

Bayer

Germany/Pharmaceuticals

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UBS Research

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So it is true: Bayer evaluates Monsanto takeover

Senior management discussions have already taken place

Bayer confirmed that executives have met to discuss a negotiated acquisition of Monsanto by Bayer, confirming recent media reports (Bloomberg, 12 May '16) on the matter. Monsanto's Board of Directors is reviewing the unsolicited, non-binding proposal. According to Bayer, the combination would "reinforce Bayer as a global innovation-driven Life Science company with leadership positions in its core segments, and would create a leading integrated agriculture business."

Another, and maybe the last, major deal in this industry

The Dow/DuPont and ChemChina/Syngenta mergers already announced (but pending regulatory approvals), three of the six leading ag chem/seeds companies are already consolidating. With a Bayer/Monsanto tie-up, another two would follow, leaving BASF out as the only major player who did not participate (although BASF has said that it would be happy to take up any assets that could come to the market from the Dow/DuPont deal) and holds no position in seeds (apart from the Monsanto R&D collaboration contact, which comes up for renewal in 2017).

Combined entity would become the new global behemoth in ag

The deal would combine the world's leading seeds business with the global #2 (by a tiny margin) in crop protection and create the global leader in ag chem with sales of \$25.6bn on a CY15 basis. In Crop Protection, combined sales of \$14.4bn would yield a 28% global market share (ChemChina/Syngenta 26%, Dow/DuPont 16%, BASF 13%). In seeds, the \$11.2bn sales would even represent a global market share of 30% (DuPont/Dow 22%, ChemChina/Syngenta 8%). Although the portfolios would be highly complementary, given the deals already in the making, anti-trust concerns could mount in certain regions (e.g. North America in terms of share of wallet) or products (e.g. cotton seeds).

Valuation: Neutral, Price Target €105

Bayer's balance sheet is solid with 1.7x net debt/ EBITDA and 69% gearing as at FY15. In addition, Bayer still holds a c65%, non-core stake in Covestro. Based on UBSe, a 40% cash, 60% equity offer would remain EPS accretive until \$110 per Monsanto share. However, evidence from past ag transactions indicate that there could be significant cost synergies to be harvested (on average 6% of combined sales, see our note on Syngenta / Monsanto published in 2015). Our price target for Bayer is based on 13.7x 2017E Core EPS adjusted for Covestro earnings. This is broadly in line with the sector (13.9x), and is underpinned by our NPV/SOTP value of €102 per share.

12-month rating	Neutral
12-month price target	€105.00
Price	€89.54

Trading data and key metrics

52-wk range	€137.73-92.62
Market cap.	€79.9bn/US\$89.7bn
Shares o/s	827m (ORD)
Free float	100%
Avg. daily volume ('000)	7
Avg. daily value (m)	€0.7
Common s/h equity (12/16E)	€23.7bn
P/BV (12/16E)	3.4x
Net debt / EBITDA (12/16E)	1.5x
RIC	BAYG.F
BBG	BAYN.GY

Sources: UBS, Bloomberg

EPS (UBS, diluted) (€)

	UBS	Cons.
12/16E	7.01	7.24
12/17E	8.01	7.96
12/18E	8.77	8.31

Definitions of terms and abbreviations are available in the appendix section of this report, and more extensively on internet at www.ubs.com/glossary

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Company Profile: Bayer

Bayer is a diversified German life sciences company, with Pharmaceuticals, Consumer Health, CropScience and Animal Health divisions. Pharma (45% of group 2015 pre-exceptionals EBITDA) key franchises are women's health, cardiovascular and specialty pharmaceuticals; key growth products are Xarelto and Eylea. Consumer Health (14% of EBITDA) is one of the top OTC businesses globally. CropScience (24%) is mainly crop protection chemicals, with a smaller seeds business and an emerging bio-ag business. Animal Health contributed 3% of 2015 EBITDA. Covestro (16% EBITDA) was spun off in 2015.

Statement of Risk

Risks to Bayer include - in Pharma: Xarelto growth being impacted by increasing competition from Eliquis as well as edoxaban; multiple new/better competitors for Betaseron (multiple sclerosis) and Kogenate (hemophilia) – including Roche's ACE910; failure of the promising phase II pipeline, particularly cardiovascular assets finerenone and vericiguat. In CropScience: weakness in global crop prices leading to a sharper or more prolonged downturn in crop chemicals markets than expected; renewed competition in seeds, or chemicals; greater regulatory oversight leading to increased R&D requirements or litigation. Valuation: our price target is based on 13.7x 2017E Core EPS adjusted for Covestro earnings. This is broadly in line with the sector (13.9x), and is underpinned by our NPV/SOTP value of €102 per share.

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Highlights (€m)	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
Revenues	40,157	42,239	46,324	46,792	48,950	51,030	52,875	54,282
EBIT (UBS)	5,773	5,944	7,069	7,476	8,365	9,198	10,040	10,498
Net earnings (UBS)	4,643	4,977	5,647	5,799	6,623	7,250	7,851	8,192
EPS (UBS, diluted) (€)	5.61	6.02	6.83	7.01	8.01	8.77	9.49	9.91
DPS (€)	2.10	2.25	2.50	2.80	3.10	3.40	3.65	3.90
Net (debt) / cash	(7,369)	(20,007)	(18,075)	(15,331)	(13,399)	(12,277)	(9,137)	(7,651)
Profitability/valuation	12/13	12/14	12/15	12/16E	12/17E	12/18E	12/19E	12/20E
EBIT margin %	14.4	14.1	15.3	16.0	17.1	18.0	19.0	19.3
ROIC (EBIT) %	16.9	13.9	13.6	14.4	16.5	18.4	20.7	22.6
EV/EBITDA (core) x	10.0	12.2	13.1	10.3	9.3	8.5	7.8	7.4
P/E (UBS, diluted) x	14.9	17.2	18.5	13.8	12.1	11.0	10.2	9.8
Equity FCF (UBS) yield %	4.6	4.2	4.4	6.2	5.1	5.7	6.3	6.7
Net dividend yield %	2.5	2.2	2.0	2.9	3.2	3.5	3.8	4.0

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied.

Valuations: based on an average share price that year, (E): based on a share price of €96.62 on 18 May 2016 21:34 BST

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UBS 12-Month Rating	Rating Category	Coverage ¹	IB Services ²
Buy	Buy	47%	33%
Neutral	Hold/Neutral	42%	34%
Sell	Sell	11%	23%

1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

Source: UBS. Rating allocations are as of 31 March 2014.

UBS 12-Month Rating	Definition
Buy	FSR is > 6% above the MRA.
Neutral	FSR is between -6% and 6% of the MRA.
Sell	FSR is > 6% below the MRA.

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Global Equity 12-Month Rating Definitions

Buy: FSR is > 6% above the MRA. **Neutral:** FSR is between -6% and 6% of the MRA. **Sell:** FSR is > 6% below the MRA.

Key Definitions

Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months.

Market Return Assumption (MRA) is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium).

Under Review (UR) Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation.

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Core Banding Exceptions (CBE): Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified the Companies Mentioned or Company Disclosure table in the relevant research piece.

Company Disclosures

Bayer	BAYN GR	Neutral	€96.62	18 May 2016
Novo Nordisk	NOVOB DC	Sell	DKr360.40	18 May 2016
AstraZeneca	AZN LN	Buy	3,901p	18 May 2016
GlaxoSmithKline	GSK LN	Neutral	1,438p	18 May 2016
Roche	ROG VX	Buy	CHF245.30	18 May 2016
Novartis	NOVN VX	Neutral	CHF74.45	18 May 2016
Sanofi	SAN FP	Neutral	€70.11	18 May 2016
Syngenta	SYNN VX	Neutral	CHF395.80	18 May 2016
Company Name	Reuters	12-mo rating	Price	Price date

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

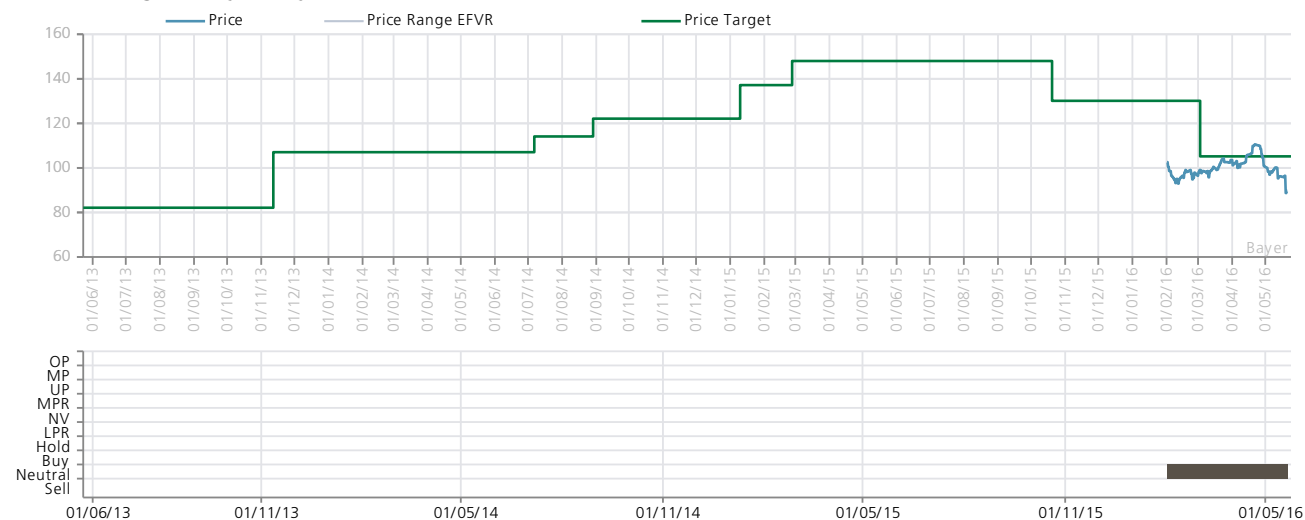
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Global rating history -- Bayer, BAYN GY



Source: UBS CIO as of 23 May 2016

Terms and Abbreviations

Term / Abbreviation	Description / Definition	Term / Abbreviation	Description / Definition
1H, 2H, etc. or 1H11, 2H11, etc.	First half, second half, etc. or first half 2011, second half 2011, etc.	1Q, 2Q, etc. or 1Q11, 2Q11, etc.	First quarter, second quarter, etc. or first quarter 2011, second quarter 2011, etc.
2011E, 2012E, etc.	2011 estimate, 2012 estimate, etc.	A	actual i.e. 2010A
ADR	American depositary receipt	ARPU	Average Revenue Per User
AUM	Assets under management = total value of own and third-party assets managed	Avg.	average
bn	Billion	bp or bps	Basis point or basis points (100 bps = 1 percentage point)
BVPS	Book value per share = shareholders' equity divided by the number of shares	CAGR	Compound annual growth rate
Cant Inc/Capita	Cantonal income per capita (Switzerland only)	Capex	Capital expenditures
CF	Cash flow	CFO	1) Cash flow from operations, 2) Chief financial officer
COGS	Cost of goods sold	COM	Common shares
Cons.	Consensus	Core Tier 1 Ratio	Tier 1 capital minus tier 1 hybrid securities
Cost/Inc Ratio (%)	Costs as a percentage of income	CPI	Consumer price index
CR	Combined ratio = ratio of claims and expenses as a percentage of premiums (for insurance companies)	CY	Calendar year
DCF	Discounted cash flow	DDM	Dividend discount model
Dividend Yield (%)	Dividend per share divided by price per share	DPS	Dividend per share
E	expected i.e. 2011E	EBIT	Earnings before interest and taxes
EBIT Margin (%)	EBIT divided by revenues	EBITDA	Earnings before interest, taxes, depreciation and amortization
EBITDA Margin (%)	EBITDA divided by revenues	EBITDA/Net Interest	EBITDA divided by net interest expense
EBITDAR	Earnings before interest, taxes, depreciation, amortization and rental expense	EFVR	Estimated fair value range
EmV	Embedded value = net asset value + present value of forecasted future profits (for life insurers)	EPS	Earnings per share
Equity Ratio (%)	Shareholders' equity divided by total assets	EV	Enterprise value = market value of equity, preferred equity, outstanding net debt and minorities
FCF	Free cash flow = cash a company generates above outlays required to maintain/expand its asset base	FCF Yield (%)	Free cash flow divided by market capitalization
FFO	Funds from operations	FY	Fiscal year / financial year
GDP	Gross domestic product	Gross Margin (%)	Gross profit divided by revenues
H	half year	h/h	Half-year over half-year; half on half
hist av.	Historical average	Interbank Ratio	Interbank deposits due from banks divided by interbank deposits due to banks
Interest Coverage	Ratio that expresses the number of times interest expenses are covered by earnings	Interest exp	Interest expense
ISIN	International securities identification number	K	One thousand
LLP/Net Int Inc (%)	Loan loss provisions divided by net interest income	LLR/Gross Loans (%)	Loan loss reserves divided by gross loans

Bayer

Term / Abbreviation	Description / Definition	Term / Abbreviation	Description / Definition
LPR	Least Preferred: The stock is expected to both underperform the relevant benchmark and depreciate in absolute terms.	Market cap	Number of all shares of a company (at the end of the quarter) times closing price
m/m	Month-over-month; month on month	mn or m	Million
M and A	Merger and Acquisition	MP	Marketperform: The stocks expected performance is in line with the sector benchmark
MPR	Most Preferred: The stock is expected to both outperform the relevant benchmark and appreciate in absolute terms.	n.a.	Not available or not applicable
NAV	Net asset value	Net Debt	Short- and long-term interest-bearing debt minus cash and cash equivalents
Net DPS	Net dividends per share	NIM or Net Int Margin (%)	Net interest income divided by average interest-bearing assets
Net Margin (%)	Net income dividend by revenues	NV	Neutral View: The stock is expected to neither outperform nor underperform the relevant benchmark nor significantly appreciate or depreciate in absolute terms.
n.m. or NM	Not meaningful	NPL	Non-performing loans
OP	Outperform: The stocks is expected to outperform the sector benchmark	Op Margin (%)	Operating income divided by revenues
p.a.	Per annum (per year)	P/BV	Price to book value
P/E or PE	Price to earnings / Price Earnings Ratio	P/E Relative	P/E relative to the market
P/EmV	Price to embedded value	PEG Ratio	P/E ratio divided by earnings growth
PPI	Producer price index	Prim Bal/Cur Rev (%)	Primary balance divided by current revenue (total revenue minus capital revenue)
Profit Margin (%)	Net income divided by revenues	q/q or QQQ	Quarter-over-quarter; quarter on quarter
R and D	Research and development	ROA (%)	Return on assets
ROAE (%)	Return on average equity	ROCE (%)	Return on capital employed = EBIT divided by difference between total assets & current liabilities
ROE (%)	Return on equity	ROIC (%) or ROI	Return on invested capital
Shares o/s	Shares outstanding	Solvency Ratio (%)	Ratio of shareholders' equity to net premiums written (for insurance companies)
sotp or SOTP	Sum of the parts	Tax Burden Index	Swiss tax index; 100 = average tax burden of all cantons
tgt	Target	Tier 1 Ratio (%)	Tier 1 capital divided by risk-weighted assets; describes a bank's capital adequacy
tn	Trillion	UP	Underperform: The stock is expected to underperform the sector benchmark
Valor	Swiss company identifier	WACC	Weighted average cost of capital
CIO	UBS WM Chief Investment Office	x	multiple / multiplier
y/y or YOY	Year-over-year; year on year	yr	Year
YTD	Year-to-date		

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