

Nürnberger Beteiligungs-AG

Insurance
12 May 2017

Discounted valuation, restructuring potential

Nürnberger Beteiligungs-AG (NBG) is now in its 134th year of operation and is one of Germany's oldest and most recognised insurers, with gross premium income of €3.3bn. While its market share of the life sector is small (c 3%), in disability it ranks among the top providers, with a market share of 9.2% in 2016. Aided by a refocusing strategy, NBG reported profits of €58m in 2016 (2015: €47m). It is also a solid dividend payer, paying €3.00/share for the fourth consecutive year. Expected future restructuring measures suggest potential for further efficiency and market share gains.

Conservative capital structure, solid dividend

NBG has a conservative capital structure and its group solvency ratio forecast for June 2017 at 250% is well above the EU average. This enables it to maintain a dividend yield of c 5% pa as well as providing capital to grow in profitable business lines (like disability). It also cushions it against regulatory changes, for example a continued increase in payments to the ZZR fund.

Business mix holds well for future earnings

NBG shifted its accounting from IFRS to HGB in 2016, which should lead to cost savings double-digit millions of euros a year, representing a significant proportion of profitability. NBG continues to focus on disability and unit-linked insurance in its life segment, which have less guarantee exposure. In addition, the company successfully reduced its combined ratio in property and casualty insurance from 99.3% in 2014 to 96.8% in 2016, and boosted its underwriting result in life insurance from €236m in 2015 to €268m in 2016.

Valuation: A substantial discount

NBG's shares underperformed both the market and the insurance sector in 2016. NBG is mainly a life insurer (75% of premiums) and therefore its results are more dependent on investment income. Within the life sector, investment income fell 41%, mainly due to €170m lower unrealised profits, which arose due to the shift to HGB accounting. NBG's shares traded at a 52% P/E discount and on a 49% P/B discount to the market in 2016. Compared with the European industry, at 1.19x tangible book (Q416) NBG shares offer a 35% discount to the industry average (Reuters). The major ratings agencies have graded the company's subsidiaries and operating segments A- to A+.

Historical financials

Year end	Revenue (€m)	PBT (€m)	EPS (€)	DPS (€)	P/E (x)	Yield (%)
12/13 IFRS	4,713	111.1	6.21	3.00	10.2	4.7
12/14 IFRS	4,963	134.9	9.44	3.00	6.7	4.7
12/15 HGB	4,658	85.4	4.11	3.00	15.4	4.7
12/16 HGB	4,256	88.1	5.03	3.00	12.6	4.7

Source: NBG annual reports. Note: Revenues are insurance typical revenues. HGB = German GAAP. Company changed from IFRS to HGB in 2016.

Price €3.25
Market cap €729m

Share price graph



Share details

Code NBG6
 Listing Deutsche Börse Scale
 Shares in issue 11.52m
 Last reported net cash at December 2016 €430.0m

Business description

Nürnberger Beteiligungs-AG (NBG) is the parent company of a group of insurers and financial service companies. It is one of Germany's oldest life insurers, and currently has 5.7m contracts, €3.3bn in gross premium income and €27.6bn in AUM. In 2016, NBG sharpened its image to be seen as a "clear, easy and solid" insurer.

Bull

- New, client focused management structure.
- Well-established brand name, solid historical performance; focus on top 10 strategy.
- New organisational structure paves way for premium income growth and cost reductions.

Bear

- Challenging macroeconomic environment.
- Low current operating profitability.
- Restructuring process in its infancy.

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Company description: Ready for growth

Founded in 1884, Nürnberger Beteiligungs-AG (NBG) is one of Germany's oldest and most recognised insurance companies with a healthy balance sheet. It has held a steady market share of around 2.6% of the domestic life insurance market for the past 10 years. NBG operates in four insurance segments through wholly owned subsidiaries: life, health, property and casualty (P&C). In addition, it offers banking services through Fürst Fugger Privatbank. The life segment includes all major lines for life, disability and pensions and a pension fund. NBG currently has 4,100 employees and offers services through an additional 16,500 agents (not on NBG's payroll). In this report, we use the abbreviation NBG for all activities executed by NBG's subsidiaries in the segments life, health, P&C and other insurance activities.

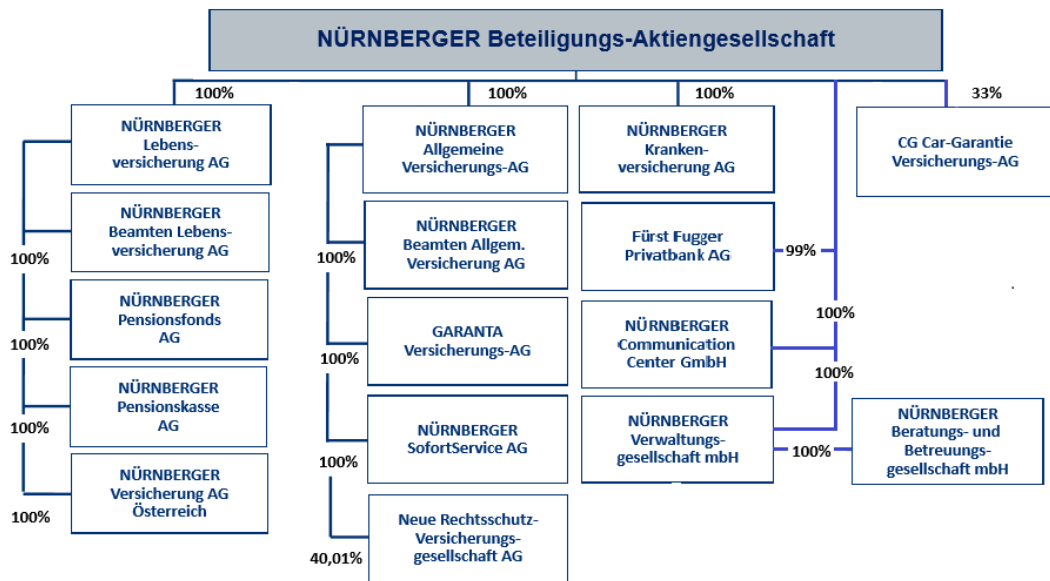
The life segment has shifted in the past years; while the conventional business is still the major source of premium income, disability and unit-linked income shows stronger growth. While NBG remains a recognised player in life (as well as in P&C), it has moved into a prominent position in disability, with approximately 17% market share in disability insurance, with strength in the self-employed segment.

Exhibit 1: NBG business – focus on life insurance		2014	2015	2016
Life market share	Total	2.61%	2.56%	2.60%
Life market share	Regular premium	3.32%	3.31%	3.30%
% conventional premium	GDV market	68.70%	69.70%	70.90%
% conventional premium	NBG life	87.20%	90.00%	89.90%

Source: NBG presentation April 2017, GDV data, Edison Investment Research

The table above shows that NBG's overall market share is around 2.6% and 3.3% in the more profitable conventional (regular monthly payments) segment. While the sector achieves just 70% of its life premium income in this segment (the rest is mostly single premium income), NBG's regular monthly payment premium income is at almost 90%, which stabilises its overall premium income.

NBG is a provider of quality insurance products in the life segment and in pension provision. It ranks among the top 20 insurers in the segment, based on its capital resource (free RfB ratio >5.5% in 2015; RfB is a surplus fund requirement with a minimum level determined by Solvency II). NBG is a key player in the disability insurance segment (see above). This segment has been the one of the key drivers of NBG's premium income growth since 1989. While the conventional life segment grew 68% to €1.03bn over the past 27 years, unit-linked life insurance business grew 11 times to €723m and disability insurance 15 times to €722m over the same period. Following its sales restructuring in 2015 and organisational restructuring in 2016, it aims to use its capital strength to exploit the market segments for high returning products and boost profitability.

Exhibit 2: Organisation of NBG


Source: NBG presentation April 2017

Business model

NBG is a full service provider: it offers life insurance coverage (75% of premium income), P&C insurances (16% of premium income) and health insurance (6% of premium income).

In the most important segment of life insurance, NBG's product mix is driven by client demand. The aim is to offer only products where NBG can achieve a top 10 market position in terms of its 'quality' approach. This means that its product quality aims to be ranked by industry surveillance groups, independent distributors and consumer protection groups within the top 10 of all products offered. The focus is on insuring 'biometric' risks, such as death, care and disability. This includes new add-on products: clients are offered products that provide additional coverage to existing insurance coverage. These add-on products can be offered more cheaply, as the clients are known, allowing potentially better product-related combined ratios.

Exhibit 3: NBG distribution channels

Distribution channels new business	Single agents/ tied agents	Multi company agents	Broker/ independent intermediates	Banks	Direct sales/ online	Other/ car dealers	Total
NBG Life & Health	13%	0%	78%	0%	1%	8%	100%
Industry Life	41%	6%	26%	21%	3%	3%	100%
Industry Health	57%	3%	27%	5%	6%	2%	100%
NBG P&C	24%	13%	32%	0%	1%	30%	100%
Industry P&C	47%	3%	27%	6%	13%	4%	100%

Source: NBG presentation April 2017, GDV data 2016

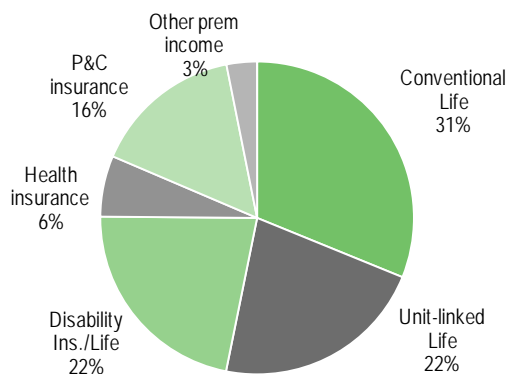
As shown in the table above, in the life and health business NBG is focused on distribution through independent agents. 78% of NBG's distribution was through IFAs vs only 26-27% for the industry as a whole. The advantage of using IFAs is that salary and social security costs are not charged to the company. Instead, NBG pays fees for actually conducted business. Another advantage is that IFAs operate independently and therefore act faster on new clients' requests. With a strong focus on IFAs, NBG is required to act fast as well, which it does for example through new, modular policies and the dreaded disease policies.

NBG restructured its distribution in 2015 with its 'Vertrieb 2015' programme. This has proven successful, and in 2016 was supplemented by the 'direct distribution channel', which is mostly

executed through online access. This enables the exclusive distribution agents to approach their clients through links on their own websites. Initially, all motor insurance offerings are available online, and more products are to follow in 2017 and beyond. NBG continues to invest in digitalisation to improve its processes, both in administration and distribution. NBG is completing a programme to reduce 290 full time equivalents by 2018, mainly in internal administration. ‘Vertrieb 2015’ and the cost-cutting programme are expected to save at least €40m annually by 2018.

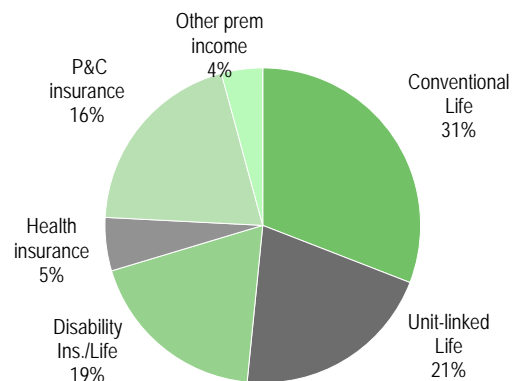
A key element of success is control: NBG needs to tightly manage its distribution channels in order to respond quickly to changes. NBG uses KPIs such as segmental profitability, special solvency analysis and claims quotas to compare its plans with actual results. In addition, following its top 10 strategy, it measures market penetrations of its products, process efficiency, image and client satisfaction. Using IFAs allows NBG to push products faster into the market than through its own salesforce, which could never reach the same penetration as an IFA network.

Exhibit 4: Premiums by segment, 2016



Source: NBG

Exhibit 5: Premiums by segment, 2013



Source: NBG

Revenues from life insurance business (75% of 2016 premiums)

Life premium income is the core activity of NBG, executed through three life insurance companies, plus a pension scheme and a pension fund. The business is carried out through modularly structured policies, which allow adding insurance coverage to existing base policies. NBG offers unit-linked policies (total premiums in 2016: €723m), conventional policies (€1.03bn) and biometrics (€722m) – total €2.50bn including pension insurance. New business – new gross written premiums – reached €401.6m in 2016 (2015: €416.1m), less than internally expected. The main reason for this shortfall was a legal change in the payment structure for agents. Nevertheless, the number of policies remained almost unchanged with 2.9m (2015: 3.0m), setting a solid base for 2017. However, due to lower taxes (€15.7m vs €32.1m in 2015), the operating result improved to €33.4m (2015: €31.8m).

Revenues from P&C insurance business (16% of 2016 premiums)

The P&C insurance business is offered by three insurance companies under the roof of NBG, in addition to service companies occupied mainly with claims regulation. NBG expected an increase in all segments in 2016, which did not materialise due to higher competition and regulation. New business was €86.1m, below last year's €87.2m. Booked premium income fell 2.1% to €665m. However, profitability was strong with the overall combined ratio at 96.2%. In addition, the expense ratios have been improving over the last three years following restructuring. Consequently, the “technical” insurance result almost doubled to €21.5m. Higher restructuring costs and taxes reduced the segment result by €4m to €25.6m, still well above internal expectation of €15m.

Revenues from health insurance business (6% of 2016 premiums)

The health business (private health and care insurance) covers individuals as well as products for corporate health schemes. New business reached €8.4m (2015: €8.0m), mainly due to add on coverage offerings. Full coverage policy business was negative, mainly due to higher entry barriers (higher income brackets). Nevertheless, due to more travel insurance and add-on services, the number of contracts grew to 366,203 in 2016, up 12.2%. The segment result reached €4.0m, some €500k below the previous year's level.

Other revenues (3% of 2016 premiums)

This revenue line – banking and service activities – saw an increase in pre-tax result by 20% in 2016 to €6.7m, but higher taxes led to an unchanged result for the segment at €4.4m (although this was more than 100% above the internal projections).

In addition, NBG achieved an investment result of €973m, which was not part of the premium income stream but of investment activities. This result was down €332m from the previous year, partly due to a lower interest result (comparable figures, both HGB).

Recent newsflow and upcoming catalysts

The most relevant event prior to the AGM was the 'NÜRNBERGER PERSPEKTIVEN' event on 14 December 2016, where the group presented its new products and support for distributors. It was the first event that combined the internal and external salesforce and focused on the new, client-based strategy.

The company held its AGM on 25 April 2017, approving a €3.00/share dividend. At the AGM, Chairman Dr Armin Zitzmann focused on NBG's new strategic approach; in the past, it had focused on the requests of its IFA network. This created a loyal network, as NBG reacted fast and provided the insurance products that IFAs could sell, allowing NBG to achieve comparably strong results in unit-linked and disability insurance. The new focus is on the clients themselves: offering the 'right' protection for the individual. NBG is investing heavily in digitalisation (expected c €14m in 2017, 40% of total investment), allowing the client to use the internet to find the 'right' products. Interestingly, a survey by NBG found that while clients used the internet to research products, the final contract is then signed at an agency or with an IFA, thus avoiding channel conflict. Digitalisation could also help the company to cope with the new requirements of the Insurance Distribution Directive (IDD), which requires IFAs to document all of their activities. The online and digitalisation initiative of NBG support the IFAs and should also help bind them to NBG. In addition, 'easy products', such as travel insurance and motor insurance, are increasingly becoming online products, reducing costs for NBG.

Regulatory overview

Solvency II (introduced in 2016) is a key quality and solvency measure for the insurance industry. It measures the capital resources of an insurer in relation to the capital requirements resulting from its insurance business (Solvency Capital Requirement [SCR] figure). Essentially, Solvency II requires that insurers have sufficient capital to withstand claims, which statistically happen once every 200 years. One key element of the SCR calculation is the Ultimate Forward Rate (UFR), which is the input for the long-term interest rate (essentially, UFR is the interest rate expected in 60 years). This figure (currently at 4.2%) is regularly scrutinised by EIOPA, the European insurance regulator. The current solvency ratio figure stands at around 283% (source: GDV, March 2017, BaFin calculation).

In Europe, based on EIOPA data, the German industry stands at 286% (EU average: 193%). NBG, as a combined group, is at 289% (not fully implemented) (source: NBG presentation April 2017, data January 2016). As highlighted at its AGM, for June 2017, NBG estimates a combined solvency ratio of 250%, well above the 100% requirement, while its important life segment should have a very strong solvency ratio of 400%.

Solvency II (second layer) is the qualitative part of the regulation and requires that insurers have competent management and a strong risk management and compliance (ORSA – own risk and solvency assessment) function. This regulation requires insurers to build the following key functions: risk management, compliance, insurance mathematics and internal audit.

Solvency ratios and requirements are designed to create a strong and reliable insurance sector. Changes in requirements – such as the regulator's discussions on the reduction of the UFR from 4.2% to 3.65%, starting 2018 – are challenging the overall profitability and its ability to distribute income. A reduction as proposed would lower the life insurance industry solvency ratio from 288% to 272% (source: GDV, April 2017).

ZZR ('Zins-Zusatz-Reserve' – additional interest reserve – introduced in 2011) is an additional reserve pocket built by life insurers since 2011 in order to meet obligations resulting from historically higher yielding life insurance policies maturing in a low interest rate environment. Currently these older contracts guarantee yields well above the prevailing market rates. In order to make sure guarantees can be fulfilled, insurers must set aside a ZZR reserve. In 2014, the industry added €8.4bn to these reserves, which then amounted to €21bn. In 2016, the annual contribution reached €13bn, of which NBG contributed €770m (2015: €602m); this year some €20bn is expected (source: GDV, February 2017). While building a ZZR reserve supports the policyholder's position, the requirement hinders insurers' ability to fund the acquisition of new business, adding to the need to dissolve valuation reserves in order to honour the high yielding policies, hence reducing financial room to manoeuvre further.

The industry has asked the government to change the calculation principles for the ZZR in order to lower the annual burden. A change in law could include certain adjustment factors, which would lower the allocations. A system similar to the calculation system for pension plans is envisaged. In order to support the industry, the maximum guaranteed interest rate for conventional life insurance policies has declined from 1.25% to 0.90%.

Market overview and outlook

The German insurance market was stable in 2016, with total premium income of €194.2bn (+0.2% y-o-y). About 50% (€90.8bn, -2.2%) was received in the life insurance segment, which saw the third consecutive annual decline. Private health insurance, in contrast, grew by 1.1% to €37.2bn, the third consecutive year of growth. P&C insurance premiums rose by 2.9% to €66.3bn. For 2017, the GDV (the German insurance association) expects overall premium income to rise by around 1% to €196bn, while the life segment is expected to stabilise (-0.5%) and the P&C segment to grow another 2.1%.

In 2017, the environment appears to support the insurance industry: global GDP is expected to improve, coupled with a return of inflation, hence paving the ground for monetary normalisation and rising interest rates, although at a slow pace. This implies that the low-yield environment will persist for the time being and investment income remains under pressure. Moreover, political risks could easily derail the economy and knock markets from their path to normalisation.

In particular, the life segment is affected by the low-interest rate environment. In 2016, 86.3% of €385.4bn invested capital (on behalf of the policy owners) was invested in fixed income products (NBG: 71%), mostly in mortgage loans and in fixed income funds. Only 4.2% was invested in

equities (NBG: c 10%, excluding mutual funds) and 3.6% in real estate (NBG: 3%). These percentages have been almost unchanged in the past three years. It is noteworthy that NBG's equity proportion is higher than that of its peers; the main reason is the search for yield. A significant portion of its equity positions are hedged, according to NBG. With the continuous downturn in interest rates, the sector faces significant challenges to cope with rising payments to policy owners.

For 2017, the life insurance and long-term insurance segment (including pensions) is expected to face more customers opting for 'guarantee products', which do not promise a certain return, but a certain level of the invested capital, depending on the 'riskiness' of the asset mix of the investments. NBG is responding to the market challenges with innovative guarantee products such as DAX Rente (capital guaranties against a cap on performance participation) and biometric (mainly disability) products, which are more profitable and less dependent on the interest rate environment. NBG's product strategy aims to boost biometrics on the back of its strong position in disability and new product lines (Ernstfall Schutz – dreaded disease protection).

At the AGM on 25 April, Dr Zitzmann explained that NBG targets a group net profit of €55m for 2017, based on a slight overall decline in life insurance business, a strong growth in health insurance business and slow growth in P&C.

Management

Management board, supervisory board and advisory boards

NBG has a divisional board structure based on functional and business responsibilities. Business-related divisions reflect the business segments property-casualty, life/health, investments and corporate functions. Furthermore, a new operations structure was implemented in 2016 to exploit synergy effects on the costs and revenue sides and is overseen by a COO.

Exhibit: 6: New organisation



Source: Company presentation April 2017

Dr Armin Zitzmann has been chairman of the management board of NBG since 1 January 2013, having been a board member since 1999. Dr Wolf-Rüdiger Knocke has served as deputy chairman of the management board since 1 January 2013. He is responsible for IT and serves as board member of some of NBG's subsidiaries. Mr Walter Bockschecker is responsible for HR and holds several mandates on the boards of the subsidiaries. Dr Jürgen Voß is responsible for investments

and IR. Voß is also CEO of the life insurance segment. His duties will be partly taken over by Mr Rosenberger, an ex-Munich Re manager, later this year, following BaFin approval. Dr Detlef Schneidawind has been chairman of the supervisory board since 21 April 2015 and a board member since 2011. He is also chairman of the personnel, nomination, arbitration and investments committee. Until 2005, he was a board member of Munich Re.

Shareholders and free float

The company has 11.52m ordinary registered shares in issue with an indicated value of €3.50 each, equating to share capital of €40.32m. 75% of the shares are tightly held. 25% is declared as free float. The vast majority of these shares are held by institutions and insurance companies. Munich Re is shareholder of both Consortia and SEBA Beteiligungen, implying that the company owns directly and indirectly around 19.1 % of Nürnberger Beteiligungs-AG, suggesting that it is its largest single shareholder.

Financials

NBG shifted to the HGB accounting standard in 2016 (comparable figures under HGB provided for 2015). Therefore, figures before 2014 are not strictly comparable. It should be noted that HGB accounting is more conservative than IFRS accounting, as it typically excludes mark-to-market valuations and uses the lower of purchase price or current value. The shift should lead to lower auditing costs, but chiefly to lower internal costs. NBG has reacted to a continued decline in life premium income since 2011 with an internal and external restructuring, focusing on synergy effects and creating a new and fresh brand image. Its overall pre-tax margins have increased from 1.6% in 2011 to 2.1% in 2016 and should benefit from the new, simplified internal structure in the future. New products in the life and health segment, new distribution channels in the P&C segment and cost synergies are likely to help overcome greater competition. NBG has a strong brand name and is seen as a quality provider. Given constant changes in regulation, clients are likely to focus on established names, allowing NBG to successfully penetrate the market with new products. NBG has an overall market share of 3% in Germany, but 9.2% in disability insurance. The focus on top 10 quality products should further streamline the product offerings and reduce costs. NBG's balance sheet and insurance related measures (RfB) are strong.

Typical for the insurance sector is the high level of costs, incurred by accounting for claims. As much as possible, insurers are eager to reduce the claims ratio: NBG was successful in reducing the P&C claims ratio by almost 100bp in 2016. In the life segment, the sharpened focus on new, successful products and the strong customer base should allow for at least a stabilisation of profits.

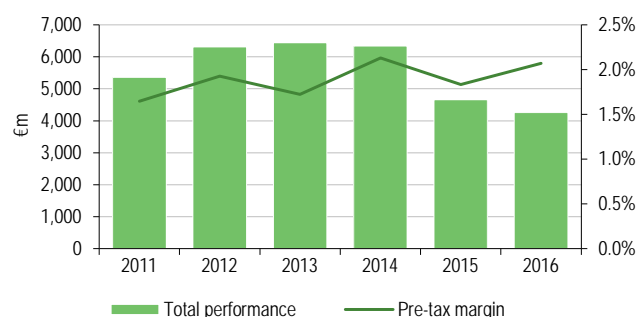
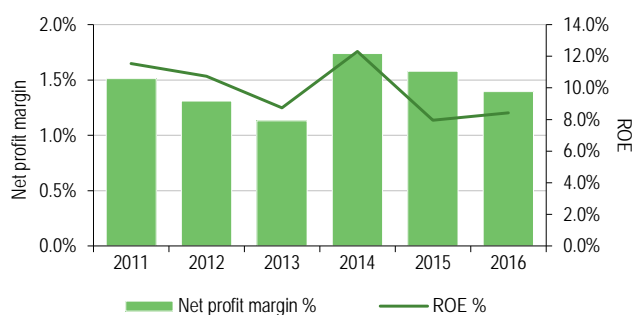
Exhibit 7: Financial summary

€m	2011	2012	2013	2014	2015	2016
Year end 31 December	IFRS	IFRS	IFRS	IFRS	HGB	HGB
Income statement						
Revenue	5,354	6,310	6,441	6,334	4,658	4,256
Insurance typical revenues (reported)	4,579	4,714	4,713	4,963	4,658	4,256
Premium income	3,501	3,639	3,601	3,543	3,268	3,220
Other income	1,853	2,671	2,887	2,841	1,529	1,139
Total claims	2,574	4,343	4,504	4,394	3,530	3,191
Total operating costs	2,640	1,816	1,798	1,788	1,082	1,077
Profit Before Tax (as reported)	88	122	111	135	85	88
Net income (as reported)	79	81	71	109	47	58
EPS (as reported) – (€)	6.88	7.04	6.21	9.44	4.11	5.03
Dividend per pref share (€)	2.90	2.90	3.00	3.00	3.00	3.00
Balance sheet						
Total non-current assets	21,239	23,710	25,533	27,958	26,709	27,661
Total current assets	880	881	842	834	511	431
Total assets	22,869	25,194	26,933	29,184	27,971	29,083
Total non-current liabilities	20,803	23,342	25,008	27,294	26,101	27,162
Total current liabilities	1,361	1,079	1,087	992	1,164	1,191
Total liabilities	22,164	24,421	26,094	28,287	27,264	28,352
Net Assets	705	773	838	898	707	730
Shareholders' equity	701	771	833	895	706	730
Cash flow statement						
Cash Flow from current activities	552	953	758	877	320	348
Cash Flow from investments	(81)	(948)	(748)	(898)	(147)	(52)
Cash Flow from financing	(206)	154	(87)	(73)	(126)	(50)
Changes in cash	265	159	(77)	(94)	47	246
Cash EOP	598	448	384	286	288	533

Source: NBG annual reports 2011-2016. Note: 'HGB' = German GAAP.

Income statement

While total performance – ie premium income, investment income and other income – is less comparable due to the change in accounting, the pre-tax margin improvement is, as revenues and profits are adjusted by the shift to HGB in a similar fashion.

Exhibit 8: Revenue and margin progression

Exhibit 9: Net profit progression and ROE


Source: NBG accounts

Source: NBG accounts

ROE has declined as accounts are adjusting from IFRS principles (typically using mark-to-market) to HGB (typically using purchase prices or minimum prices), reducing the earnings potential from fair value adjusting. Nevertheless, between 2015 and 2016, margins improved slightly.

Exhibit 10: P&C profitability				Exhibit 11: Life profitability			
P&C segment (€m)	2015	2016	% change	Life segment (€m)	2015	2016	% change
Premium income	679.2	665.0	-2.1%	Premium income	2,483.0	2,466.4	-0.7%
Underwriting result	11.7	21.5	83.8%	Underwriting result	236.2	268.0	13.5%
Investment result	41.8	28.0	-33.0%	Investment result	105.1	62.4	-40.6%
Segment profit	53.5	49.5	-7.5%	Segment profit	341.3	330.4	-3.2%
Segment margin %	7.9%	7.4%		Segment margin %	13.7%	13.4%	
Other results	(19.2)	(13.1)	-31.8%	All to pre fund (RfB)	(277.5)	(281.3)	1.4%
Taxes	(5.0)	(10.7)	114.0%	Taxes	(32.1)	(15.7)	-51.0%
Segment result	29.3	25.7	-12.3%	Segment result	31.8	33.4	5.2%

Source: NBG presentation April 2017

The profitability of NBG is predominantly driven by its key business segments: unit linked and disability policies. In the P&C segment, the underwriting result rose because of a better combined ratio, contribution from re-insurance coverage and lower contribution to the reserve fund, despite almost unchanged premium income. As mentioned before, the combined ratio for the business has fallen 3pp in the past three years. According to NBG, its combined ratio is better than that of its peers. This positive development was more than offset by a 33% drop in the investment result, leading to a 7.5% drop in segment profit. This, coupled with a higher tax burden, resulted in a 12.3% decline for the year.

In the life segment, the strategy to focus on profitable business has also borne fruit, as underwriting results grew by 13.5%. As the investment criteria are stricter than in the P&C business, the investment result dropped 41% – mainly due to €170m lower realised profits – leading to a segment profit of €330.4m, still a very healthy 13.4% margin. Most of this – around €200m – is from the disability segment, underlining its importance for NBG. As mentioned before, allocations to the premium fund are rising as a result of the low interest rate environment. A countering factor was a lower tax rate, allowing the life segment to record a 5.2% increase in profit.

Balance sheet

NBG's balance sheet shows the typical structure of an insurance company. The vast majority of assets are primarily investments for the life insurance segment (€26.7bn out of €29.1bn total assets), while the vast majority of liabilities are insurance technical accruals, equally €26.7bn. Equity is built up via retained profits. Hence, total equity has increased from €701m in 2011 to €924m in 2015. These are IFRS figures and show a 30% increase in equity. By shifting to HGB, most of the mark-to-market valuations have been eliminated (€100m in profit reserves and €80m in capital reserves). This brought stated equity back to €730m. The overall balance sheet total fell through the accounting shift, from €30.2bn in 2015 (IFRS) to €29.1bn (HGB). In addition to the equity valuation decline, overall accruals fell by €800m. These are all changes due to new accounting principles, which do not affect the overall quality of NBG.

Nevertheless, NBG's solvency ratios are strong (286% vs EU average of 193%), as indicated by the Fitch (A+) and S&P (A-) ratings.

Valuation

Exhibit 12: Valuation ratios			
	NBG	Industry	Sector
P/E ratio (trailing 12 months) (x)	14.7	17.2	20.66
P/E high – last five years (x)	11.0	28.1	25.1
P/E low – last five years (x)	7.6	11.7	11.05
Beta	0.28	0.93	1.53
Price to tangible book (most recent quarter) (x)	1.2	1.8	2.5

Source: Reuters

NBG trades at a significant discount to peers based on yield, P/E and P/B.

Based on P/E, NBG traded well below the market averages in the past five years. However, NBG has experienced a significant share price rise to €68.3 since the end of 2016 (+19.8%), outperforming the market. This also means that NBG's current P/E ratio is higher than in 2016, actually trading at a premium to its direct peers, Allianz SE (11.2x, Bloomberg consensus) and Talanx (9.2x, Bloomberg consensus).

As an insurer, NBG's P/B valuation is relevant to shareholders, as a large proportion of assets are actually owned by the insurer's policyholders, not the shareholders. Shareholders have access to the group's equity, ie book value. The majority of companies in the sector use IFRS accounting, which might lead to higher book values in a positive market environment, which tends to push asset values above purchase prices for these assets (the typical HGB valuation approach). Still, NBG shares trade well below market averages.

NBG recently declared a dividend of €3.00/share for the fourth consecutive year, leading to a dividend yield of 5.3%, based on 2016 year end prices (4.4% on current price levels). This is more than twice the 10-year average dividend yield for the SDAX Index.

Exhibit 13: Valuation

	2011	2012	2013	2014	2015	2016
Cash dividend (€)	2.9	2.9	3.0	3.0	3.0	3.0
Dividend yield	5.2%	4.8%	4.8%	4.2%	4.3%	5.3%
10-year average SDAX yield	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
EPS (€)	6.9	7.0	6.2	9.4	6.3	5.0
P/E year + 1 (x)	8.0	9.8	6.7	11.3	13.7	
Share price at year end (€)	56.0	61.0	63.0	71.0	69.0	57.0

Source: Bloomberg. Note: Using year-end share price.

As described earlier, the shift to HGB is expected to lead to significant cost advantages. It should be noted that the 8.7% increase in the costs in 2016 included the initial work of full accounting and auditing costs of Solvency II requirements.

Sensitivities

NBG is a financial institution, chiefly operating in Germany. Hence, the economic and political stability in Germany is key to NBG's success. Currently, the economic situation is healthy with more people in work than ever (44 million of 83.2 million citizens, according to Destatis 2017). A large employed workforce is the base for increasing demand for insurance, whether it is health, conventional or unit-linked life or disability. The latter in particular should benefit from high employment levels.

The company still provides an IFRS-like risk scenario analysis. Based on data provided for 2016 (pages 126 and 127 of the annual report), the sensitivities are as follows:

- A 20% decline in the equity market would reduce investment value by €400m.
- A 20% decline in the Private Equity segment would reduce the investment value by €151.2m.
- A 1% increase in interest rates would lead to a reduction in the value of the portfolio by €1.139bn (of which €565,8m is valued at purchase prices).
- A 10% decline in real estate prices would lead to losses of €143.6m.

Economic downturns are obviously an important issue for the insurance sector. Although long-term contracts, such as conventional life insurance policies, warrant a constant flow of funds to the company, new business would be hampered by such downturns.

Falling equity/property/corporate credit values have an impact on capital and solvency during a downturn. Lower interest rates would place more pressure to add reserves for interest guarantees.

New sales might be affected by weaker confidence. Note that P&C claims tend to rise in a downturn too.

Regulatory issues

NBG's business model is highly regulated. While the life insurance business is hampered by the maximum interest rate that conventional life insurance policies are required to yield (was 1.25% and has recently changed to 0.9%), unit-linked policies have less guarantees and are mostly structured to warrant the paid-in capital. The key issue is that lower guaranteed rates make conventional life insurance look much less attractive especially since the guaranteed rate is before costs.

Regulation could become stiffer in terms of regulatory reserving requirements, which could limit NBG's ability distribute profits to its shareholders as it would be required to build reserves instead. Low interest rates are requiring insurers to build the ZZR and this is likely to increase if no changes to the calculation method are made.

Currently insurers can capitalise costs – this is distribution costs paid to the distribution channels – to a maximum of 2.5% of expected cumulative premiums on the balance sheet. It is understood that costs in certain segments are higher. A reduction of this level might lead to a less incentivised salesforce and lower levels of new business.

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