexible interfaces that are highly scalable and capable of accommodating up to 10 times the current customer base at low incremental costs. In addition, the insurance products offered are characterised by innovative features that make it possible to change insurance contracts situationally by adapting risk coverages in short notice (e.g., accident insurance). Also, the integration of digital language assistants into DFV's service portfolio is an example of innovation that aimed at opening new consulting and distribution channels. Based on results from opinion polls conducted by market researchers (Aducubum "Digital Insurance 2018"), DFV's management is convinced that in the near future within the insurtech world, the conclusion of insurance contracts will mainly be conducted by chatbots like Amazon Alexa or Google Home. Additional insurtech characteristics are provided by the proprietary product module editor that is equipped with 1,500 different parameters, allowing for product launches within two to four weeks. The same is true for product changes and service complements that are easily implemented in just a few hours. Moreover, a high degree of business processes are digitalised and have been automated, reducing the operational costs and allowing for competitive product pricings.

IPO proceeds strengthen regulatory risk-bearing capital and allow for intensified sales and marketing activities

DFV has experienced impressive growth so far, especially in the supplementary health and long-term health care product segment. Based on its highly digitalised business model, the company strives to further grow its business, which was also a reason behind the recent IPO and associated capital increase. Through a capital increase, the company has reached two important requirements for further growth. First, its regulatory risk-bearing capacity has increased significantly and will take several years to reach a level before the capital measure (solvency ratio in 2017: 214%), depending on the realised corporate growth going forward. Second, a significant portion of the cash proceeds from the IPO will be expensed for sales and marketing initiatives (approx. €30m) that primarily are comprised of customer acquisition costs (12 monthly premiums per contract) and marketing expenses (search engine marketing with Google Ads and Bing Ads, search engine optimisation for Google and Bing searches and affiliate marketing with over 3,400 affiliate

partners). The chances are quite good that this campaign will boost gross written premiums significantly, along with the number of contracts in the years ahead.

Internationalisation and product portfolio expansion

Additional growth stimulus is expected to be provided by internationalising the business model and expanding the supplied insurance product portfolio. Currently, the company is serving the German insurance market only, which is showing attractive growth opportunities for supplementary health and long-term care insurance products because of demographic developments and the resulting financial strain on the statutory health insurance system. To tap foreign markets, the company plans to initially start with the distribution of its accident insurance product, which is suitable for internationalisation because of the possibility of situational adjustment. The envisioned expansion of the product portfolio is expected for 2019 and will encompass insurance products such as term life insurance, occupational disability and pension insurance. Last but not least, the company aims to establish holistic insurance products that cover all the insurance needs of a customer or his or her family at once for an insurance lump sum.

Market Environment

Supplementary health and long-term care insurance

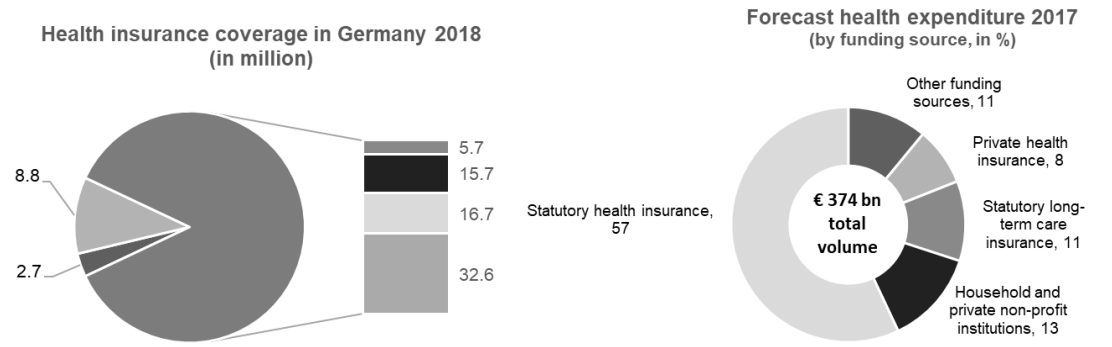
Insurance industry important risk sharing mechanism

The German insurance industry is of major importance when it comes to risk sharing within the economy. Global warming, demographic change, rising geopolitical risks and the rapidly increasing process of digitalisation are posing major challenges for society and the economy. Enterprises want to protect their assets from unforeseeable risks threatening their business operations. Regarding private households, risk coverage is more about insurance products compensating for expenses associated with health recovery and health care and protection against loss or damage of personal objects such as property, bicycles or cars.

German citizens are required by law to take out health and long-term care insurances.

Regarding health and long-term care insurance, Germany is characterised by broad insurance coverage because citizens are required by law to take out health and long-term care insurance. According to data published by the market research firm Destatis, roughly 71 million, or 86%, of the German population is insured via statutory health and long-term care insurances, whereas 8.8 million, or 10.7%, have chosen to be insured via the private health system. Here, 5.7 million (6.9%) of Germans who are currently insured via statutory health insurance have chosen to stay within this system voluntarily, despite the possibility of switching to privately organised health insurers. In Germany, self-employed persons, freelancers and citizens who are on the payroll with an annual gross income of at least €59,400 are free to choose membership between private or statutory health insurance.

The health insurance market in Germany

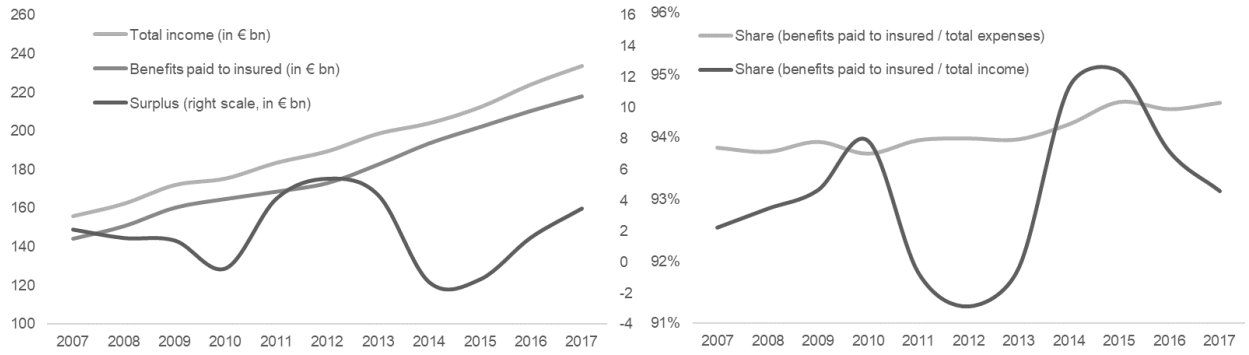


Source: Destatis 2018, FMR

The well-being of statutory health insurers is positively impacted by a rising contribution assessment ceiling and a low interest rate policy of the ECB.

As shown in the left chart below, total income and benefits paid to members of statutory health insurers in Germany have been on the rise over the last decade. In parallel, the benefits paid to insured persons increased more than the total expenses of statutory health insurers (right chart), implying that general and administrative expenses have been reduced over time. Another positive aspect is the fact that health expenditures in relation to total income of statutory health insurers decreased from 95.1% in 2015 to 93.1% in 2017. However, this has been with the regular/yearly increase of the contribution assessment ceiling (current level at €53,100 p.a.). In the past, without the steady increase of the contribution assessment ceiling statutory health insurers' total income would have been too low to compensate for the rising health expenditures. Further, the low interest rate policy of the ECB had a positive effect on the German economy and thus on employment, which in turn increased the total income of statutory health insurers. Without these positive impacts, statutory health insurers' surpluses (left chart below) would have been below the positive level observed in 2016 and 2017.

Financial development of statutory health insurers in Germany



Source: German Federal Ministry of Health 2018 2018, FMR

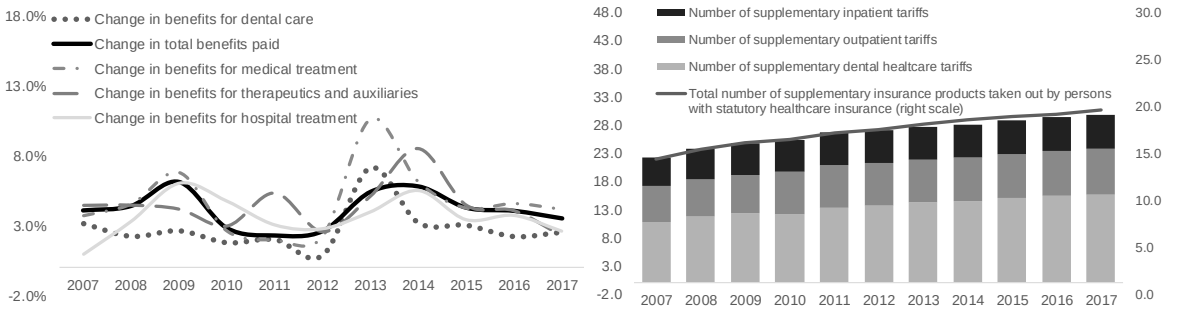
Demographic trend put strain on statutory health insurers

Over the last decade, German statutory health insurers covered rising health expenses without financial strain because total income surpassed the total expenses, except for fiscal years 2010, 2014 and 2015. As mentioned before, the steadily rising level of the contribution assessment ceiling and the stimulating effects of low interest rates for economic activity have been crucial supportive elements so far. However, to evaluate the future prospects of German statutory health insurers, demographic development should also be taken into account. One important observation in demographic development is the fact that the German population is getting older and older. According to calculations from the German Federal Statistical Office, the population in Germany is expected to decrease from today's 82 million people to approximately 70–76 million in 2060. Simultaneously, the share of old individuals is projected to increase perceptibly.

Rising per capita health expenditures and shrinking per capita contribution payments

The crucial point about the aforementioned developments is that the working class is shrinking and the level of the contribution assessment ceiling cannot rise forever to compensate for the rising health expenditures. According to market researchers, in the coming years, per capita health expenditures of German individuals will rise, whereas per capita payments of members of the statutory system will decrease because of an advancing ageing of society. To put it differently, in the coming years, a shrinking working population will have to devote a rising share of national income for health expenditures to keep the current health care system running. This scenario burdens statutory health insurance funds, which will be forced to restrict their treatment catalogue to provide the most vital treatments to as large a part of the German population as possible.

Change in benefits paid (in %) & Supplementary health insurance market (in millions)



Source: German Federal Ministry of Health 2018 2018, FMR

Dental care with lowest treatment coverage at statutory health insurers…

A relatively stable share of 66% of total benefits paid to members of the statutory system are expenditures for medical treatment, therapeutics and auxiliaries, hospital treatment and benefits used for dental care. As can be seen from the left chart above, these various expenditure categories developed differently over the last decade. Whereas the change of yearly expenditures for medical treatment, therapeutics and auxiliaries, as well as hospital treatment, roughly increased in parallel to the total benefits paid for statutory health-insured parties, the growth rate for benefits allocated to dental care hovered significantly below all other expenditure categories. Obviously, treatment coverage related to dental care expenditure was even more limited compared with all other medical treatments.

…exhibits highest growth within the supplementary health care insurance category

Simultaneously, the number of underwritten supplementary health care products offered by insurance companies increased significantly over the last decade. The total number of supplementary insurance products taken out by persons with statutory health care insurances rose by an annual average growth rate (CAGR) of 3.8% between 2007 and 2017, adding up to 19.58 million contracts. The largest (15.67 million tariffs) and fastest growing category (CAGR: 4.8%) of supplementary insurance products was represented by dental health care tariffs, the category with the weakest support within the statutory health system. Supplementary inpatient care and outpatient care insurance tariffs showed a positive CAGR of 2.8% and 1.7% respectively, whereby at the end of 2017, the outpatient care number of tariffs (8.02 million) surpassed the inpatient care number of tariffs (6.11 million) by roughly 2 million contracts.

Property & Casualty insurance

High competition within the property and casualty insurance sector

Property and casualty insurance encompasses the insurance of objects and items, for example, peoples' homes or cars, and also provides liability coverage if someone is found legally responsible for an accident that causes injuries to another person or damage to another person's belongings. Apart from automotive insurance, all other kinds of property and casualty insurance products are not mandatory in Germany. Further, market forces driving demand for property and casualty insurance products are not comparable with developments in the health insurance sector because of the voluntary nature of property and casualty insurance products. Moreover, most customers do not perceive property and casualty insurance as essential, though these products might absolutely preserve them from existential risk. This might also explain the relatively more intense competition within that sector compared with the health insurance market, where legislation has set the rules for competition, that is, the characteristics of insurance offerings, in a more restrictive way.

Property & Casualty insurance market in Germany - Premiums

Premium income in property & casualty insurance by class (in € bn)	2016	2017	Share in %	Change in %
Total of motor insurance	25,906	26,956	39.5%	4.1%
Total of property insurance	18,741	19,444	28.5%	3.8%
General liability insurance	7,667	7,746	11.3%	1.0%
Private accident insurance	6,450	6,479	9.5%	0.4%
Legal expenses insurance	3,828	3,981	5.8%	4.0%
Marine and aviation insurance	1,847	1,831	2.7%	-0.9%
Credit, surety and fidelity insurance	1,660	1,675	2.5%	0.9%
Roadside assistance	196	207	0.3%	5.6%
Total of property & casualty insurance	**66,296**	**68,320**	**100%**	**3.1%**

Source: GDV Statistical Yearbook of German Insurance 2018, FMR

Market volume in the property and casualty market lower than in the health insurance industry

Compared with the health insurance industry, the property and casualty market is characterised by a lower total premium income, as depicted in the chart above. The largest subsector within the property and casualty insurance market is represented by motor insurance, which also showed the second largest growth in 2017. Last year, the combined premium income of the property, general liability, private accident and legal expenses insurance market was 55.1% of the total premium income. In the same year, the benefits paid within the aforementioned insurance categories added up to 48.6%, pointing to a relatively more favourable claims ratio compared with the other subsectors.

Property & Casualty insurance market in Germany - Claims

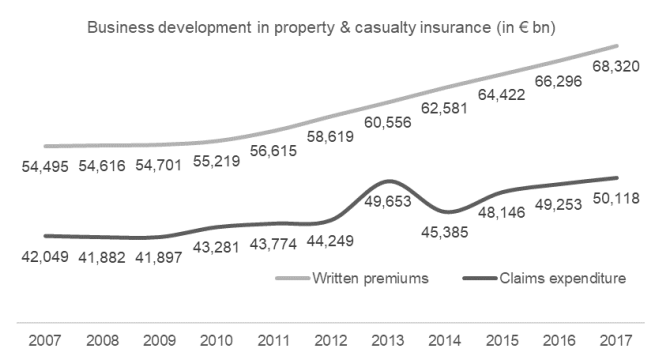
Claims expenditure in property & casualty insurance by class (in € bn)	2016	2017	Share in %	Change in %	Claims ratio in %
Total of motor insurance	22,762	23,649	47.2%	3.9%	87.7%
Total of property insurance	13,140	13,099	26.1%	-0.3%	67.4%
General liability insurance	5,046	5,136	10.2%	1.8%	66.3%
Private accident insurance	3,238	3,364	6.7%	3.9%	51.9%
Legal expenses insurance	2,792	2,738	5.5%	-1.9%	68.8%
Marine and aviation insurance	1,281	1,178	2.4%	-8.0%	64.3%
Credit, surety and fidelity insurance	768	718	1.4%	-6.5%	42.9%
Roadside assistance	226	235	0.5%	4.0%	113.5%
Total of property & casualty insurance	**49,253**	**50,118**	**100%**	**1.8%**	**73.4%**

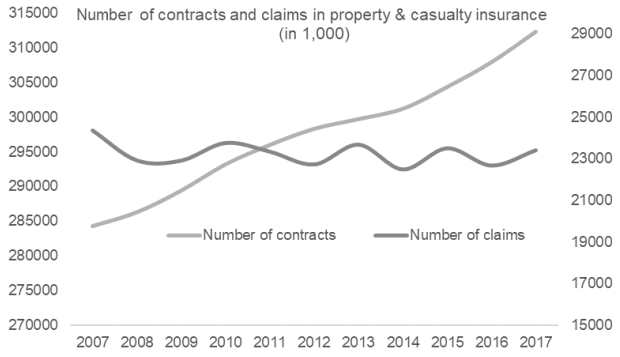
Source: GDV Statistical Yearbook of German Insurance 2018, FMR

Written premiums and number of contracts show steady growth

To evaluate this historical growth, the left chart below depicts the long-term trend of written premiums and claims expenditure in the property and casualty insurance industry. As shown by the left chart below, between 2007 and 2010, written premiums showed a flat development, despite the continuously rising number of contracts. This implies that written premiums per insurance contract dropped, pointing to stiff competition. From 2011 onwards, written premiums returned to a growth path.

Property & Casualty insurance market in Germany – Premiums & Claims





Source: GDV Statistical Yearbook of German Insurance 2018, FMR

Competition

Online insurance products and services of major importance

DFV is solely active in the German market and there competes with a variety of institutions. As a highly digitalised and technologically driven insurer with a high share of online sales and services, the market for online insurance products, which

is highly competitive, fragmented and rapidly changing, is of major importance. To differentiate from its competitors, the company's product strategy pursues the goal to offer clearly structured and easily understandable insurance products that are marketed either as product bundles or as individual insurance products.

DFV is technologically forced to offer comprehensible and clearly structured insurance products and services.

DFV's product strategy is derived from the business model that today exhibits a high degree of digitalisation and is steadily being developed towards a fully digitalised insurance company. To fully digitalise business processes and effectively combine the business model of a direct insurer with the usage of digital technology, the company is technologically forced to offer easy-to-understand and clearly structured insurance to automate as many business processes as possible. Offering insurance products in need of explanation requires knowledgeable and customer-friendly personnel stuff, which increases operational costs and is diametrically opposed to the process of ongoing digitalisation. Therefore, to press ahead with penetrating the online sales channel, the company streamlined and clearly structured its insurance product supply via a 4x4 product matrix that was applied to the supplementary health care segment and the property and casualty product offerings.

IT infrastructure enables real-time data processing and innovative customer services

By increasing business efficiency through automation, the company has continuously reduced operational costs, allowing for price reductions and thus enhancing competitiveness. The same is true for technology-driven product innovations that differentiate innovative market players from sluggish and old-fashioned competitors. For example, in 2014, DFV abandoned batch processing and introduced a new inventory control system as part of its IT infrastructure. Since then, the tracking, analysing and processing of information/data is done in real time. Hereby, contracting is fully digitalised/automated, and innovative customer services such as usage of digital language assistants and comfortable processes are made possible. In turn, this accelerates product innovations and thus improves time-to-market, which is a decisive competition factor, especially in highly competitive and fast markets.

DFV is well prepared to counter competitive forces

Also, the invention of situational accident insurance, a real innovation within the property and casualty insurance market, where clients have the possibility to adjust their existing protection flexibly on a daily basis, would not be realisable without the event-based IT infrastructure DFV is relying on. Therefore, given the scalable IT infrastructure and the ability to expand insurance offerings by new and innovative products and services with a short time-to-market, the company is more than well prepared to counter competitive forces.

Big insurance companies have the financial power to spawn new competitors.

Therefore, the competitive advantage DFV possesses is its powerful IT infrastructure that defines product strategy, innovation and customer approach. However, whereas DFV benefits from economies of technology, other less-innovative market players dominate by business volume, which is also a rather powerful competitive factor. That is, big traditional insurers such as Allianz, R+V, Debeka, HanseMerkur, ERGO and ARAG are equipped with enough financial power to support innovative and technology-driven insurance companies and intensify competition through the emergence of additional market players. It could also occur that a smaller and younger insurtech such as the Munich-based Ottonova starts collaborating with incumbents or gets funding from strategic investors to spur growth. This could detrimentally affect DFV's corporate growth and downsize prospective market volume because Ottonova offers insurance products and services comparable to DFV's product and service portfolio.

As a direct insurer with a strong focus on online business, as of today, DFV primarily faces competition from companies such as ERGO Direkt Versicherungen AG and ERGO Direkt Krankenversicherung AG, as well as HanseMerkur Allgemeine Versicherung AG and its subsidiary HanseMerkur.

Financials

Historical Development

Profit and Loss Account

CAGR (2014 to 2017): 12.3%

Between fiscal years 2014 and 2017, gross written premiums showed a CAGR of 12.3%, which was well above market growth. Looking at the segments, it is obvious where the growth dynamics came from. While the gross written premiums in the damage/accident-segment increased slightly from € 15.72m in 2014 to € 17.14m in 2017 (+9%), the underwriting activity related to the supplementary health insurance-segment evolved more dynamically with gross written premiums increasing from € 34.13m in 2014 to € 53.52m in 2017 (+56.8%). In total, gross written premiums increased by 41.74% to € 70.65m for the same period.

DFV – Gross written premiums (in €m)

Gross written premiums	2014	2015	2016	2017	CAGR (14-17)
Supplementary health insurance	**34.1**	**39.5**	**45.5**	**53.5**	**16.2%**
Growth yoy in %		15.8%	15.1%	17.7%	
Share in %	68.5%	62.6%	71.0%	75.7%	
Damage/accident	**15.7**	**23.7**	**18.6**	**17.1**	**2.9%**
Growth yoy in %		50.5%	-21.4%	-7.8%	
Share in %	31.5%	37.4%	29.0%	24.3%	
Total result	**49.8**	**63.2**	**64.1**	**70.7**	**12.3%**

Source: DFV Deutsche Familienversicherung AG, FMR

In order to protect its business from unusual and major events, DFV transfers portions of its risk portfolio to reinsurance companies. Thus, under a proportional reinsurance agreement, a contractually stipulated share of yearly gross written premiums is conveyed to reinsurers which, in turn, bear a portion of the total benefits paid to claimants. Moreover, the reinsurer reimburses the insurer, in part, for the acquisition costs and administrative expenses associated with insurance operations.

In 2017, 56.13% of the gross written premiums were ceded to reinsurers.

For example, in fiscal year 2017, the company generated € 70.65m in gross written premiums, of which 56.13% or € 39.66m were ceded to reinsurers. As shown in the company´s annual statement, between 2015 and 2017 the average share of gross written premiums ceded to reinsurers was approximately 56%. Through the cession of risks, the company reduces the likelihood of insolvency caused by the obligation to pay a large amount of insurance benefits within a short period of time caused by mass accidents, accumulation of claims or pandemic risk. Furthermore, by steadily compressing its underwriting risks DFV stabilises its operational results, empowers its equity, improves its solvency and creates the prerequisite for further corporate growth. On the downside, net written premiums are supressed. During 2014 and 2017, net written premiums soared disproportionately by 10% to € 31m. This subdued growth in net written premiums was partly compensated by the change in unearned premiums as well as the results from investments and other income. Thus, during the same period total income increased by 16.60% to € 33.1m.

Reinsurers paid 52.36% of all benefits paid to customers in 2017.

The average number for the share of benefits paid to customers (58.1% of DFV´s total expenses in 2017) that was taken over by reinsurers was roughly 52.36%. Thus, it was significantly below the average for the shared gross written premiums. However, with a share of 62.75%, reinsurers took over a relatively large portion of

DFV´s expenses for insurance operations, which accounted for 36.9% of the company's total expenses in 2017. As shown in the chart on the right, below, between 2014 and 2015, accompanied by increases in the reinsurers´ share of gross written premiums, a relatively high percentage of customers´ claims and expenses for insurance operations was covered by reinsurers. In turn, this burdened the reinsurers´ share of DFV´s insurance business, which is defined as the difference between reinsures´ share of the gross written premiums and the sum of the reinsurers´ share of paid claims and expenses for the insurance operations (chart on the left, below). After 2015, this metric showed a steady upward movement caused by a significant decrease in the reinsurers´ share of operational expenses.

EBT was stabilised by the investment income.

When the same indicator is applied for DFV´s share in its own business operations, a rather asymmetric development can be observed. While the company´s share in its own insurance business soared steadily between 2014 and 2016, in 2017 a downturn was experienced. However, as shown by the chart on the left, below, DFV´s income before taxes (EBT) remained nearly stable. This points to the positive and stabilising investment income that cushioned the unfavourable outcome of the reinsurance activities. Apart from 2016, the results from investments made a positive contribution to total income, with yields ranging between 1.27% to 3.53%.

DFV´s & Reinsurers´ share in the insurance operations

Source: DFV Deutsche Familienversicherung AG, FMR

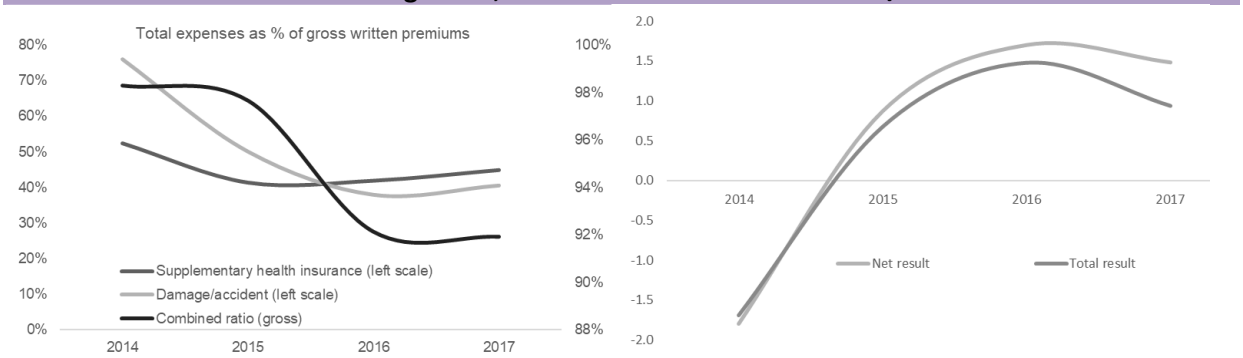
In 2017, the company incurred total expenses of € 30.98m, including other expenses of € 1.57m. Other expenses included underwriting expenses, such as deposit interest insurance, and non-underwriting expenses, such as supervisory board compensations. As previously mentioned, the lion´s share of total expenses consists of benefits paid to customers (€ 17.99m) and expenses for insurance operations (€ 11.42m). Expenses for insurance operations include direct and indirect customer acquisition costs and administrative expenses. Commissions and profit shares received from reinsurers are deducted from this amount.

Reinsurance limits insurance risks and stabilises costs.

In comparison to fiscal year 2014, total expenses only increased by 4.3% in 2017 due to the stabilising effect of risk transferring through reinsurance. The benefits of reinsurance for DFV´s insurance business is also exemplified by comparing risk sharing in 2014 with subsequent years. As shown in the income statement, in 2014 the share of gross written premiums allocated to reinsurers was 43.48%, which was well below the levels seen in subsequent years. The same was true for the reinsurers´ share in the benefits paid to customers and the expenses for insurance operations. Thus, in 2014, DFV took in a lot more of gross written premiums and shared much less of the paid claims and expenses with reinsurers. This exposed the company to underwriting risks that increased its total expenses to unsustainable

levels. While total expenses as a percentage of the gross written premiums in the supplementary health segment amounted to 52.4% in 2014, in subsequent years, this was reduced significantly to an average of 42.7%. The following chart shows that the cost reduction in the damage/accident-segment was even stronger. Total expenses as a percentage of gross written premiums decreased from 76% in 2014 to an average of 42.8% in subsequent years.

DFV – Evolvement of business segments, combined ratio and total result/net result



Source: DFV Deutsche Familienversicherung AG, FMR

2015: business restructuring and suspension of insurance products and services

In 2015, the year after the company experienced a negative net result of € 1.33m, DFV´s business operations were completely restructured and realigned. The business line of technical insurance, which is susceptible to fraud and which caused unexpectedly high claims in 2014, was suspended; it has since been phased out. Moreover, the number of employees was reduced and the sales division was reorganised. In 2016, DFV introduced its customer-friendly and innovative product-matrix for supplementary health insurance products. Further, the broker portal was developed and introduced, and the restructuring process was completed in 2017.

In comparison to other insurtechs, DFV generates profits.

Apart from 2014, the company realised a positive net result for each fiscal year. In comparison to other insurtechs, this is a very impressive result given that almost all of them are growing their business while in deep red. As shown by the chart on the right, above, there was a difference between the reported net result and the total income related to the unrealised gains and losses from investment activity. The sum of the unrealised gains and losses from investments (unrealised changes in the value of the financial assets measured at fair value that are available for sale at any time) is recognised as a separate item in the corporation´s book value of equity.

DFV – Key figures (in €m)

Income statement	2014	2015	2016	2017	CAGR (15-17)
Gross written premiums	**49.8**	**63.2**	**64.1**	**70.7**	**5.8%**
change in %	29.5%	26.7%	1.4%	10.3%	
Total income	**28.4**	**28.4**	**28.1**	**33.1**	**8.0%**
in % of gross written premiums	56.9%	45.0%	43.8%	46.8%	
Operating result (EBIT)	**(1.3)**	**0.7**	**2.0**	**2.1**	**73.0%**
in % of total income	-4.7%	2.5%	7.2%	6.4%	
Net result	**(1.8)**	**0.9**	**1.7**	**1.5**	**30.6%**
in % of total income	-6.3%	3.1%	6.1%	4.5%	

Source: DFV Deutsche Familienversicherung AG, FMR

Balance Sheet – Assets

In 2017, balance sheet assets primarily consisted of investments in financial assets and the share of reinsurers in the underwriting provisions that, together, accounted for 80.4% of the balance sheet total. Between 2014 and 2017, both balance sheet items showed a steady appreciation.

Investment management is executed by MainFirst.

The investment volume, generated through premiums received from insurance contracts, reached € 46.36m in 2017. The funds were allocated to and managed by the company´s own investment fund: DFV Sondervermögen. On 5 December 2013, DFV entered into an asset management agreement with MainFirst Affiliated Fund Managers S.A. Since then, MainFirst has been responsible for managing DFV´s security assets. In doing so, MainFirst is obliged to comply with all legal, and in particular, regulatory requirements in connection with the investment of the respective assets. For its asset management services, MainFirst received a payment of € 192.8m in 2017. As of the end of 2017, 82.7% of the investment volume was represented by marketable government and investment grade rated corporate bonds with varying and congruent maturities that are held to maturity. In terms of the investment volume, 17.3% was allocated to stocks of listed and regulated companies that are part of OECD member countries. Of the total investment volume, 84.6% was denominated in EUR-currency.

DFV – Assets (in €m)

Balance sheet - Assets	2014	2015	2016	2017	CAGR (14-17)
Intangible Assets	8.0	9.3	9.6	9.3	5.1%
Investments	12.8	15.6	31.7	46.4	53.5%
Current accounts at banks	1.7	8.5	4.7	5.5	47.0%
Share of reinsurers in underwriting provisions	4.9	13.6	20.7	29.4	81.4%
Others	8.9	8.3	6.0	3.7	-25.6%
Total assets	**36.4**	**55.4**	**72.6**	**94.3**	**37.3%**

Source: DFV Deutsche Familienversicherung AG, FMR

As previously explained, based on the proportional reinsurance agreements, DFV cedes a contractually stipulated share of yearly gross written premiums to reinsurance companies. Therefore, DFV reduces its underwriting risks and increases its underwriting capacity, which is a crucial component for prospective corporate growth.

The share of reinsurers in the underwriting provisions.

In general, regulators prohibit insurance companies from underwriting an unlimited number of policies in order to protect policyholders. The regulatory supervision has implemented solvency capital requirements (SCR) that determine the amount of funds insurance and reinsurance companies in the European Union are required to hold. The higher the volume of underwritten policies, the higher the associated underwriting risks that, in turn, increases the SCR. In order to increase its underwriting capacity, an insurer can put more weight on underwriting policies that cover fewer volatile risks and/or cede a share of the obligations to reinsurers. In the past, DFV used both options to spur further growth. For example, in 2015 the company suspended its technical insurance business line, which caused unexpectedly high claims in 2014. Additionally, DFV has ceded a share of its liabilities in exchange for a portion of the premiums paid by policyholders. These liabilities assumed by the reinsurers are subsumed under the balance sheet item: “Share of reinsurers in the underwriting provisions”.

The balance sheet item, “Intangible assets”, refers to purchased software, and it reflects the value of DFV´s proprietary IT infrastructure. The company invests in its intangible assets; thus, it continuously strives to improve its developed software and IT infrastructure. Between 2015 and 2017, investments in intangible assets amounted to € 4.6m. As of the end of 2017, total investments in the company´s digitalisation amounted to € 11.9m.

Digitisation investments totalled € 11.9m

Balance Sheet – Equity and liabilities

Although shareholders´ equity steadily increased between 2014 and 2017, the equity ratio decreased from 39.44% in 2014 to 20.63% in 2017. This was due to a disproportional surge in the gross underwriting provisions (CAGR of 52.1%) and liabilities (54.6%) during the same time period.

Gross underwriting provisions consist of provisions for outstanding claims, actuarial reserve, unearned premiums and other underwriting reserves. The largest item within the gross underwriting provisions is actuarial reserves, which reflect the commercial value of the insurer's liability that arise from obligations under an insurance contract, provided that it does not relate to claims already due, or that arise from insurance claims that have already occurred. Because these obligations are uncertain, this is a provision.

Liabilities that either arise from obligations under an insurance contract related to claims that are already due or from insurance claims that have already occurred but are still uncertain are subsumed in the subcategory, “Reserves for outstanding claims”. Taking into account the item, “Share of reinsurers in underwriting provisions”, on the asset side of the balance sheet, it becomes obvious that reinsurers took on a disproportionately high share of underwriting risks over the last four years. Because DFV, as the ceding company, is still responsible for the claims settlement process, it is vital that the company have an accurate and comprehensive selection process for its reinsurance partners.

Reinsurers took on a disproportionately high share of underwriting risks.

DFV – Equities & Liabilities (in €m)

Balance sheet - Equity and liabilities	2014	2015	2016	2017	CAGR (14-17)
Equity	14.4	17.0	18.5	19.5	10.6%
Gross underwriting provisions	13.3	26.2	35.3	46.8	52.1%
Liabilities	7.0	10.6	16.8	26.0	54.6%
Others	1.7	1.5	2.0	2.0	5.3%
Total assets	**36.4**	**55.4**	**72.6**	**94.3**	**37.3%**

Source: DFV Deutsche Familienversicherung AG, FMR

The position, “Liabilities”, is dominated by the subcategory, “Other liabilities”, which is dominated by the item, “Deposit liabilities for reinsured insurance business”, which reflects the funds held by the company for the reinsurers´ share of the underwriting provisions. Thus, all the premiums that are collected from policyholders and that are ceded to reinsurers continue to be owned and managed by the company. Financial assets held for sale, i.e. investments, largely contain the corresponding amount on the assets side of the balance sheet.

Cash Flow Statement

DFV´s operating cash flow was positively driven by growing its insurance business.

DFV´s growing insurance business generated positive and continuously increasing operating cash inflows between 2014 and 2017. On the one hand, this was attributable to the mainly positive net results. On the other hand, the growing insurance business, primarily the continued growth of DFV´s core business. i.e. the private supplementary health and long-term care insurance segment (SHC), induced favourable changes in retained funds for the reinsurers´ share of the underwriting provisions and changes in the gross underwriting provisions that positively contributed to cash flows from operating activities.

DFV – Cash flows (in €m)

Cash Flow Statement	2014	2015	2016	2017	CAGR (14-17)
Cash flow from operating activities	3.5	10.1	14.8	16.6	67.6%
Cash flow from investment activities (right scale)	-10.3	-5.3	-18.7	-15.8	15.1%
Cash flow from financing activities	0.0	2.0	0.0	0.0	n.m.
Changes in cash funds	**-6.8**	**6.8**	**-3.9**	**0.9**	n.m.
Cash funds at beginning of fiscal year	**8.5**	**1.7**	**8.5**	**4.7**	n.m.
Cash and cash equivalents at end of fiscal year	**1.7**	**8.5**	**4.7**	**5.5**	**47.0%**

Source: DFV Deutsche Familienversicherung AG, FMR

CAPEX of approx. ~€ 1.5m p.a.

The company primarily used cash proceeds from operating activities for investments in financial assets held for sale. Between 2014 and 2017, capital expenditures relating to investments in intangible assets, in particular developed software and IT infrastructure, amounted to a yearly average of € 1.53m. The company´s management expects the ongoing and future capital expenditures to be approximately € 1.0m per year.

In 2015, DFV increased its equity base leading to a cash inflow of € 2.0m. No other capital measures were implemented between 2014 and 2017.

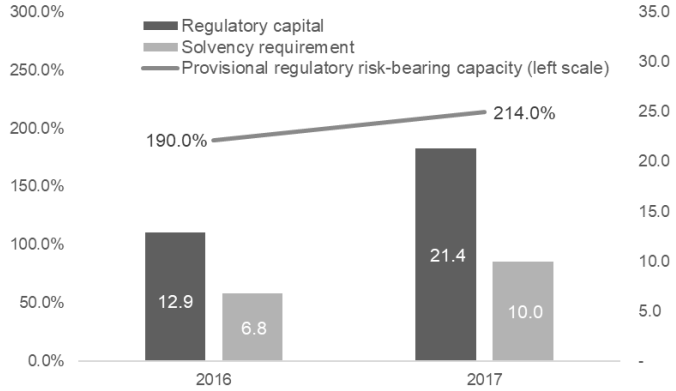
Solvency II & Risks

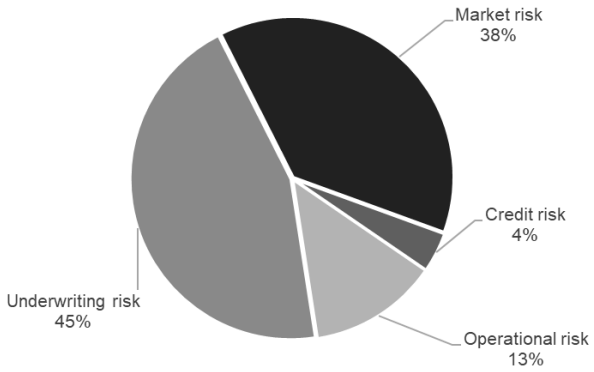
At the end of 2017, DFV´s regulatory risk-bearing capacity was 214% in comparison to 190% in 2016. The improvement in the regulatory risk-metric induced by a disproportional increase in the regulatory capital suggests that the company strengthened its capability to meet all of its financial obligations to policyholders and beneficiaries related to the existing business, as well as new business expected over the course of 12 months with a 99.5% probability. This implies that the possibility of financial distress is limited to less than one time in 200 cases.

The capability to meet all financial obligations has increased.

The solvency capital requirement is recalculated at least once each year.

DFV – Solvency ratios & Business risks





Source: DFV Deutsche Familienversicherung AG, FMR

Estimates

Income Statement Assumptions

Strong growth is expected in the SHC-segment.

In deriving projections for the gross written premiums, we anticipate a strong growth in newly acquired insurance contracts, especially within the supplementary health and SHC-segment. For the recently concluded fiscal year 2018e, gross written premiums in the SHC-segment are expected to increase by 25.1% to € 66,97m. As of the end of 2018e, this corresponds to an increase of approximately 50,000 contracts and a total portfolio of 364,000 insurance contracts.

Sales and marketing expenses are expected to double.

For the period spanning 2019e and 2022e, we anticipate a CAGR of 28.9% for the gross written premiums within the SHC-segment. The company aims to reach that above average growth (CAGR 2014-2017: 16.2%) by doubling its sales and marketing expenses.

While the company spent roughly € 16.75m for customer acquisition costs (sales and marketing expenses) in 2017 and 2018e, it is estimated to spend € 32m in 2019e and 2020e.

There is a high potential for supplementary health care insurance products in Germany.

Search engine marketing with Google Ads and Bing Ads, search engine optimisation for Google and Bing Search, TV marketing (ProSiebenSat.1) and affiliate marketing are all expected to deliver vital impulses for further penetration into the online sales channel through which the company already generates most of its gross premiums (80%). DFV is also targeting growth via cooperation with partners that are acting as multipliers. For instance, in 2019e DFV began cooperating with the insurance intermediary, IG BCE Bonusagentur, Germany´s third largest union with roughly 638,000 members at the end of 2017. As part of the cooperation agreement, DFV acts as a developer of tailor-made insurance products and as a risk-carrier. Based on the cooperation agreement, DFV, in coordination with IG BCE and Henkel AG & Co., KGaA, a German manufacturer of home, beauty care and adhesive products, jointly developed a supplementary nursing care insurance product to reduce the gap between statutory health care insurance benefits and rationally anticipated national mid- to long-term needs for nursing services. According to market researchers, in Germany the potential for supplementary insurance products amounts to approximately 120 million contracts, encompassing supplementary insurance offerings for long-term care, nursing care and dental insurance products. The company has high aspirations of securing at least 1% of that potential mid- to long-term.

DFV – Forecast gross written premiums (in €m, Number of contracts in 1,000)

Gross written premiums	2014	2015	2016	2017	2018e	2019e	2020e	2021e	2022e
Supplementary health insurance	**34.1**	**39.5**	**45.5**	**53.5**	**67.0**	**79.9**	**106.8**	**136.3**	**171.1**
Growth yoy in %		15.8%	15.1%	17.7%	25.1%	19.3%	33.6%	27.6%	25.5%
Share in %	68.5%	62.6%	71.0%	75.7%	89.3%	92.7%	93.8%	94.5%	95.1%
Number of contracts	*221*	*247*	*275*	*314*	*364*	*444*	*534*	*634*	*744*
Change in number of contracts		*26*	*28*	*40*	*50*	*80*	*90*	*100*	*110*
Damage/accident	**15.7**	**23.7**	**18.6**	**17.1**	**8.0**	**6.3**	**7.1**	**8.0**	**8.9**
Growth yoy in %		50.5%	-21.4%	-7.8%	-53.3%	-21.6%	12.8%	12.7%	11.3%
Share in %	31.5%	37.4%	29.0%	24.3%	10.7%	7.3%	6.2%	5.5%	4.9%
Number of contracts	*307*	*299*	*228*	*150*	*100*	*78*	*86*	*95*	*104*
Change in number of contracts		*-9*	*-71*	*-78*	*-50*	*-22*	*8*	*9*	*9*
Total	**49.8**	**63.2**	**64.1**	**70.7**	**75.0**	**86.2**	**113.9**	**144.3**	**180.0**

Source: DFV Deutsche Familienversicherung AG, FMR

With regard to the property and accident insurance segment (PAI), a reduction in gross written premiums by -53.3% to € 8m is forecasted for 2018e. Considering the

ongoing suspension of the electronic insurance business activities, we also recognise that the terminated coinsurance contract with RheinLand Versicherungen has burdened written premiums that were generated through the sale of household insurance products. This negative development is projected to continue until the end of the current fiscal year, 2019e. From 2020e onwards, our model depicts that the gross written premiums within the PAI-segment will increase again. However, despite the huge market potential for accident insurance products in Germany, which market experts estimate to be 31.5 million contracts, our forecast foresees that the share of revenues generated by the PAI-segment will continuously decrease, reaching roughly 5% by at the end of 2022e.

DFV – Forecast income statement (in €m)

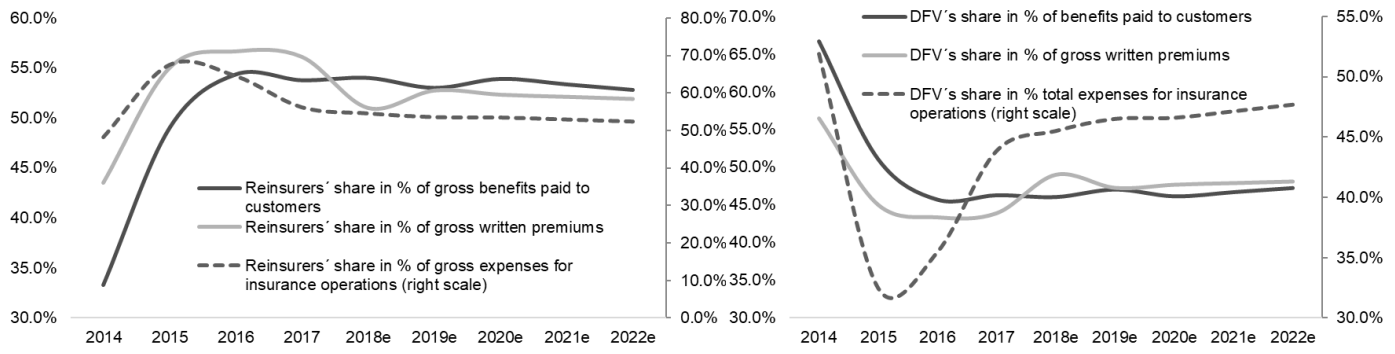
Income statement	2018e	2019e	2020e	2021e	2022e	CAGR (18e-22e)
Gross written premiums	75.0	86.2	113.9	144.3	179.98	24.5%
Share of reinsurers	38.2	45.5	59.6	75.2	93.4	25.0%
Net written premiums	**36.7**	**40.7**	**54.3**	**69.1**	**86.6**	**23.9%**
Benefits paid to customers	41.2	47.8	61.4	77.0	95.0	23.2%
Share of reinsurers	22.3	25.4	33.1	41.1	50.2	22.5%
Net change in benefits paid to customers	**19.0**	**22.5**	**28.3**	**35.9**	**44.9**	**24.0%**
Expenses for insurance operations	26.6	38.8	44.4	51.2	61.8	23.4%
Share of reinsureres	14.5	20.7	23.7	27.1	32.3	22.2%
Net change of expenses for insurance operations	**12.1**	**18.0**	**20.7**	**24.1**	**29.5**	**24.9%**

Source: DFV Deutsche Familienversicherung AG, FMR

The reinsurers´ share in gross written premiums is diminishing.

As shown in the table above, we anticipate that the total gross written premiums will increase by 24.5% on average each year. The same is true for the share of ceded premiums to reinsurers. Even more important than the growth rate of absolute figures for premiums is the share of business that is allocated between DFV and its reinsurers. Although we assume that premiums will grow for both, in the company's model the reinsurers´ share in the gross written premiums decreases during the forecast period from 52.75% in 2019e to 51.91% in 2022e.

DFV – Forecast DFV´s and reinsurers´ share in insurance operations (in %)



Source: DFV Deutsche Familienversicherung AG, FMR

For 2018e, we anticipate that DFV will cede 51% of its gross written premiums to reinsurers, given that, after the first six months of 2018e, only 44% was ceded to reinsurers (remember that, between 2015 and 2017, the reinsurers´ share of DFV´s gross written premiums was well above 55% each year). Based on our assumption of a lower ceding activity in the years ahead, we have consistently reduced the reinsurers´ share in the gross benefits paid to customers as well as the reinsurers´ share in expenses for insurance operations. To put it differently, our base case model implies a disproportional increase in the benefits paid to customers and the expenses for insurance operations covered by the company.

Extraordinary expenses that must be considered.

As shown in the table below, between 2019e and 2022e total income increases by an average of 29.9% each year, and it reaches € 90.36m in 2022e. In parallel, total expenses, consisting of benefits paid to customers, expenses for insurance operations and other expenses, increase on average by 20.0% each year. Both assumptions lead to a strong increase in DFV´s operating result (EBIT) from € -3.1m in 2019e to € 13.8m in 2022e. The negative EBIT in 2019e is expected to be caused by customer acquisition costs. On average, the company pays a sales commission of 12 monthly premiums for each new customer. Because customers are acquired throughout the fiscal year, a growth in gross written premiums has to be accompanied by a disproportionately high increase in sales and marketing expenses because each customer only makes a positive contribution to the company's profit margin after 12 months.

Regarding the disproportionately low increase in total expenses from 2020e onwards, two critical assumptions should be considered. Firstly, growth in gross written premiums is accompanied by a disproportionately low increase in the reinsurers´ share of the gross written premiums. This should lead to a disproportionately high increase in DFV´s total income (leverage effect).

The claims ratio is sinking.

Secondly, the disproportionately low increase in total expenses is also driven by the assumption of a steadily decreasing claims ratio going forward. We think that the suspension of electronics insurance in combination with a shrinking share of written premiums in the PAI-segment will subdue both the volatility and the yearly increase of benefits paid to customers. Thus, going forward, we anticipate a relatively strong increase in the supplementary health insurances operated by type of life insurance, in particular long-term care insurance products for which ageing provisions are build. In comparison to insurance products related to accident insurance and property insurance, the underwriting risks associated with long-term care insurance products are characterised by better predictability and lower claims volatility.

DFV – Forecast total result (in €m)

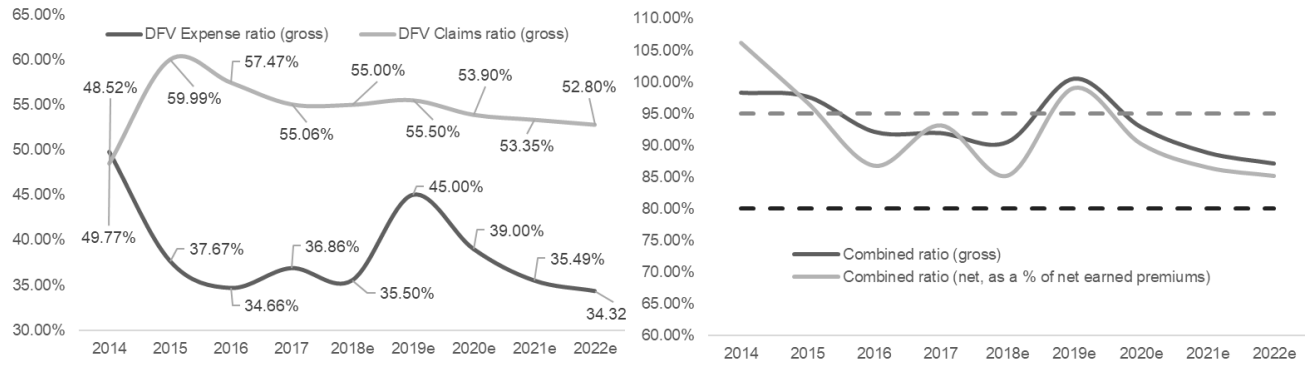
Income statement	2018e	2019e	2020e	2021e	2022e	CAGR (19e-22e)
Total income	**36.1**	**41.2**	**55.4**	**71.4**	**90.4**	**29.9%**
in % of gross written premiums	48.2%	47.8%	48.7%	49.5%	50.2%	
Total expenses	**36.9**	**44.3**	**50.7**	**62.0**	**76.6**	**20.0%**
in % of gross written premiums	49.3%	51.4%	44.6%	43.0%	42.5%	
Operating result (EBIT)	**(0.8)**	**(3.1)**	**4.7**	**9.3**	**13.8**	
in % of total income	-2.3%	-7.5%	8.5%	13.1%	15.3%	
Net result	**(1.3)**	**(2.3)**	**3.5**	**7.0**	**10.3**	
in % of total income	-3.5%	-5.6%	6.4%	9.8%	11.5%	

Source: DFV Deutsche Familienversicherung AG, FMR

Combined ratio within targeted range

Opposed to the assumptions for the claims ratio, we suggest that expenses for insurance operations are going to be higher than the levels seen in previous years, which is first and foremost linked to DFV´s intensified sales and marketing activities. As shown in the chart on the left, below, between 2015 and 2017 the company´s expense ratio hovered between 34.7% and 37.7%; it is expected to do so in 2018e. For the coming years, our estimates imply a strong improvement in the expense ratio, shrinking to more representative levels at the end of the forecast period. All in all, our projections for the company´s income statement lead to a net combined ratio (see the chart on the right, below) that (except for 2019e due to extraordinary high sales and marketing expenses) evolves within the 80% to 95% range targeted by DFV´s management.

DFV – Forecast combined ratio (in %)



Source: DFV Deutsche Familienversicherung AG, FMR

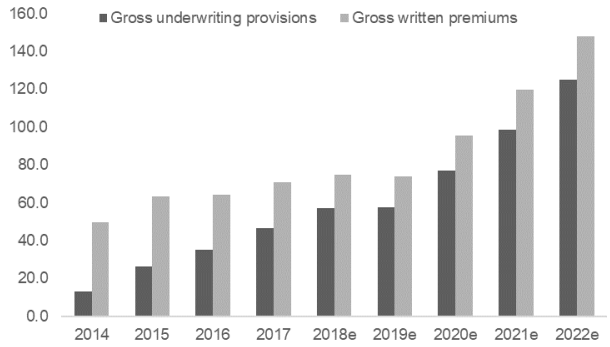
Balance Sheet Assumptions

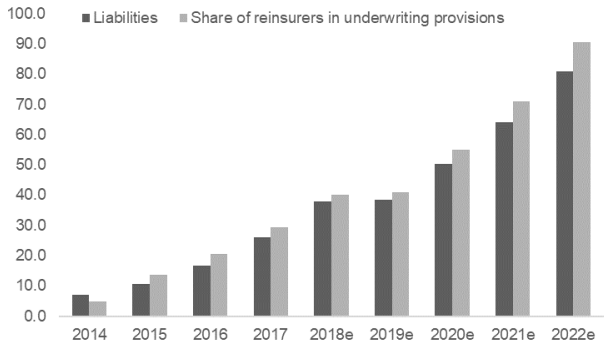
CAPEX of € 7m in 2020e

For the forecast period, we have assumed steady investments into intangible assets of € 1.5m each year, which surpass yearly depreciations of € 0.75m. Moreover, the company has plans to separate the supplementary health and long-term care insurance segments by founding its own health insurance company, Deutsche Familien-Krankenversicherung AG (Healthcare). In addition, DFV strives to establish Deutsche Familien-Lebensversicherung AG (Lifecare). This second foundation will act as a holding company in the new corporate structure and enable DFV to launch new products (term life insurance, occupational disability and pension insurance) for which the company cannot be approved. In order to complete the aforementioned restructuring process and initiate internationalisation, we assume that EUR 7 million of the IPO proceeds will be invested in 2020.

With regard to all other major balance sheet items, our model assumptions have been set to comply with several economic restrictions specific to insurance companies. First of all, rising gross written premiums should be accompanied by rising gross underwriting provisions. Basically, premiums are calculated so that prospective claims are fully covered. The model's projections suggest that premiums cover all prospective benefit payments and that the difference between gross written premiums and gross underwriting provisions remains stable (see the chart on the left, below).

DFV – Forecast provisions and liabilities (in €m)

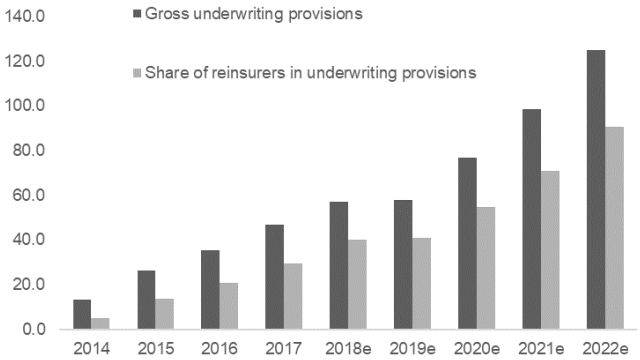


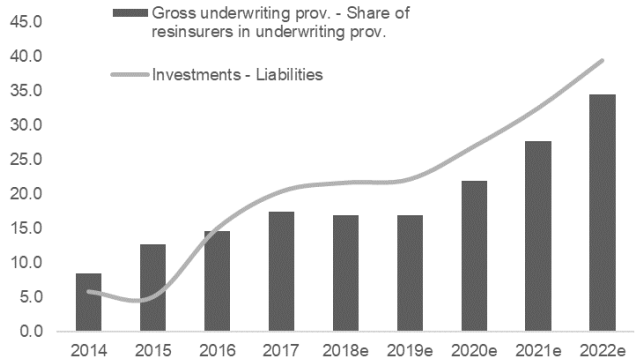


Source: DFV Deutsche Familienversicherung AG, FMR

The development of liabilities mirrors the share of reinsurers in the underwriting provisions that was observed in previous years, with the exception of 2014 (see the chart on the right, above).

DFV – Forecast provisions and investments (in €m)





Source: DFV Deutsche Familienversicherung AG, FMR

As described in the income statement projections, it is assumed that the reinsurers´ share in DFV´s insurance business will decline during the forecast period due to the strengthened regulatory capital as a result of the IPO. That is why a relatively stronger increase in gross underwriting provisions is forecasted in comparison to the share of reinsurers in the underwriting provisions (see the chart on the left, above).

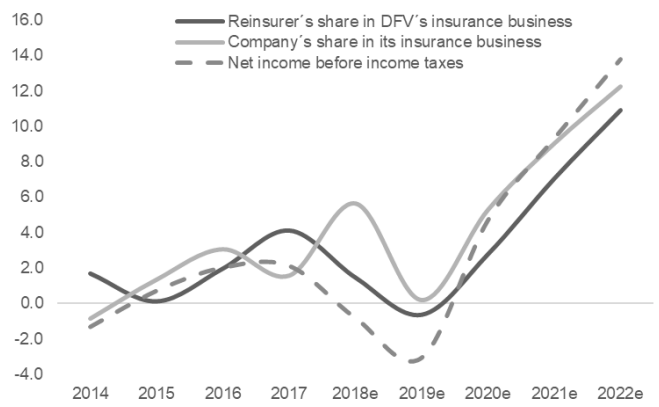
There has been a disproportional increase in the gross underwriting provisions.

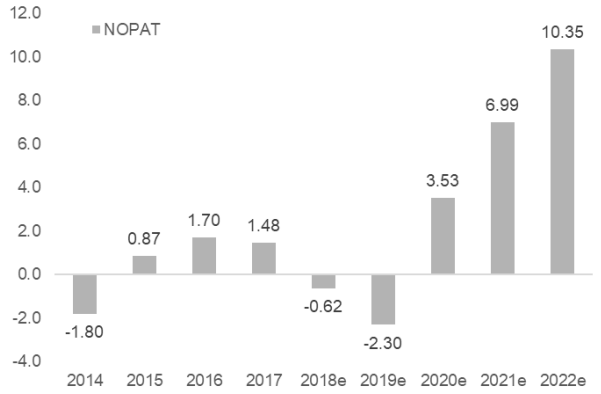
The chart on the right, above, depicts how DFV´s share in the underwriting provision evolves in comparison to the invested funds managed by the company´s own investment fund, DFV Sondervermögen. As shown, the value of the invested funds (after deducting the liabilities) is expected to stay above the expected gross underwriting provision (after deducting the share of the reinsurers in underwriting provisions) that the company is obliged to bear mid- to long-term.

The balance sheet assumptions have also been cross-checked by several other indicators that combine profitability metrics with balance sheet items. The chart on the left, below, shows how EBT develops. The chart on the right depicts the NOPAT-forecast, which is equal to the operating profit less prospective yearly tax burden.

The profitability metrics have been combined with balance sheet items.

DFV – Forecast EBT and NOPAT (in €m)



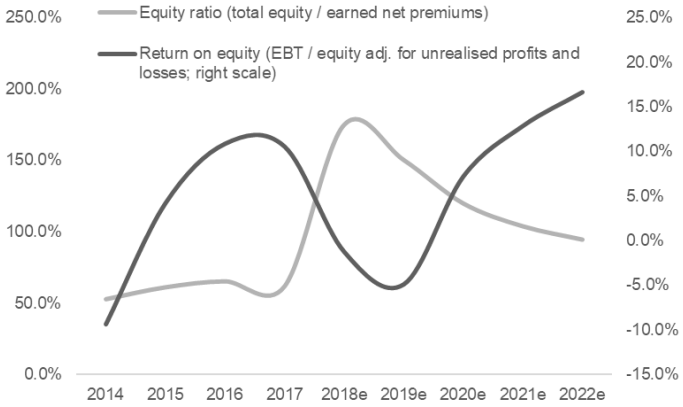


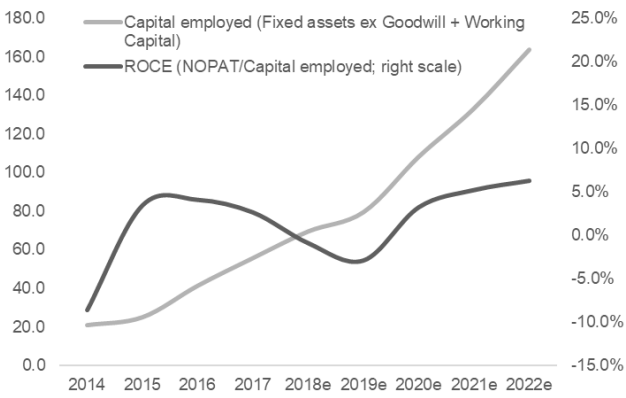
Source: DFV Deutsche Familienversicherung AG, FMR

ROE and ROCE are above historical max-levels

In a second step, the projected EBT and NOPAT were used to derive return on equity (ROE) and return on capital employed (ROCE), respectively. As seen from the charts below, both indicators rise above the highest levels that were observed in the past. While ROE reaches 16.6% in 2022e (max-level in 2016: 10.8%), ROCE increases to 6.32% (max-level in 2016: 4.11%). The highly scalable IT infrastructure as well as the anticipated increase in written premiums per insurance contract are rational justifications for this assumption.

DFV – Forecast equity ratio, ROE, capital employed and ROCE (in €m, in %)



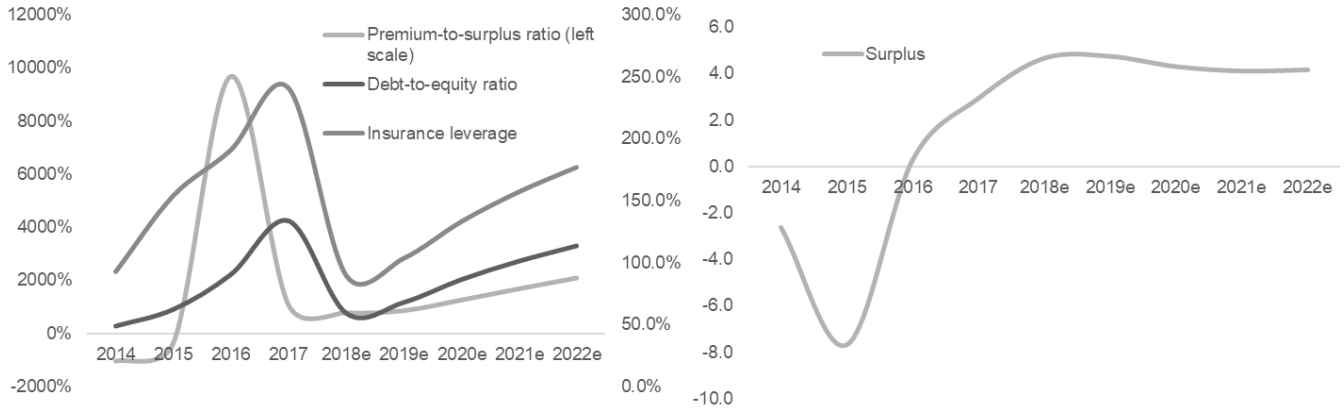


Source: DFV Deutsche Familienversicherung AG, FMR

Surplus enters steady state in 2021e

Furthermore, the generated surplus was analysed. This is defined as the sum of the balance sheet item investments and the reinsurers' share of the underwriting provisions minus the sum of the gross underwriting provisions and liabilities. As shown in the chart on the right, below, these assumptions suggest that the surplus enters a steady state in 2021e. Consequently, the premium-to-surplus ratio moves slightly upward as the earned net premiums are expected to increase going forward.

DFV – Forecast leverage and profitability ratios (in %) & surplus (in €m)



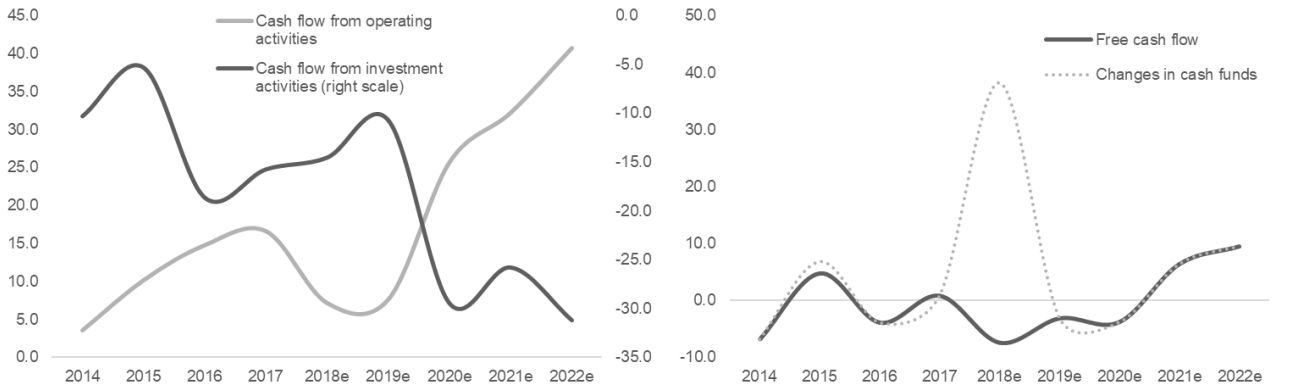
Source: DFV Deutsche Familienversicherung AG, FMR

Cash Flow Statement Assumptions

Based on the income statement and balance sheet assumptions, a dynamic upward movement of operating cash flows is forecasted, as depicted in the chart on the left, below. In parallel, operating cash flow from investing activities that primarily consist of changes in the invested funds and investments in the intangible assets steadily decreases during the forecast period.

A positive change in free cash flow is predicted from 2021e onwards.

DFV – Forecast cash flows and change in cash (in €m)



Source: DFV Deutsche Familienversicherung AG, FMR

Taking into account operating cash flow from financing activities, a positive change in cash funds is forecasted from 2021e onwards. The same is true for the free cash flow that follows a linear upward trend from 2021e going forward.

Appendix

P&L

IFRS EURm	2015	2016	2017	2018e	2019e	2020e
Gross written premiums	**63.2**	**64.1**	**70.7**	**75.0**	**86.2**	**113.9**
YoY growth	26.7%	1.4%	10.3%	6.1%	15.0%	32.1%
Share of reinsurers	34.8	36.3	39.7	38.2	45.5	59.6
as % of gross written premiums	55.0%	56.7%	56.1%	51.0%	52.8%	52.3%
Net written premiums	**28.4**	**27.8**	**31.0**	**36.7**	**40.7**	**54.3**
as % of gross written premiums	45.0%	43.3%	43.9%	49.0%	47.3%	47.7%
Net change in unearned premiums	0.5	-0.7	-0.6	0.3	-0.2	0.0
as % of net written premiums	1.6%	-2.4%	-1.8%	0.8%	-0.4%	0.1%
Earned net premiums	**28.0**	**28.4**	**31.6**	**36.4**	**40.9**	**54.2**
as % of gross written premiums	44.3%	44.4%	44.7%	48.6%	47.4%	47.6%
Result from investments	0.2	-0.6	1.1	-0.7	0.0	0.9
as % of earned net premiums	0.7%	-2.1%	3.4%	-1.9%	0.0%	1.7%
Other income	0.2	0.2	0.5	0.3	0.3	0.3
as % of earned net premiums	0.9%	0.9%	1.5%	0.9%	0.7%	0.6%
Total income	**28.4**	**28.1**	**33.1**	**36.1**	**41.2**	**55.4**
as % of gross written premiums	45.0%	43.8%	46.8%	48.2%	47.8%	48.7%
Net change in benefits paid to customers	19.3	16.8	18.0	19.0	22.5	28.3
as % of gross written premiums	30.6%	26.2%	25.5%	25.3%	26.1%	24.8%
Net change of expenses for insurance operations	7.7	7.9	11.4	12.1	18.0	20.7
as % of gross written premiums	12.2%	12.3%	16.2%	16.2%	20.9%	18.2%
Other expenses	0.6	1.4	1.6	5.9	3.8	1.8
as % of gross written premiums	1.0%	2.1%	2.2%	7.8%	4.4%	1.5%
EBIT (Operating result)	**0.7**	**2.0**	**2.1**	**-0.8**	**-3.1**	**4.7**
as % of gross written premiums	1.1%	3.2%	3.0%	-1.1%	-3.6%	4.1%
EBT (Earnings before income taxes)	**0.7**	**2.0**	**2.1**	**-0.8**	**-3.1**	**4.7**
as % of gross written premiums	1.1%	3.2%	3.0%	-1.1%	-3.6%	4.1%
Income taxes	-0.2	0.3	0.6	0.4	-0.8	1.2
as % of EBT	-22.7%	16.0%	30.1%	-52.6%	25.0%	25.0%
Income from continuing operations	**0.9**	**1.7**	**1.5**	**-1.3**	**-2.3**	**3.5**
Other results (recognized directly in equity)	-0.2	-0.2	-0.5	-0.1	0.0	0.0
Total result	**0.7**	**1.5**	**0.9**	**-1.4**	**-2.3**	**3.5**
Minorities	0.0	0.0	0.0	0.0	0.0	0.0
Shares outstanding (in m)	12.8	12.8	12.8	13.3	13.3	13.3
Basic earnings per share (EUR)	**0.05**	**0.12**	**0.07**	**-0.10**	**-0.17**	**0.26**

Source: DFV Deutsche Familienversicherung AG, FMR

Balance sheet

IFRS EURm	2015	2016	2017	2018e	2019e	2020e
Assets						
Intangible Assets	**9.3**	**9.6**	**9.3**	**10.1**	**10.8**	**18.6**
as % of total assets	16.8%	13.2%	9.9%	6.3%	6.2%	8.5%
Goodwill	0.0	0.0	0.0	0.0	0.0	0.0
Other intangible assets	9.3	9.6	9.3	10.1	10.8	18.6
Investments	**15.6**	**31.7**	**46.4**	**59.4**	**68.7**	**89.7**
as % of total assets	28.2%	43.7%	49.2%	37.1%	39.3%	41.2%
Financial investments available for sale	15.6	31.7	46.4	59.4	68.7	89.7
Receivables from direct insurance business	**6.5**	**3.4**	**1.9**	**3.8**	**3.8**	**3.8**
as % of total assets	11.7%	4.7%	2.0%	2.4%	2.2%	1.8%
to policyholders	1.6	0.7	0.5	1.0	1.0	1.0
to insurance brokers	0.3	0.2	0.6	1.2	1.2	1.2
other receivables	4.6	2.4	0.8	1.6	1.6	1.6
Current accounts at banks	**8.5**	**4.7**	**5.5**	**43.7**	**40.5**	**36.8**
as % of total assets	15.4%	6.4%	5.8%	27.2%	23.2%	16.9%
Share of reinsurers in underwriting provisions	**13.6**	**20.7**	**29.4**	**40.1**	**47.8**	**65.4**
Assets	24.5%	28.5%	31.2%	25.0%	27.3%	30.1%
Unearned premiums	1.7	2.0	2.0	2.2	2.6	3.4
Actuarial reserves	7.7	14.1	22.0	32.2	38.5	52.9
Reserves for outstanding claims	4.3	4.5	5.4	5.6	6.7	9.1
Other underwriting provisions	0.0	0.0	0.0	0.0	0.0	0.0
Tax refund claims	**0.3**	**0.5**	**0.4**	**0.3**	**0.3**	**0.3**
as % of total assets	0.5%	0.6%	0.4%	0.2%	0.2%	0.2%
Other assets	**1.6**	**2.1**	**1.4**	**2.9**	**2.9**	**2.9**
as % of total assets	2.9%	2.9%	1.5%	1.8%	1.7%	1.3%
Total assets	**55.4**	**72.6**	**94.3**	**160.3**	**174.9**	**217.4**
Shareholders´ equity and liabilities						
Shareholders´ equity	**17.0**	**18.5**	**19.5**	**63.7**	**61.4**	**64.9**
as % of total equity and liabilities	30.8%	25.5%	20.6%	39.7%	35.1%	29.8%
Gross underwriting provisions	**26.2**	**35.3**	**46.8**	**57.1**	**67.4**	**91.3**
as % of total equity and liabilities	47.3%	48.6%	49.7%	35.6%	38.5%	42.0%
Unearned premiums	5.2	4.9	4.3	4.9	5.0	5.9
Actuarial reserves	10.9	20.2	30.9	39.7	47.7	65.8
Reserves for outstanding claims	9.3	9.5	10.7	11.6	13.8	18.9
Other underwriting provisions	0.8	0.8	0.8	0.8	0.7	0.7
Other reserves	**0.4**	**0.7**	**0.5**	**0.6**	**0.6**	**0.6**
as % of total equity and liabilities	0.8%	1.0%	0.5%	0.4%	0.4%	0.3%
Liabilities from direct insurance business	**10.6**	**16.8**	**26.0**	**37.8**	**44.4**	**59.4**
as % of total equity and liabilities	19.2%	23.1%	27.6%	23.6%	25.4%	27.3%
to policyholders	0.4	0.2	0.2	0.2	0.2	0.2
to insurance brokers	0.7	0.8	0.5	3.1	3.1	3.1
Other liabilities	9.6	15.7	25.3	34.5	41.0	56.0
Tax debt	**1.1**	**1.3**	**1.5**	**1.2**	**1.2**	**1.2**
as % of total equity and liabilities	2.0%	1.8%	1.6%	0.7%	0.7%	0.5%
Total equity and liabilities	**55.4**	**72.6**	**94.3**	**160.3**	**174.9**	**217.4**

Source: DFV Deutsche Familienversicherung AG, FMR

Cash Flow Statement

IFRS EURm	2015	2016	2017	2018e	2019e	2020e
Net income	**0.9**	**1.7**	**1.5**	**-1.3**	**-2.3**	**3.5**
Change of gross underwriting provisions	4.3	2.0	2.7	-0.4	2.6	6.4
Change in deposits retained and accounts payable as well as accounts receivables and accounts payable	0.8	8.2	11.0	9.9	6.6	15.0
Change in other receivables and liabilities	0.6	1.0	-0.2	-1.4	0.0	0.0
Gains and losses on the disposal of investments	-0.2	0.5	-0.3	0.0	0.0	0.0
Change in other balance sheet items	2.4	-0.2	0.4	-0.3	0.0	0.0
Other non-cash expenses and income	1.3	1.6	1.6	0.6	0.8	0.8
Cash flow from operating activities	**10.1**	**14.8**	**16.6**	**7.1**	**7.6**	**25.7**
Proceeds from the sale and maturities of other investments	0.0	0.0	2.2	0.0	0.0	0.0
Payments from the acquisition of other investments	-2.9	-17.0	-17.0	-14.6	-10.7	-22.5
Other proceeds	-0.2	-0.3	0.0	0.0	0.0	0.0
Other payments	-2.2	-1.4	-1.0	0.0	0.0	-7.0
Cash flow from investing activities	**-5.3**	**-18.7**	**-15.8**	**-14.6**	**-10.7**	**-29.5**
Proceeds from additional equity	2.0	0.0	0.0	45.6	0.0	0.0
Payments to company owners and minority shareholders	0.0	0.0	0.0	0.0	0.0	0.0
Cash flow from financing activities	**2.0**	**0.0**	**0.0**	**45.6**	**0.0**	**0.0**
Total change in cash and cash equivalents	**6.8**	**-3.9**	**0.9**	**38.2**	**-3.1**	**-3.8**
Cash and cash equivalents at the start of the period	1.7	8.5	4.7	5.5	43.7	40.5
Cash and cash equivalents at year´s end	**8.5**	**4.7**	**5.5**	**43.7**	**40.5**	**36.8**

Source: DFV Deutsche Familienversicherung AG, FMR

Declaration of liability (disclaimer) and mandatory details pursuant to Section 85 Securities Trading Act (WpHG), EU Market Abuse Regulation (EU Regulation No. 596/2014), Delegated Regulation 2016/958 and Delegated Regulation 2017/565 including details of possible conflicts of interest (disclosures), the author and the responsible supervisory authority

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b) Time conditions of expected updates: quarterly

c) Supervisory authority: Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht), Lurgiallee 12, 60439 Frankfurt am Main

d) Previous analyses: No analysis was published in the 12 months before publication of this analysis that contains a recommendation for a specific investment decision which contradicts this analysis.

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Company	Disclosure(s)
DFV Deutsche Familienversicherung AG	-

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(ii.) was involved in the management of a syndicate within the past five months that issued financial instruments of the issuer in the context of a public tender;

(iii.) managed financial instruments of the issuer on a market by means of concluding purchase or sale agreements:

(iv.) has, within the past twelve months, concluded an agreement regarding services in connection with investment banking business or received a service or performance promise from such agreement, with issuers which either themselves or the financial instruments thereof, are the subject of the financial analysis;

(v.) is in possession of a net sales or purchase position which exceeds the threshold of 0.5% of the total issued share capital of the issuer;

(vi.) has concluded an agreement regarding the preparation of investment recommendations with the issuer.

(vii.) has other significant interests with regard to the company being analysed, for example clients with the company being analysed.

Company	Disclosure(s)
DFV Deutsche Familienversicherung AG	iii, vi

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FMR Frankfurt Main Research AG

Registered office: Frankfurt am Main; Commercial Register No. HRB 113537, Frankfurt am Main district court; Chairman: Marcus Silbe

b) Issuer

Enid Omerovic, Senior Analyst

Marcus Silbe (CEFA), Head of Research, Senior Analyst

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• Risks/losers/negative: In our opinion, the company will be negatively affected by the assumed development.

• Neutral/balanced: In our opinion, the assumed development will not have any decisive impact on the company.

A possible indicated ranking position of the issuers demonstrates the relatively strong impact we believe the assumed development will have on the various issuers.

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