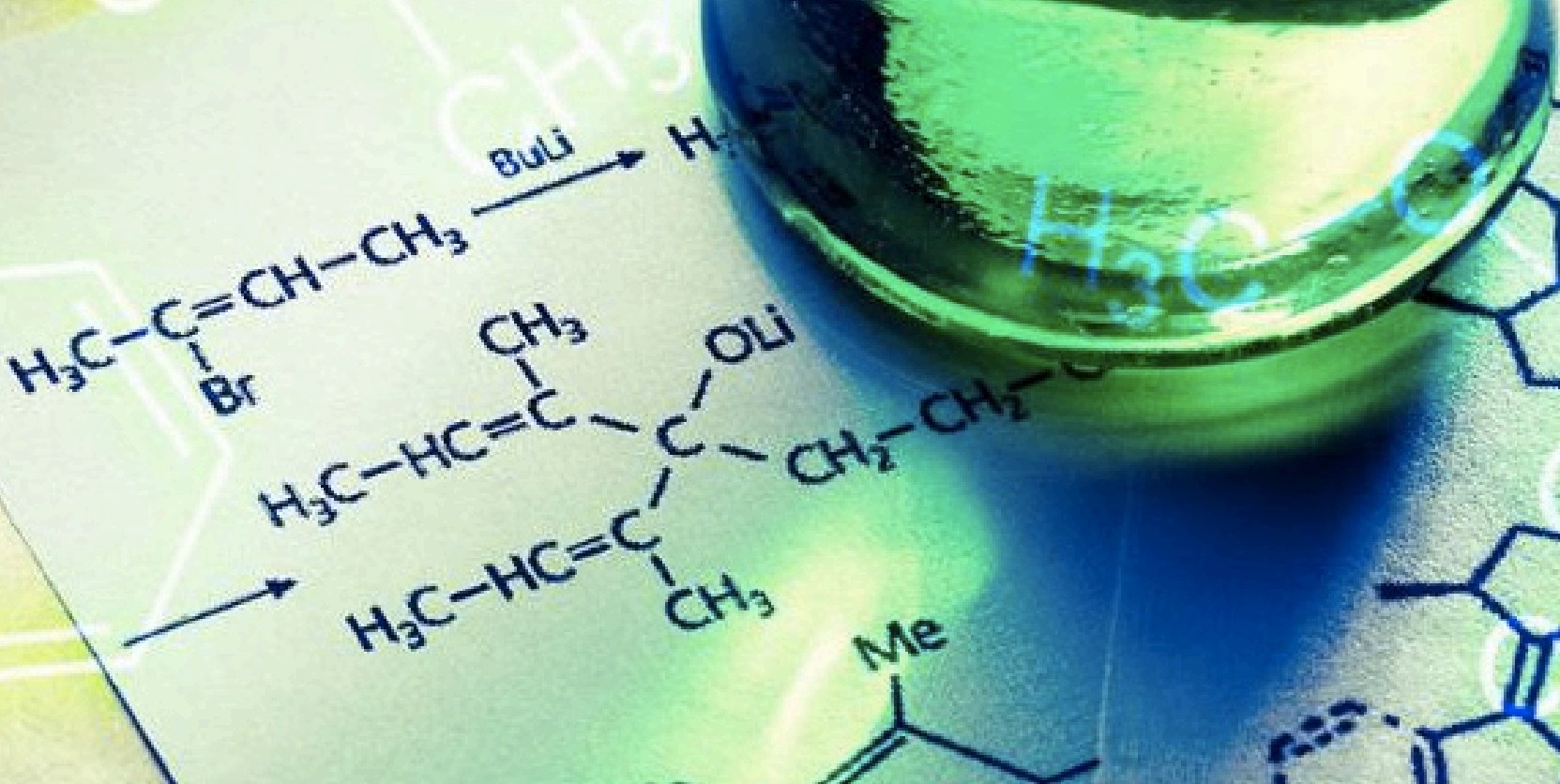




2018

CREATING VALUE IN THE CHEMICALS SECTOR

AVA Research on the main European listed companies



**ACTIVE
VALUE
ADVISORS.**

Management Consultants

Introduction

This research investigates the **European Chemicals sector** based on a sample of 50 leading European listed companies.

These companies are further classified into the following market sub-sectors: **Commodity Chemicals, Nondur.Household Prod, Specialty Chemicals.**

Their performance is analyzed using four different approaches. The first is **The Traditional Approach** which examines common indicators such as Sales, EBIT and Profit. The other three approaches: **The EVA® View, The EVA® People-Based View and The Market View** are designed to measure companies' ability to create Value. The **EVA® People-Based View** investigates the issues of productivity and employees' value creation. **The Market View**, on the other hand, focuses on understanding market expectations regarding future company performance in terms of created Value. Thus, it serves as a basic tool to revise business plans and improve incentive schemes to achieve the set objectives.

Finally, Active Value Advisors provides its point of view about some recent "**Hot Topics**" companies need to deal with when they face challenges related to **profitability, efficiency and organizational flexibility** or when they need to take full advantage of **technology (i.e. Big Data, Cloud Computing, Business Intelligence)** in the most profitable way.

Active Value Advisors believes that properly managing and constantly monitoring information through **Business Intelligence & Analytics tools** can contribute significantly to an exceptional performance. Another extremely important driver in this historical context is related to the **organizational dimension** which represents the "real challenge" companies have to face in order to deal effectively with the complexity of the current competitive environment.

How to measure company performance?

TRADITIONAL APPROACH

Analysis of traditional performance indicators and KPIs

Investigating companies' performance we couldn't omit the **analysis of margins and profitability**. Therefore, we initially examined traditional performance indicators such as Sales, EBIT and Net profit.

EVA® VIEW

Analysis of Value creation

Sometimes, though, the adoption of a traditional approach might make us short-sighted and unable to detect possible problems related to the performed strategy or to come up with solutions. A methodology based on the actual Value created by a company addresses these issues.

A company generates **Value** when its Return on Invested Capital (**ROIC**) is higher than what investors expect to get by taking on an equally risky investment (**WACC**).

Value creation is assessed using the EVA® formula:

$$\text{EVA}^{\circledR} = (\text{ROIC} - \text{WACC}) * \text{Invested Capital}^1$$

EVA® PEOPLE BASED

Human Resources productivity

One of the main features of the EVA® methodology is that it provides some alternative ways of reading the management performance achieved by the company and allows to associate the created **Value** with the determinants that have contributed to generate it.

Indeed, by applying a simple algebraic decomposition to the traditional EVA® formulation we can obtain the EVA® People Based formula, an Economic Profit computed considering **“People” instead of “Capital”**:

$$\text{EVA}^{\circledR} \text{ People Based} = (\text{Labour Productivity} - \text{Average Labour Cost}) * \text{N}^{\circ} \text{Employees}$$

MARKET VIEW

Sustaining performance over time

Creating wealth and value through performance improvements is one of the core aspects of “doing business”. Nevertheless, ensuring business Sustainability over time is certainly not less important.

Analyzing current performance is a very good starting point, but it is equally important to understand market expectations about **future performance**:

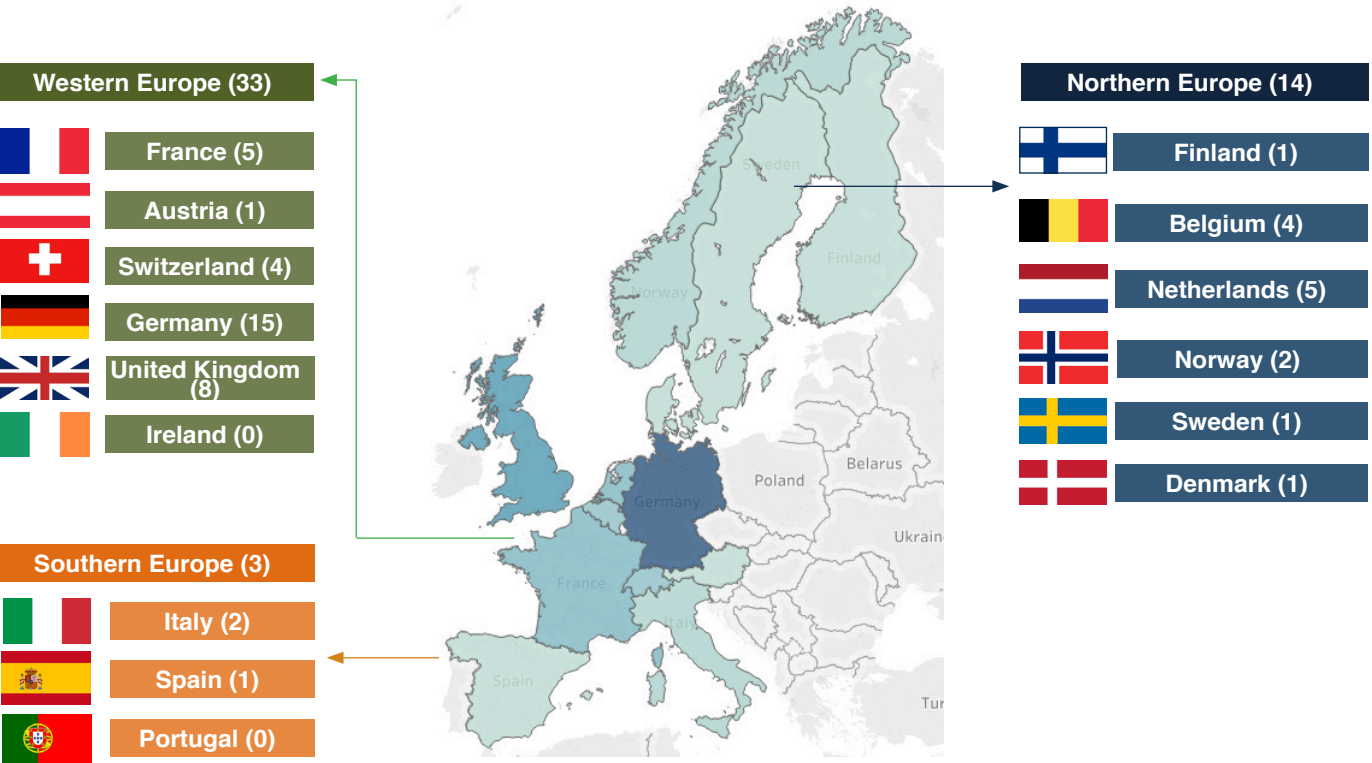
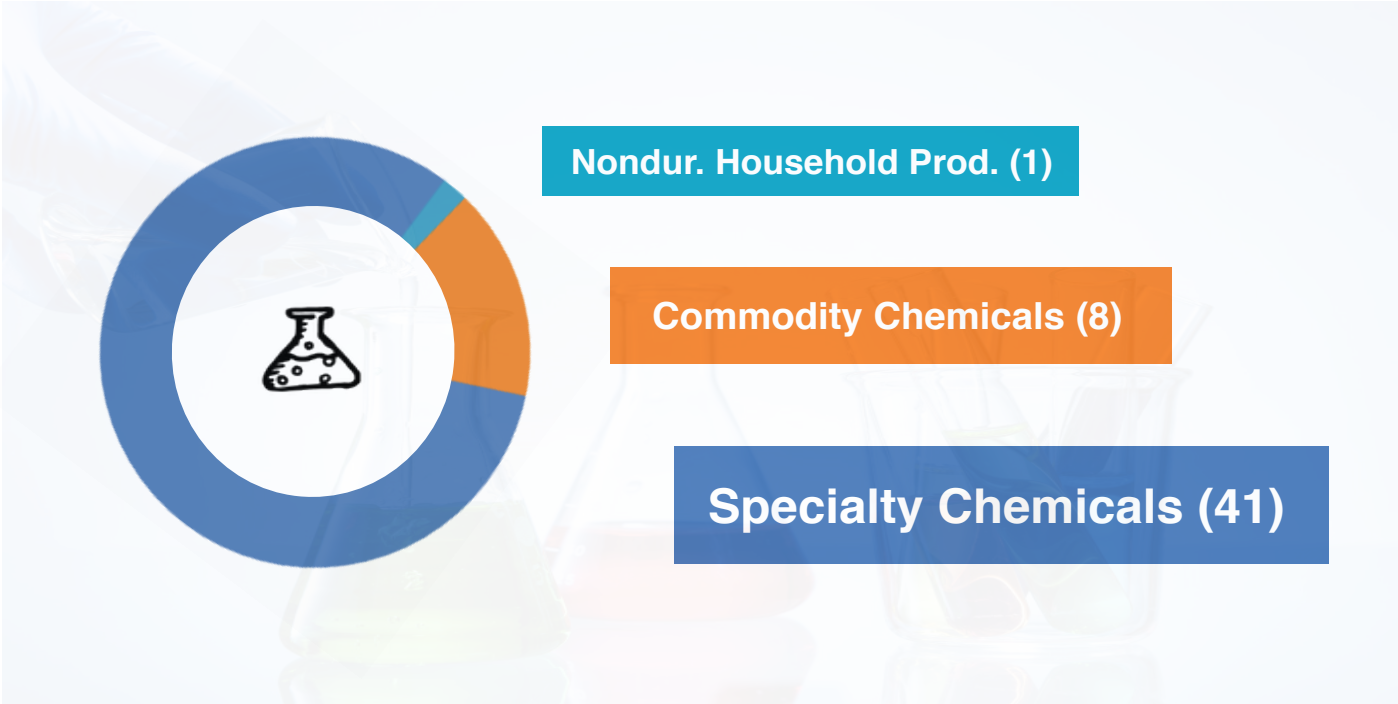
- *Is a positive EVA® performance likely to repeat in the future?*
- *Does the market believe in a possible turnaround for negative EVA® performances?*

¹ AVA advises to use Invested Capital net of goodwill for management purposes and applies this best practice to the EVA® View and EVA® People-Based analyses. The Market View analysis and price decomposition instead is carried out using Invested Capital without netting out goodwill.

The research sample

This study investigates the performance of the **Chemicals sector** in 2017 by analyzing a basket of **European listed companies**.

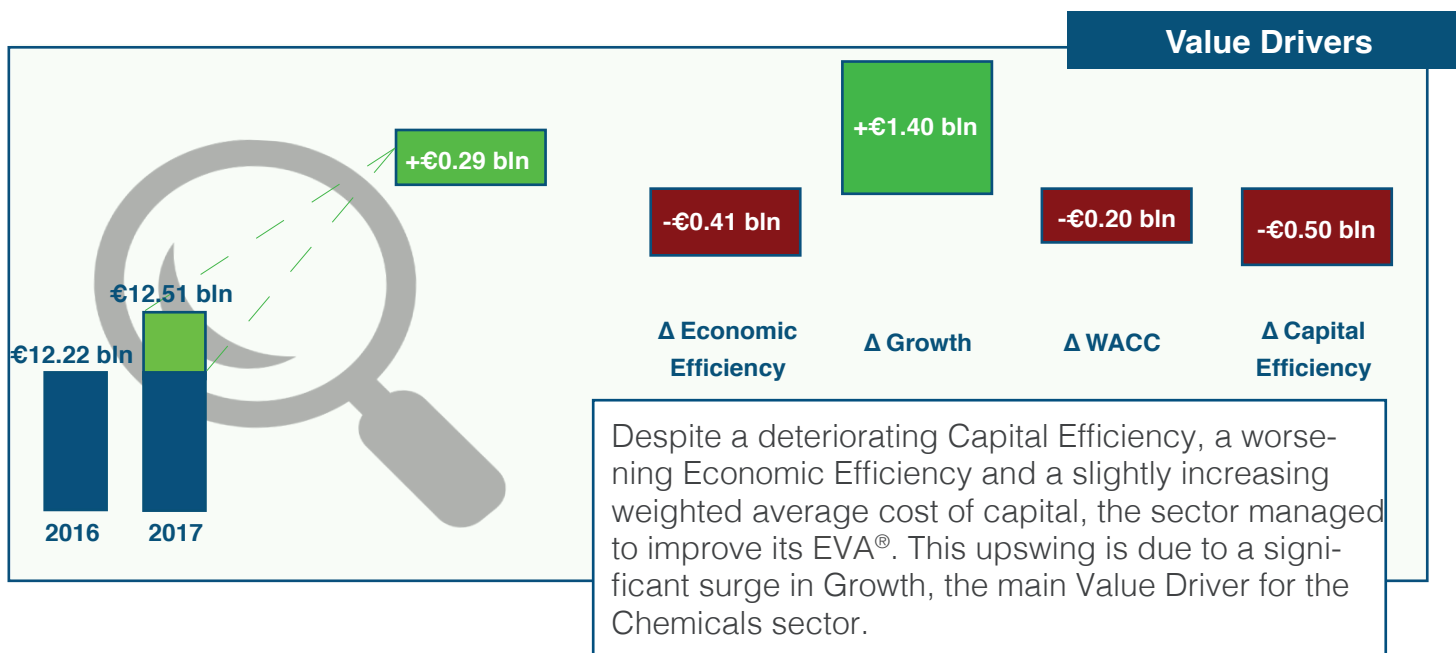
The sample is composed of **50** leading companies listed on the main European exchanges.
The companies have been further categorized into the following subsectors:



The Chemicals sector in a nutshell

Sales for the Chemicals companies in the sample grew by 6.6% w.r. to 2016 and reached €282.5 bln in 2017. Positive strides were made also in terms of sector profitability with profit margins (Profit/Sales) reaching 8.6% (+1.5 p.p. w.r. to 2016). Among the companies in the sample, Henkel excels with a 12.6% profit margin.

As far as Value creation is concerned, the sector managed to deliver a modest +2.4% improvement relative to 2016, with EVA® hitting €12.5 bln in 2017. Once again, Henkel stands out with a €2.4 bln EVA®, compared to a €0.26 bln sector average.



Average **employee productivity**, at €104.6k in 2017, is **on the rise** relative to 2016 (+7.2%). Interestingly, this growth was not matched by an equivalent increase in average salaries, which grew only by +2.0%. At the same time, the number of employees in the Chemicals sector remains almost constant (-0.4% w.r. to 2016). In terms of employee productivity, the **Commodity Chemicals** subsector's performance is distinctive with an average €119.9k/employee.

What do the markets tell us about the Chemicals sector? The picture here is **not particularly optimistic**. The improvement delivered in the last year was insufficient to achieve a positive FGV. What does it mean? A negative sector FGV implies that the expected return implicit in stock prices is now lower than the actual return obtained. In other words, investors do not expect future performance improvements in the Chemicals sector. This is true for all subsectors except Specialty Chemicals.

The Traditional Approach

TRADITIONAL APPROACH

The table below shows the **Top 10** companies based on the **The Traditional Approach**.

In the three columns we have reported respectively:

- the **differential (%) between 2017 and 2016 Sales**
- the **2017 EBIT/Sales**
- the **2017 Profit/Sales**.

	VICTREX
	EMS-CHEMIE HOLDING
	KONINKLIJKE
	WACKER CHEMIE
	CRODA INTERNATIONAL
	GIVAUDAN
	COVESTRO
	HENKEL
	HEXPOL
	LENZING

Δ Sales (2017-2016)	EBIT/Sales	Profit/Sales
10%	39%	34%
7%	27%	22%
9%	10%	21%
-9%	7%	18%
5%	24%	17%
7%	17%	14%
19%	19%	14%
7%	16%	13%
10%	16%	12%
6%	14%	12%

The British company, **Victrex**, has the highest Profit/Sales margin in the sample.



*See the complete table at page 15











Value Creation - The EVA® View


EVA® VIEW

The following table shows the **Top 10** companies based on the **EVA® View**.


In the five columns we have reported respectively:

- the **2017 EVA®/Sales**
- the sign of **EVA®**
- the sign of the **EVA® variation between 2017 and the 2016-2015 mean**
- the sign of the **Sales variation between 2017 and the 2016-2015 mean**
- the **Status**, or the label used by AVA to assess companies' performance.


	EVA®/Sales	EVA® (+/-)	ΔEVA® (+/-)	ΔSales (+/-)	Status
 VICTREX	28%	+	+	-	Focusing
 EMS-CHEMIE HOLDING	20%	+	+	+	Champion
 CRODA INTERNATIONAL	14%	+	+	+	Champion
 GIVAUDAN	13%	+	+	+	Champion
 COVESTRO	12%	+	+	+	Champion
 HENKEL	12%	+	+	+	Champion
 HEXPOL	12%	+	+	+	Champion
 AIR LIQUIDE	10%	+	+	+	Champion
 ELEMENTIS	9%	+	-	+	Need for control
 FUCHS PETROLUB	8%	+	+	+	Champion

**Focusing**

Companies featuring slower growth but higher and more focused Value Creation.

**Champion**

Companies with an outstanding and improving performance in terms of both sales growth and adopting an EVA® view.

**Need for control**

Companies featured by a temporary downturn.

WHAT IS EVA® ?

EVA® is a residual Income, i.e. the residual value of Sales after deducting the cost of all operating factors, including the opportunity cost of the capital invested by shareholders.

*See the complete table at page 16


Value Creation- The People-Based Approach

EVA® PEOPLE BASED

The following table represents the **Top 10** companies in the sample, for what concerns the **EVA® People Based**.

In the three columns we have reported respectively:

- the **2017 Number of Employees**
- the **2017 Productivity** per employee
- the **2017 EVA®** per employee.

	EMS-CHEMIE HOLDING
	VICTREX
	COVESTRO
	GIVAUDAN
	CRODA INTERNATIONAL
	HENKEL
	FUCHS PETROLUB
	ELEMENTIS
	BORREGAARD
	SYNTHOMER

N° Employees	Productivity/ Employee (€ '000)	EVA®/Employee (€ '000)
2,912	206	136
763	214	122
16,176	227	108
11,170	146	53
4,309	121	50
53,700	104	45
5,190	100	39
1,600	107	37
1,065	128	37
2,789	95	35



British and German compa-
nies top the list according to
the **EVA® People Based**
Approach.

*See the complete table at page 17

The Market: sustaining performance

MARKET VIEW

Share prices are usually defined “**forward looking**” in that they embed valuable information about a company’s performance expectations. Through daily quotations, the capital market quantifies the expectations of multiple investors about the company’s future performance.

By decomposing a company’s value it is possible to **learn about market expectations** and, most of all, to quantify the company’s performance improvements needed to meet (or exceed) these expectations.

Market Value Added (MVA)

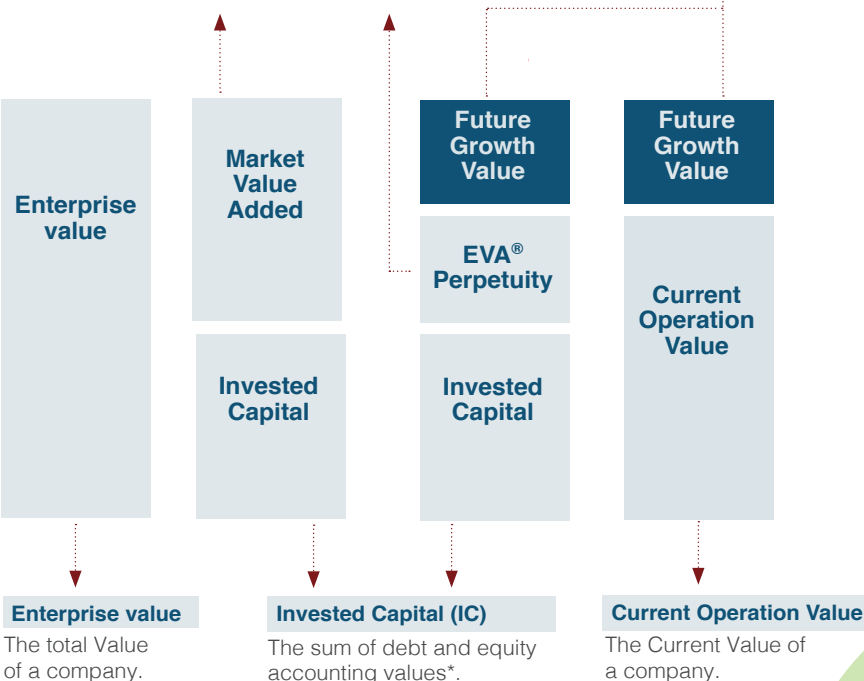
A measure of the Value created by a company. It can be seen as the sum of all the future EVA® performances expected by the market.

EVA® Perpetuity

The portion of MVA explained by the company’s ability to replicate the achieved results (2017) in the future.

Future Growth Value

The difference between MVA and EVA® Perpetuity. It quantifies market expectations about a company’s future over (or under) performance. It is the present value of the future Δ EVA®s with respect to the last EVA® recorded (EVA® 2017).



ROIC

ROIC (actual) is the Return generated by the Capital Invested (IC) in the company. It is calculated using accounting values.

ROIC® (ROIC expected)

ROIC® (expected), implicit in market prices, represents the “theoretical” Return required by investors to meet market expectations.

WHAT DOES THIS METHODOLOGY MEAN FOR COMPANIES?

The understanding of the expected performance improvements implied in a company’s share price gives companies the opportunity to revise and adjust their business plans. Moreover, it provides the board with information to assist decision-making in areas such as **target setting** and **management incentive schemes**.

A Company with a high FGV needs to deliver positive Δ EVA®s to avoid the stock price taking on a downward trend. Similarly, a high FGV company will find it difficult to increase its share price- it would need to outperform its expected EVA® performance. Such a company will have a ROIC® higher than its actual ROIC.











A company with a negative FGV will instead need relatively small improvements to beat market expectations and achieve a higher share price. Such a company will have a ROIC® that is lower than its actual ROIC.

* AVA advises to use Invested Capital net of goodwill for management purposes and applies this best practice to the EVA® View and EVA® People-Based analyses. The Market View analysis and price decomposition instead is carried out using Invested Capital without netting out goodwill.



The Market: Prices and Expectations

Accordingly, a company's share price can be decomposed into two elements: the **Current Value Component** and the **Future Value Component**.

The table below shows data on: **Share Prices**, **Price components**, **ROIC** and **ROIC^e** for the top 10 companies by market capitalization and for the Italian companies in the sample (share prices as of December, 29th 2017).

	Price/share (€)	=	Current Value Component (€)	+	Future Value Component (€)	ROIC	ROIC ^e
 BASF	91.80	=	110.54	+	-18.74	14%	12%
 AIR LIQUIDE	105.05	=	99.33	+	5.72	17%	18%
 LINDE AKTIENGESELLSCHAFT	180.72	=	160.38	+	20.34	16%	18%
 HENKEL	110.20	=	320.26	+	-210.06	41%	15%
 AKZO NOBEL	73.02	=	41.73	+	31.29	8%	14%
 GIVAUDAN	1924.62	=	1673.27	+	251.35	28%	32%
 COVESTRO	86.25	=	209.13	+	-122.88	36%	15%
 EVONIK INDUSTRIES	31.42	=	37.69	+	-6.27	16%	14%
 KONINKLIJKE	79.67	=	87.45	+	-7.78	14%	13%
 EMS-CHEMIE HOLDING	555.94	=	453.72	+	102.22	40%	50%

FOCUS ON ITALY

 SOL	10.63	=	4.04	+	6.59	7%	13%
 ISAGRO	1.72	=	-1.39	+	3.11	1%	4%

*See the complete table at page 18

Our “Hot Topics”

Revenue Management

A wide range of opportunities to increase Value

The primary aim of Revenue Management is selling the right product to the right customer at the right time for the right price and with the right configuration. The essence of this discipline is understanding customers’ perceptions about Product Value and accurately aligning Product Prices, Placement and Availability for each Customer segment. Revenue Management absorbs a wide range of opportunities to increase Value. Pricing is the most important Revenue Management lever.

Why not to use a data-driven strategy to meet these challenges and increase Revenues?

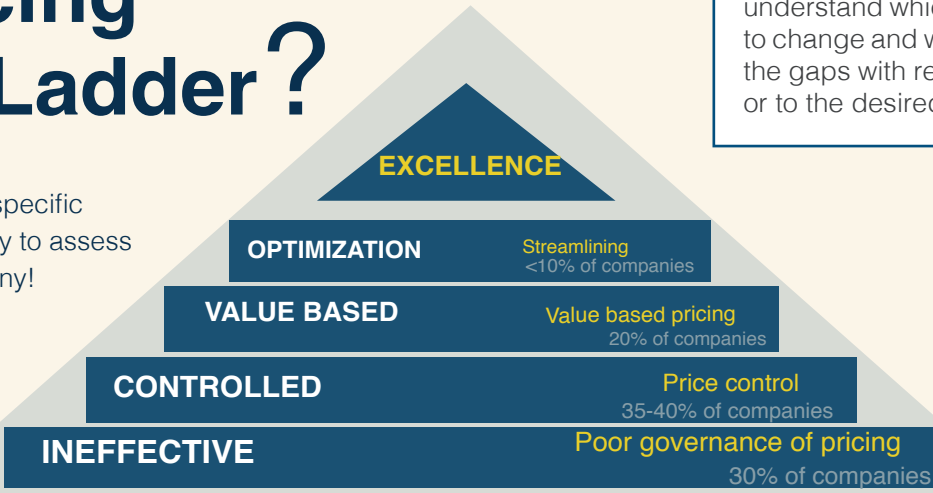
Active Value Advisors approaches the issue of Revenue Management by integrating specialized competences and the use of state-of-the-art Business Intelligence tools.

With Self BI tools like Tableau Software or Qlik, we can provide different solutions and models that are tailored to customer needs and quickly available. Win/Loss models, Price waterfall, Price elasticity, Price corridors, Variance analysis and many others are powerful tools to address operational and decisional mechanisms. The main aim of a Pricing strategy is understanding and “anticipating” the **Value created** for clients and setting prices that allow to capture this Value.



Where do you rank on the Pricing Ladder?

We have a specific methodology to assess your company!



Many of our Revenue management projects start with a diagnostic activity, quick but well-structured, based on our proprietary methodology. It allows companies to understand which operational mechanisms to change and which tools to adopt to close the gaps with respect to best practice and/or to the desired results.



Our “Hot Topics”

Network Analysis and the measure of Cooperation


Why do many excellent strategies fail or do not deliver the expected results? While there are numerous potential factors that may help explain it, there is one that is common to (almost) all cases: people. The problem is not their lack of competences or knowledge. Rather, problems arise due to corporate behaviour and the difficulty with which it can be changed and aligned with a company's strategies.

Cooperation to reduce complexity. “Business complexity” grew sixfold in the last sixty years. Traditional solutions are obsolete to deliver the successful organizational change required by today's fast-changing business world. Understanding and continuously and efficiently managing corporate behaviour is therefore a must.

What does it mean? That to succeed in a complex and continuously changing business environment, it is necessary to work not only on the “Organizational Skeleton”, but also (and most importantly) on its “Nervous System”, i.e. how people interact and work with each other.

The **SOLUTION:** Embrace new tools to quickly understand how organizations really work (Organizational Network Analysis - ONA), to foster engagement, to promote management's behavioural change (e.g. **continuous feedback**) and to adopt **incentive schemes** designed to induce people to look for **cooperation**.


How to be sure that the **informal organizational structure** is aligned with the **formal/desired one**?



Diagnostic Analysis

A web-based analysis which delivers a snapshot of the organization through diagnostic indicators and different organizational views.

- ✓ Scope and organizational focus definition
- ✓ Web-based survey (4 questions) administration
- ✓ Results analysis
- ✓ Research evidence presentation and detailed report



Internal Network Map

Extends some features of the platform to groups of resources in order to support internal processes, facilitate interaction and continuously monitor the organization.

- ✓ Scope and organizational focus definition
- ✓ Open web-based survey for selected groups
- ✓ Profiles and internal expertise collection
- ✓ Launch & Training

How to measure the level of Cooperation ?

HOW-4 is a simple but extremely powerful Organizational Network Analysis tool. It allows to analyze organizational networks and informal relationships in complex and large organizations.

HOW-4 can be used to map how an organization really works at different levels: company, business unit/team, individual. Specific indicators and different visualizations facilitate the reading of the evidence provided by such an analysis.

HOW-Targets is an optional tool that allows to understand how internal resources create groups, to discover each individual's role within such a group and to assess his/her effort and contribution relative to a company's strategic objectives.



ORGANIZATIONAL NETWORK ANALYSIS
activevalue.eu

Our “Hot Topics”

Target Setting Outside-In

What is it about?

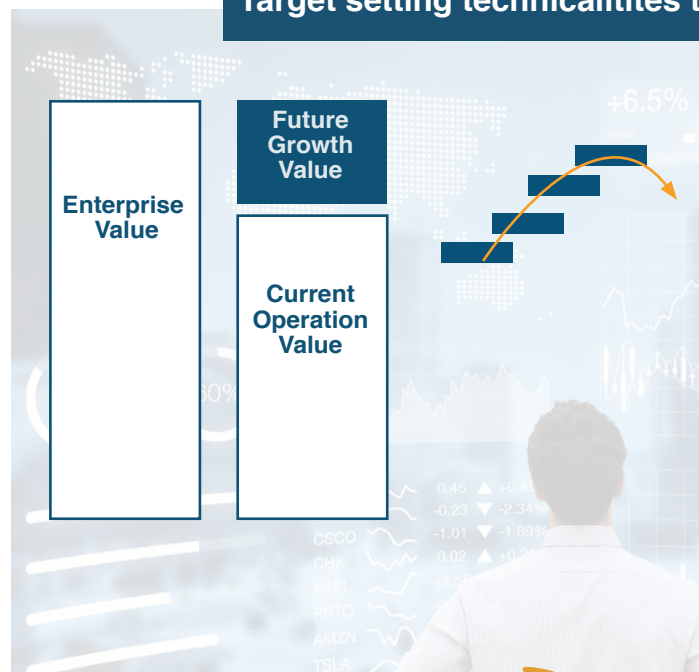
Through Target Setting modeling and simulation, it is possible to tie the expectations implicit in stock market prices to the operating results that represent the fundamental Values of a Company.

“**Target setting Outside-In**” represents the “**reverse engineering approach**” of a traditional equity valuation process. Starting from stock prices and using solid models the fundamentals that are incorporated within these prices are determined. This powerful approach, fully complementary to the traditional planning process, allows to enormously enrich it by taking advantage of all the information included in stock prices.

What is the objective of Target Setting Outside-In?

- To assess the level of challenge of Business Plans given the ‘true’ Value of a company
- To benchmark market expectations using a group of peer companies
- To define and optimize the relevant managerial levers, with due importance given to external factors
- To enable the implementation of innovative Governance Systems by defining long-term management objectives and coherent incentive schemes BEFORE business plans are drafted.

Target setting technicalities to define and optimize management objectives



MARKET EXPECTATIONS

Top-
Down

vs.



Bottom-
Up

BUSINESS PLANS



TARGET SETTING ‘OUTSIDE IN’
activevalue.eu

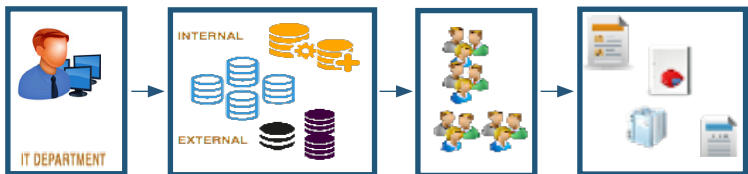
Our “Hot Topics”

Business Intelligence & Analytics

Data grow and change rapidly. If collected, analyzed and visualized properly they can be a source of valuable information, insights and competitive advantage. This data availability boom delineates a new role for IT teams.

In such a context, the term “Business Intelligence” is a concept that expresses the need to think beyond the paradigm of data analysis in isolation from business goals. Indeed, through **Self Business Intelligence**, technology and business objectives should blend together into a new configuration, within a solid decision-making framework. Today new technologies, such as Big Data, Analytics, Mobile and Cloud computing are able to capture massive and detailed streams of data, in a relatively **easy and convenient way**.

Data Management “NOW”

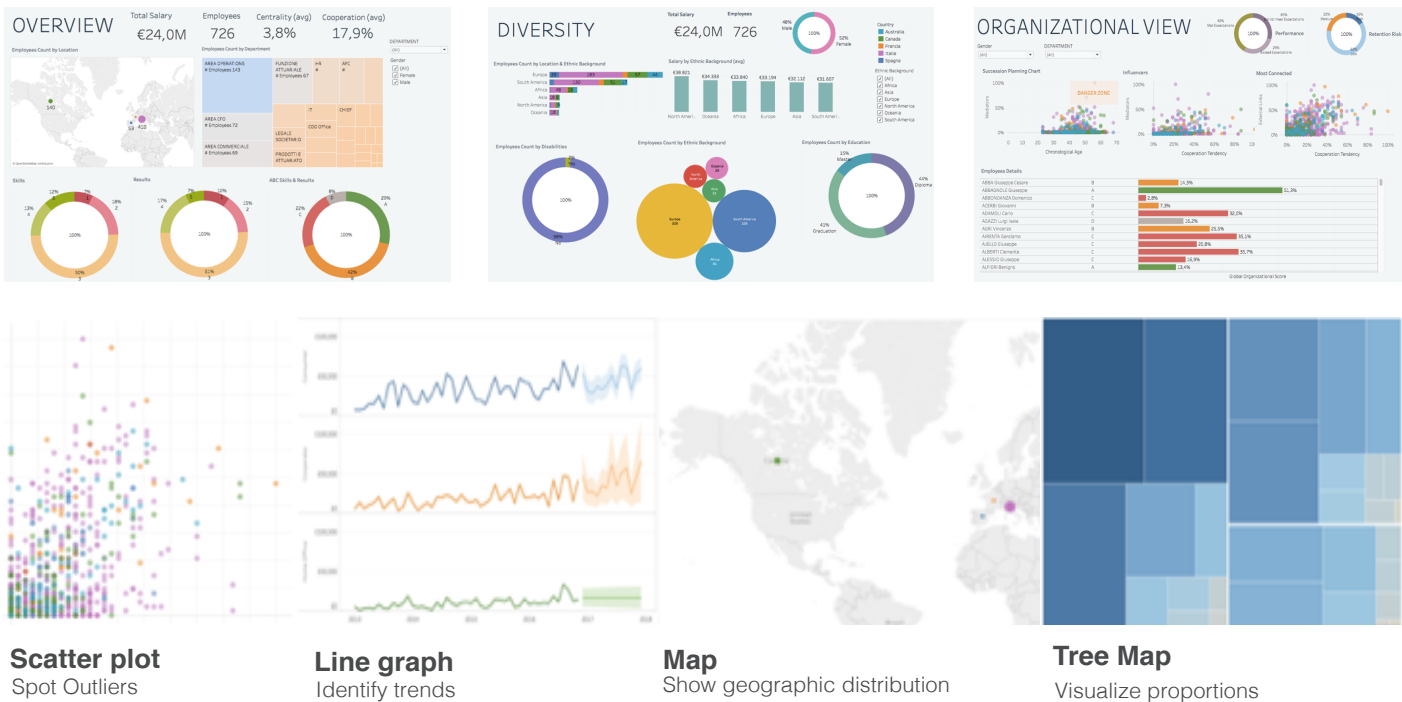


A “dynamic” model in which a Business continuously transforms data and “discovers” information that is useful at a particular point in time, making it easily understandable through data visualization and in which the IT Department acts as “the guardian” of the proper management of data sources.

- ✔ Multitude of data available
- ✔ Data always up-to-date
- ✔ Ease of data analysis
- ✔ Data centralization and uniqueness
- ✔ Reports created by final users
- ✔ Customizable output

But having everything is not always better than having nothing. **The value of data is contingent on being able to extract information.** And, this is not just a matter of tools. The role of Management is **to know what data to look for to address relevant business issues and to maximize the use of data to support strategic decisions.**

Numerous Graphs and Visualizations to address different needs



Active Value Advisors

3 Competence Centres

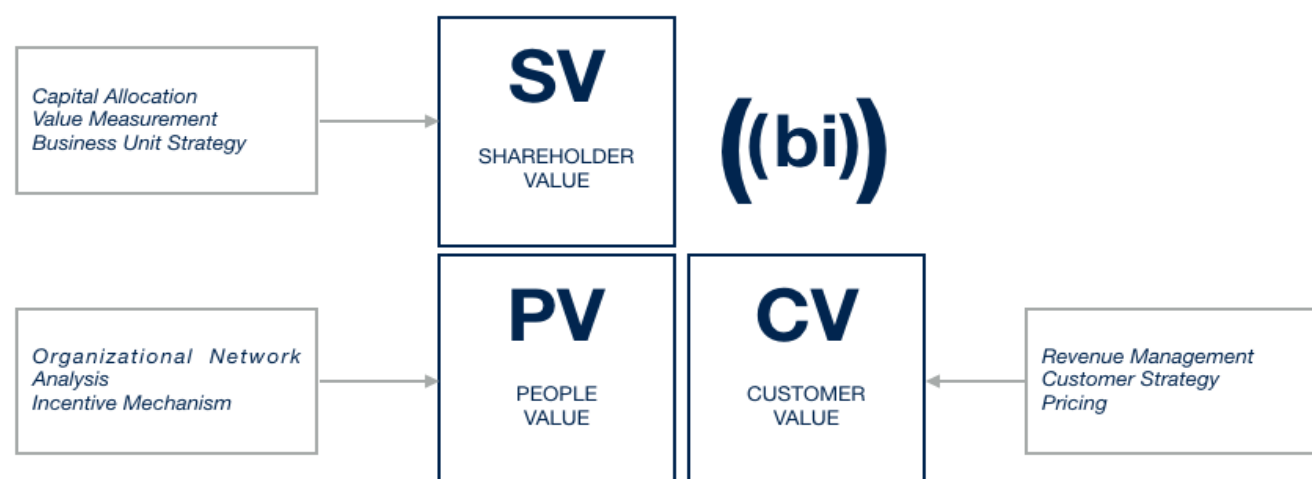
Active Value Advisors is an independent management consulting firm that acts as a partner for Companies that need to strengthen their Governance System and for Companies that want to pursue a path of growth by applying solutions consistent with the objective of creating sustainable Value.

Active Value Advisors assists such companies by leveraging successful techniques and experiences focused on Value-based management systems and by making them available to the top management through **Business Intelligence (BI) tools**.

The professionals of Active Value Advisors have a long experience in assisting major Italian listed groups in the development of Business Plans, in selecting the actions to improve Value performance and in assisting the change process required by the competitive dynamics and market opportunities.

In carrying out these mandates a common Value framework is applied to various management issues: **Shareholder Value**, **Customer Value** and **People Value**. Each competence centre responds to a fundamental dimension of the management system and addresses key stakeholders: Shareholders, Customers and Internal Resources.

Thanks to the collaboration with accredited professionals in the area of Strategic Pricing, Active Value Advisors has enriched its skills and professional methods with innovative models and tools of Value Pricing.



Disclaimer

This material has been prepared by Active Value Advisors using public information that could be incorrect. Active Value Advisors takes no responsibility for the correctness, completeness, omissions, errors of the information presented and publications made available and thus, excludes any liability. This document is for illustrative purposes only and it is not, and should not be regarded as investment advice or as recommendation regarding any particular security or course of action. Opinions expressed herein are current opinions as of the date of writing and are subject to change without notice. If any of the assumptions used herein do not prove to be true, results are likely to vary substantially.

No part of this document may be reproduced in any manner, in whole or in part, without the prior written permission of Active Value Advisors.

The Traditional Approach - complete table

Company	Δ Sales (%)	EBIT/Sales	Profit/Sales
AIR LIQUIDE	12%	15%	11%
AKZO NOBEL N.V.	-32%	9%	9%
ARKEMA SA	10%	11%	6%
BASF SE	12%	11%	9%
BORREGAARD AS	0%	16%	12%
BRAIN BIOTECHNOLOGY RESEARCH AND INFORMATION NETWORK AG	5%	-33%	-36%
BRENNTAG AG	12%	5%	3%
CLARIANT AG	8%	9%	4%
COVESTRO AG	19%	19%	14%
CRODA INTERNATIONAL PLC	5%	24%	17%
ELEMENTIS PLC	17%	14%	9%
EMS-CHEMIE HOLDING AG	7%	27%	22%
ERCROS, S.A.	14%	7%	6%
EVONIK INDUSTRIES AG	13%	8%	5%
FUCHS PETROLUB SE	9%	14%	11%
GIVAUDAN SA	7%	17%	14%
GURIT HOLDING AG	1%	11%	7%
H&R GMBH & CO KGAA	9%	4%	3%
HENKEL AG AND CO. KGAA	7%	16%	13%
HEXPOL AB	10%	16%	12%
HOLLAND COLOURS NV	5%	9%	7%
IMCD GROUP BV	11%	6%	4%
ISAGRO SPA	0%	2%	0%
JOHNSON MATTHEY PLC	7%	4%	3%
K&S AG	5%	4%	5%
KEMIRA OYJ	5%	7%	3%
KONINKLIJKE DSM N.V.	9%	10%	21%
LANXESS AG	26%	6%	1%
LENZING AG	6%	14%	12%
LINDE AKTIENGESELLSCHAFT	1%	12%	7%
NABALTEC AG	6%	9%	7%
OCI NV	14%	8%	-5%
PLASTIQUES DU VAL DE LOIRE	8%	8%	7%
RECTICEL NV	8%	0%	2%
ROBERTET SA	8%	13%	10%
SCAPA GROUP PLC	8%	8%	6%
SIMONA AG	7%	8%	4%
SIRIUS MINERALS PLC	NA	NA	NA
SOC D EXPLOSIFS PRODUITS CHIMIQUES SA	6%	3%	3%
SOL SPA	8%	10%	5%
SOLVAC	NA	NA	NA
SOLVAY SOCIETE ANONYME	-4%	10%	10%
SP GROUP AS	24%	10%	7%
SYMRISE AG	3%	13%	9%
SYNTHOMER PLC	35%	7%	5%
TESSENDERLO GROUP NV	4%	7%	2%
VICTREX PLC	10%	39%	34%
WACKER CHEMIE AG	-9%	7%	18%
YARA INTERNATIONAL ASA	-4%	4%	4%
ZOTEFOAMS PLC	17%	13%	9%

Value Creation - complete table

Company	EVA®/ Sales	EVA® +/-	Δ EVA® +/-	Δ Sales +/-	Status
AIR LIQUIDE	10%	+	+	+	Champion
AKZO NOBEL N.V.	3%	+	-	-	Falling Angel
ARKEMA SA	6%	+	+	+	Champion
BASF SE	5%	+	+	+	Champion
BORREGAARD AS	8%	+	+	+	Champion
BRAIN BIOTECHNOLOGY RESEARCH AND INFORMATION NETWORK AG	-36%	-	+	+	On the right path
BRENTAG AG	3%	+	-	+	Need for control
CLARIANT AG	4%	+	-	+	Need for control
COVESTRO AG	12%	+	+	+	Champion
CRODA INTERNATIONAL PLC	14%	+	+	+	Champion
ELEMENTIS PLC	9%	+	-	+	Need for control
EMS-CHEMIE HOLDING AG	20%	+	+	+	Champion
ERCROS, S.A.	3%	+	+	+	Champion
EVONIK INDUSTRIES AG	5%	+	-	+	Need for control
FUCHS PETROLUB SE	8%	+	+	+	Champion
GIVAUDAN SA	13%	+	+	+	Champion
GURIT HOLDING AG	6%	+	+	-	Focusing
H&R GMBH & CO KGAA	1%	+	-	+	Need for control
HENKEL AG AND CO. KGAA	12%	+	+	+	Champion
HEXPOL AB	12%	+	+	+	Champion
HOLLAND COLOURS NV	6%	+	+	+	Champion
IMCD GROUP BV	4%	+	+	+	Champion
ISAGRO SPA	-6%	-	-	-	Need for rebirth
JOHNSON MATTHEY PLC	2%	+	+	+	Champion
K&S AG	-7%	-	-	-	Need for rebirth
KEMIRA OYJ	2%	+	+	+	Champion
KONINKLIJKE DSM N.V.	6%	+	+	+	Champion
LANXESS AG	2%	+	+	+	Champion
LENZING AG	7%	+	+	+	Champion
LINDE AKTIENGESellschaft	7%	+	+	-	Focusing
NABALTEC AG	4%	+	+	+	Champion
OCI NV	-1%	-	+	+	On the right path
PLASTIQUES DU VAL DE LOIRE	5%	+	+	+	Champion
RECTICEL NV	-3%	-	-	+	What after growth?
ROBERTET SA	5%	+	+	+	Champion
SCAPA GROUP PLC	6%	+	+	+	Champion
SIMONA AG	4%	+	+	+	Champion
SIRIUS MINERALS PLC	NA	-	-	-	Need for rebirth
SOC D EXPLOSIFS PRODUITS CHIMIQUES SA	0%	-	+	+	On the right path
SOL SPA	-1%	-	-	+	What after growth?
SOLVAC	NA	-	+	-	Restructuring
SOLVAY SOCIETE ANONYME	4%	+	+	-	Focusing
SP GROUP AS	5%	+	+	+	Champion
SYMRISE AG	7%	+	+	+	Champion
SYNTHOMER PLC	6%	+	+	+	Champion
TESSENDERLO GROUP NV	3%	+	-	+	Need for control
VICTREX PLC	28%	+	+	-	Focusing
WACKER CHEMIE AG	2%	+	+	-	Focusing
YARA INTERNATIONAL ASA	-2%	-	-	-	Need for rebirth
ZOTEFOAMS PLC	5%	+	+	+	Champion



Need for control

Companies featured by a temporary downturn.



Champion

Companies with an outstanding and improving performance in terms of both sales growth and adopting an EVA® view.



Falling Angel

Companies, once Champions, but now facing decreasing performances both in terms of EVA® and Sales. It may thus be necessary to revise the Value Proposition.



Need for rebirth

Companies with worsening results, affected by heavy difficulties and witnessing a complete Value destruction.



What after growth?

Companies focused solely on growth. It may be necessary to verify/revise business objectives.



Focusing

Companies featuring slower growth but higher and more focused Value Creation.



On the right path

Companies with clearly and correctly defined objectives, featuring performance improvements, though not 'Champions' yet.

The People-Based Approach- complete table

Company	N° Employees	Productivity/ Employee (€'000)	EVA ®/ Employee (€'000)
AIR LIQUIDE	65,200	95	31
AKZO NOBEL N.V.	35,700	58	8
ARKEMA SA	19,779	NA	26
BASF SE	115,490	122	31
BORREGAARD AS	1,065	128	37
BRAIN BIOTECHNOLOGY RESEARCH AND INFORMATION NETWORK AG	212	33	-45
BRENNTAG AG	15,172	NA	22
CLARIANT AG	18,135	NA	13
COVESTRO AG	16,176	227	108
CRODA INTERNATIONAL PLC	4,309	121	50
ELEMENTIS PLC	1,600	107	37
EMS-CHEMIE HOLDING AG	2,912	206	136
ERCROS, S.A.	1,321	78	15
EVONIK INDUSTRIES AG	36,523	NA	18
FUCHS PETROLUB SE	5,190	100	39
GIVAUDAN SA	11,170	146	53
GURIT HOLDING AG	2,198	44	9
H&R GMBH & CO KGAA	1,692	58	6
HENKEL AG AND CO. KGAA	53,700	104	45
HEXPOL AB	4,389	NA	34
HOLLAND COLOURS NV	411	59	10
IMCD GROUP BV	2,265	105	30
ISAGRO SPA	610	36	-15
JOHNSON MATTHEY PLC	12,214	83	23
K&S AG	14,793	NA	-17
KEMIRA OYJ	4,732	86	9
KONINKLIJKE DSM N.V.	21,054	108	25
LANXESS AG	19,029	98	11
LENZING AG	6,488	79	25
LINDE AKTIENGESELLSCHAFT	57,605	NA	21
NABALTEC AG	476	81	14
OCI NV	2,879	NA	-9
PLASTIQUES DU VAL DE LOIRE	5,225	41	6
RECTICEL NV	6,678	NA	-5
ROBERTET SA	1,804	74	13
SCAPA GROUP PLC	1,364	72	13
SIMONA AG	1,289	71	13
SIRIUS MINERALS PLC	91	-347	-548
SOC D EXPLOSIFS PRODUITS CHIMIQUES SA	1,715	43	-1
SOL SPA	3,556	44	-3
SOLVAC	NA	NA	NA
SOLVAY SOCIETE ANONYME	24,500	NA	19
SP GROUP AS	1,852	42	7
SYMRISE AG	9,247	90	23
SYNTHOMER PLC	2,789	95	35
TESSENDERLO GROUP NV	4,547	NA	13
VICTREX PLC	763	214	122
WACKER CHEMIE AG	13,811	NA	8
YARA INTERNATIONAL ASA	15,527	47	-13
ZOTEFOAMS PLC	360	74	11

The Market - complete table (prices as of 29.12.2017)

Company	Price/share (€)		Current Value Component (€)		Future Value Component (€)	ROIC	ROIC*
AIR LIQUIDE	105.05	=	99.33	+	5.72	17%	18%
AKZO NOBEL N.V.	73.02	=	41.73	+	31.29	8%	14%
ARKEMA SA	101.55	=	151.68	+	-50.13	20%	14%
BASF SE	91.80	=	110.54	+	-18.74	14%	12%
BORREGAARD AS	8.30	=	9.74	+	-1.44	16%	13%
BRAIN BIOTECHNOLOGY RESEARCH AND INFORMATION NETWORK AG	22.34	=	-8.73	+	31.07	-59%	128%
BRENTAG AG	53.17	=	51.79	+	1.37	21%	22%
CLARIANT AG	23.29	=	20.75	+	2.54	13%	14%
COVESTRO AG	86.25	=	209.13	+	-122.88	36%	15%
CRODA INTERNATIONAL PLC	49.84	=	32.52	+	17.32	27%	40%
ELEMENTIS PLC	3.25	=	2.55	+	0.70	21%	26%
EMS-CHEMIE HOLDING AG	555.94	=	453.72	+	102.22	40%	50%
ERCROS, S.A.	2.86	=	4.63	+	-1.77	13%	9%
EVONIK INDUSTRIES AG	31.42	=	37.69	+	-6.27	16%	14%
FUCHS PETROLUB SE	44.60	=	76.92	+	-32.33	26%	15%
GIVAUDAN SA	1924.62	=	1673.27	+	251.35	28%	32%
GURIT HOLDING AG	899.92	=	1552.64	+	-652.71	17%	10%
H&R GMBH & CO KGAA	14.58	=	12.65	+	1.93	7%	8%
HENKEL AG AND CO. KGAA	110.20	=	320.26	+	-210.06	41%	15%
HEXPOL AB	8.46	=	9.42	+	-0.96	74%	67%
HOLLAND COLOURS NV	84.84	=	143.91	+	-59.07	20%	13%
IMCD GROUP BV	52.43	=	30.08	+	22.35	20%	32%
ISAGRO SPA	1.72	=	-1.39	+	3.11	1%	4%
JOHNSON MATTHEY PLC	34.64	=	37.84	+	-3.20	14%	13%
K&S AG	20.74	=	-12.19	+	32.93	0%	5%
KEMIRA OYJ	11.50	=	12.92	+	-1.42	7%	7%
KONINKLIJKE DSM N.V.	79.67	=	87.45	+	-7.78	14%	13%
LANXESS AG	66.38	=	65.77	+	0.61	9%	9%
LENZING AG	105.85	=	168.42	+	-62.57	16%	10%
LINDE AKTIENGESELLSCHAFT	180.72	=	160.38	+	20.34	16%	18%
NABALTEC AG	25.60	=	26.04	+	-0.44	11%	11%
OCI NV	21.03	=	-5.04	+	26.07	5%	13%
PLASTIQUES DU VAL DE LOIRE	18.70	=	34.87	+	-16.17	15%	9%
RECTICEL NV	7.73	=	-7.86	+	15.59	-6%	9%
ROBERTET SA	408.00	=	365.11	+	42.89	12%	13%
SCAPA GROUP PLC	4.94	=	2.12	+	2.82	53%	120%
SIMONA AG	574.45	=	887.98	+	-313.53	18%	13%
SIRIUS MINERALS PLC	0.26	=	-0.06	+	0.32	-7%	19%
SOC D EXPLOSIFS PRODUITS CHIMIQUES SA	930.00	=	341.45	+	588.55	4%	8%
SOL SPA	10.63	=	4.04	+	6.59	7%	13%
SOLVAC	128.00	=	-44.53	+	172.53	0%	6%
SOLVAY SOCIETE ANONYME	115.90	=	157.13	+	-41.23	9%	7%
SP GROUP AS	29.41	=	31.32	+	-1.91	14%	13%
SYMRISE AG	71.39	=	39.52	+	31.86	16%	26%
SYNTHOMER PLC	5.54	=	4.82	+	0.72	65%	73%
TESSENDERLO GROUP NV	38.89	=	37.93	+	0.96	14%	15%
VICTREX PLC	29.72	=	24.28	+	5.44	30%	40%
WACKER CHEMIE AG	164.15	=	105.69	+	58.46	8%	13%
YARA INTERNATIONAL ASA	38.35	=	12.87	+	25.48	3%	8%
ZOTEFOAMS PLC	5.15	=	2.97	+	2.18	11%	17%



Active Value Advisors.

T +39 02 36697100

F +39 02 36697101

E info@activevalue.eu

I www.activevalue.eu



**ACTIVE
VALUE
ADVISORS.**

Management Consultants