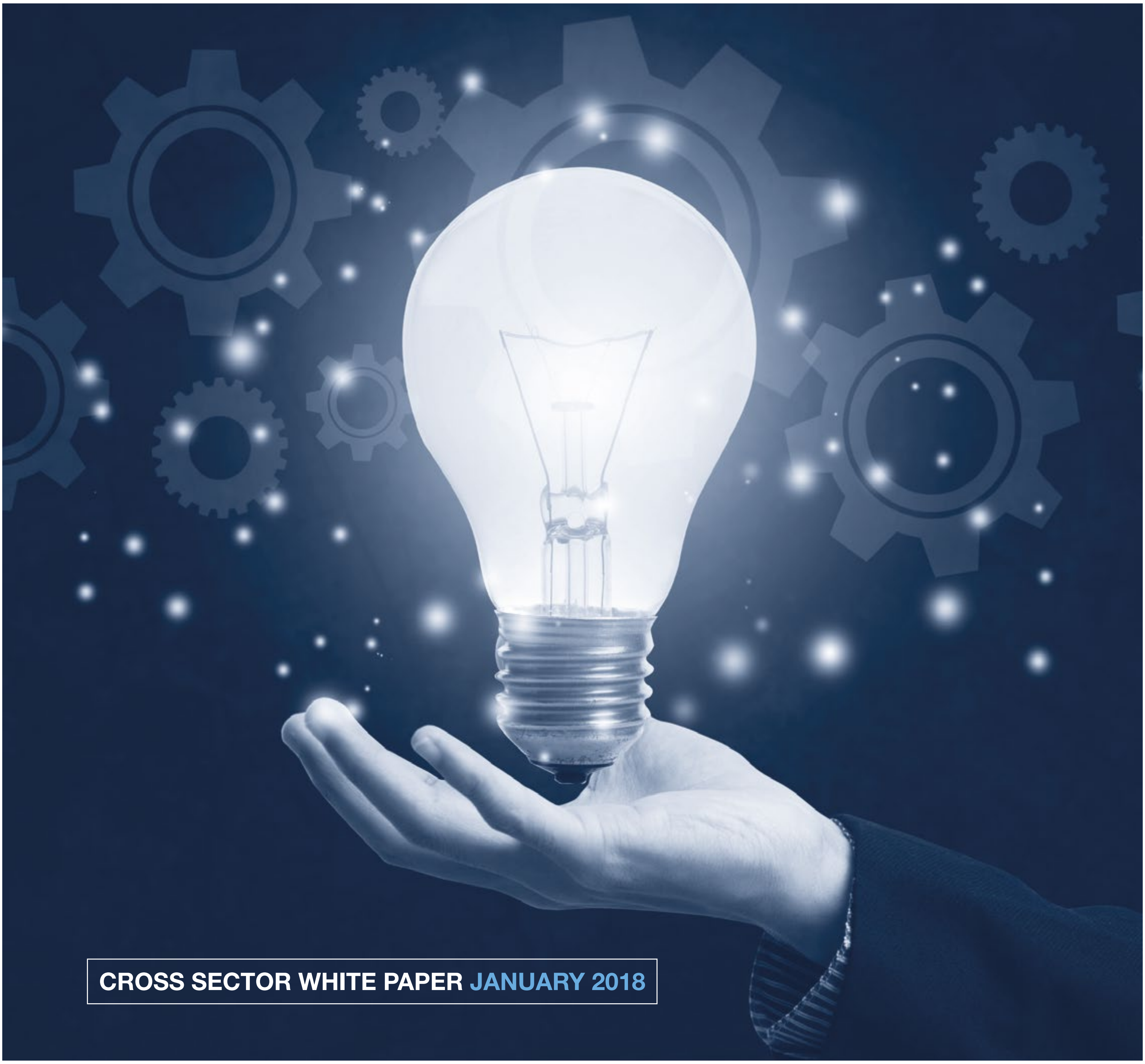
BRYAN, GARNIER & CO

The Next Big Growth Idea

COMPANIES IN AN M&A RACE TO FIND GROWTH THROUGH DATA-DRIVEN INNOVATION



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Innovation is driving an expensive wave of M&A aimed at picking up niche players. At the heart of this trend is Big Data, which is making individualized healthcare and personalized retail experiences possible. We are leaving the era of standardized, 'mass' consumption behind.

Current M&A deals are driven by more than just an advantageous financing environment. They are about finding and protecting growth, which is declining. In the healthcare, FMCG and technology sectors, deals have followed a similar sequence, albeit with different timing:

1. Initially, companies indulged in a sometimes hazardous race for scale, followed by cost-cutting, to compensate for lack of growth. At the same time, efforts to create immediate stock market value (spin-offs and buybacks etc.) caused them to lose sight of their core purpose and came at the expense of innovation.

2. Companies then made a welcome return to their core businesses (through disposals/asset swaps etc.) and by searching for critical mass. Against a backdrop of disruption caused by Amazon, integrating and protecting the value chain then became a priority.

3. Innovation, which is the best way to achieve this, therefore returned to the limelight. This third phase is feeding a wave of targeted acquisitions, as companies vie to buy niche businesses with the expertise to help create personalized services that will build value and protect growth.

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1. Dilution of natural growth factors and M&A

1.1 DEALS WE THOUGHT WERE DEAD NEVERTHELESS MATERIALIZED

Against the backdrop of their first aborted merger attempt in 2007 – and the experience of people such as Pierre Bouchut, the former **Casino** and **Carrefour** executive who suffered the fall-out of the **Carrefour-Promodes** merger before joining **Delhaize** as CFO – it was only natural to fear the 2016 **Ahold-Delhaize** tie-up. The deal had already stumbled in 2007 and the two groups had shown no particular ability to integrate acquisitions. Nonetheless, the two groups took the plunge.

The same question applies to the **Danone-Whitewave** deal (2016) in the organic food sector. As well as bitter memories of the **Numico** acquisition in 2007, investors were still conscious of the message from the group's CEO in November 2015 when he stated that a sizeable deal was useless and growth in ROCE secured. Nevertheless, the transaction took place and the operation will reduce the 2017 ratio by an estimated 200bp. Furthermore, the price offered by **Danone** showed a high valuation (i.e. EBITDA multiple of 21x or 14x including synergies vs. a 2017 sector average of 13x). Again, the two groups went ahead.

Finally, investors in technology, media and telecoms will remember the fallout from AOL's failed 2000 acquisition of **Time Warner** and **Vivendi**'s media convergence strategy that resulted in the ousting of then-CEO Jean-Marie Messier, who concluded that "being right too early could also mean being wrong". Fifteen years later, **ATT** is effectively on the verge of acquiring **Time Warner**. And in France, **SFR** has already got its hands on **Next Radio TV**.

In all these cases – retail, food, TMT – the question is the same: why have these major deals come back?

KEY M&A DEALS FROM BRYAN, GARNIER & CO'S COVERAGE REFLECTING THE SEARCH FOR COST EFFICIENCIES AND/OR THE PROTECTION OF GROWTH DURING THE LAST THREE YEARS

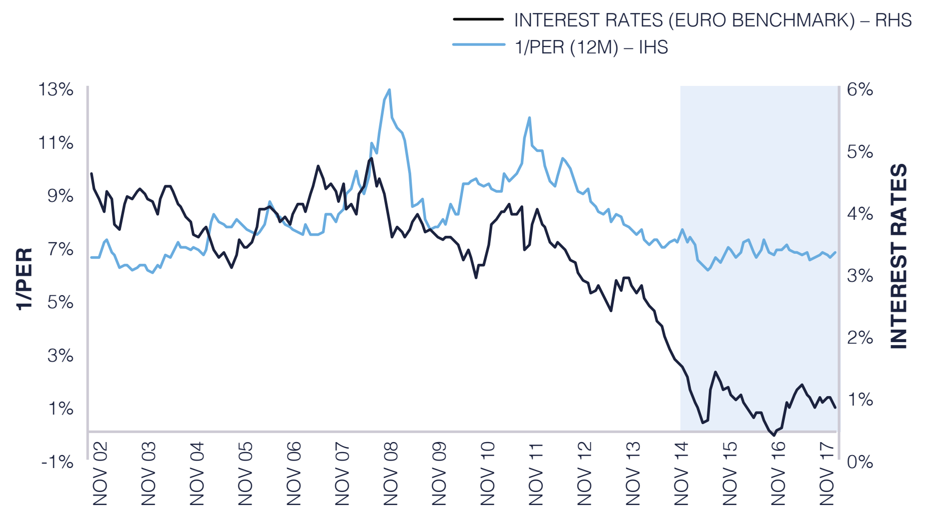
SECTOR	DATE	NATURE OF THE DEAL	RATIONALE BEHIND THE DEAL	TRANSACTION MULTIPLE
FOOD RETAIL	Jun 2016	Merger between Ahold and Delhaize (EUR24bn)	Cost-sharing in a highly mature sector which is suffering a lack of lack of growth	EBITDA multiple of 7.1x (incl. RSS) and 6.1x respectively for Ahold and Delhaize
FOOD RETAIL	Jan 2017	Tesco acquires Booker	Searching for more profitable and growing niche segments	EBITDA multiple of 16x vs 7x on average for the panel!
FOOD	Apr 2017	Acquisition of Whitewave by Danone (EUR11bn)	Searching for more profitable and growing niche segments	EBITDA multiple of 21x (14x incl. synergies) vs 13x for the sector
BEERS	Jul 2016	Acquisition of SABmiller by AB InBev (EV of EUR117bn)	Adding growth in Africa and Latin America and cost savings	17.7x EBITDA 2016e and 21.3x EBIT
UTILITIES	Mar 2017	Acquisition of GE Water by Suez (EUR3.2bn)	Offsetting tepid growth in mature European municipal water markets	EBITDA multiple of 12.5x (10x incl. synergies)
OPTICS	Jan 2017	Merger between Essilor and Luxottica (EUR50bn)	Full control of the value chain to erect barriers to entry	EBITDA multiple of 13.5x and 11.9x respectively for Essilor and Luxottica
SOFTWARE & IT SERVICES	Jul 2015	Acquisition of Igate by Capgemini (EUR4bn)	Strengthening presence in north America, financial services and offshore	2015 EV/EBIT multiple of 17x
HEALTHCARE	Jan 2016	Shire acquires Baxalta	Reinforcing footprint in rare diseases	USD32bn (38% premium)
HEALTHCARE	Feb 2016 + Dec 2016	Ipsen acquires Cabozantinib from Exelixis	EU rights for the Oncology product candidate. Deal amended to add rights for Canada	USD855m (incl. USD200m upfront) + royalties (up to 26%)
HEALTHCARE	Aug 2016	Pfizer acquires Medivation	Best-in-class product of a new promising oncology class (PARP inhibitor) + pipeline	USD14bn (118% premium)
HEALTHCARE	Sep 2016	Fresenius SE acquires Quirónsalud	Complementing portfolio and broadening pipeline in Pulmonary Arterial Hypertension primarily	USD30bn (12.3x EV/sales)
HEALTHCARE	Sep 2016	Bayer acquires Monsanto	Reinforcing agro-chemical business	USD66bn (5.0x EV/sales)
HEALTHCARE	Jan 2017	Johnson & Johnson acquires Actelion	Complementing portfolio and broadening pipeline in Pulmonary Arterial Hypertension primarily	USD30bn (12.3x EV/sales)
HEALTHCARE	Jan 2017	Ipsen acquires Onyvide from Merrimack	One molecule in Oncology to increase the focus of the company and leverage US presence	USD1.025bn (incl. USD575 upfront)
HEALTHCARE	Mar 2017	Boston Scientific acquires Symetis	Best-in-class product on a fast-growing market (transaortic valve implants)	USD435m (8.25x EV/sales)
HEALTHCARE	Apr 2017	Fresenius SE from Akorn Pharmaceuticals	Reinforcing footprint in the US generic space	USD4.3bn (EV/Sales 4.6x, EV/EBITDA 12.4x)
CEMENT	Jul 2015	Acquisition of Lafarge by Holcim. Exchange offer presented as a EUR40bn merger.	Streamlining the footprint (less Europe, more EM)	EBITDA ratio of 8,6x current year excl. synergies
BUILDING MATERIALS	Pending	Pending acquisition of SWH/Sika by Saint-Gobain (EUR2.4bn)	Accelerate growth with stronger exposure to construction technologies / specialty chemical	EBITDA multiple of 10x when announced, excluding the EUR1.1bn premium offered for voting rights

Source: company data; stocks covered by Bryan, Garnier & Co

1.2 HISTORICALLY LOW INTEREST RATES ARE NOT THE MAIN REASON BEHIND THESE DEALS

Issues with execution, cultural fit and egos – as seen in the aborted **Ahold-Delhaize** merger in 2007 and **Publicis-Omnicom** in 2014 – can make major deals very risky. In the food retailing sector for example, we don't recall any value-creating deals, until now, but instead remember the difficulties encountered in the 1999 **Carrefour-Promodes** merger. Retailing is also a local business that puts local suppliers and brands in contact with consumers who have very specific requirements. Any gains from a merger therefore rarely extend beyond a region, and transcontinental synergies are unlikely. Despite this, **Ahold** and **Delhaize** finally took the plunge in 2016 after sizing each other up for a long time.

FIG. 1: INTEREST RATES AND APPROXIMATION OF IMMEDIATE ACCOUNTING PROFITABILITY FOR THE NEW SHAREHOLDER (1/PER)



Source: Datastream; Bryan, Garnier & Co

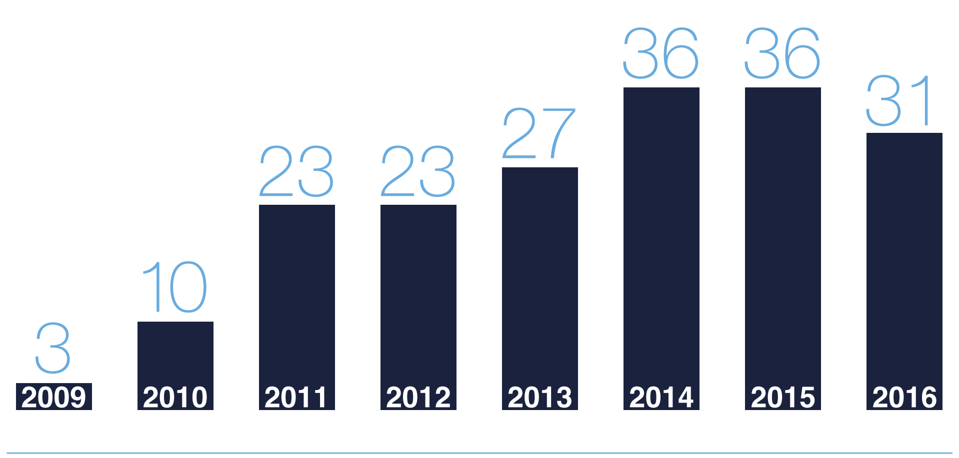
The motivation of players goes beyond an extraordinarily advantageous financing environment and has more to do with the backdrop of sluggish growth.

At first glance, low interest rates could be identified as the main motivation behind these deals. In the event of a takeover bid paid in cash, when the inverse of the target PER* is higher than the cost of debt after tax (see Fig. 1), the buyer's EPS increases. As such, all things being equal, at a financing cost of 2.5% after corporate tax, an acquisition undertaken using debt and on the basis of a PER of less than 40x (1/2.5%) must be accretive (but not necessarily value creative). Even though the predators could indeed have shouldered far more debt, the **Ahold-Delhaize** and **Essilor-Luxottica** (under way) deals have nevertheless involved share swaps.

The motivation of players therefore goes beyond an extraordinarily advantageous financing environment and has more to do with the backdrop of sluggish growth. For example, **Bayer**'s bid for **Monsanto** was a remedy for a company with insipid sales prospects. Similarly, the incredible outbidding by **Fnac** for **Darty** (paying 170p vs. a valuation of 100p a few months previously) was symptomatic of this endemic uneasiness, compounded by the impotence of certain traditional players relative to e-commerce. As Alexandre Nodale, CEO of **Conforama**, pointed out: "Our independent advisor and our management team had a clear valuation in mind for Darty. Our final offer of 160p per Darty share reflects the valuation criteria that we use for all acquisitions including return on investment and value creation". **Fnac** paid a high price for its acquisition because today, ways of making up for lack of growth are becoming priceless.

**The inverse of the PER corresponds to the immediate accounting profitability for a new shareholder who bought a share for an amount X and to whom 100% of EPS is returned, i.e. EPS/X = 1/PER)*

FIG. 2: ANNUAL, NON-EXHAUSTIVE NUMBER OF SIZEABLE SPIN-OFF OPERATIONS



Source: Stockspinoffs.com; Bryan, Garnier & Co

1.3 THE MAIN MOTIVATIONS ARE THE SEARCH FOR AND PROTECTION OF GROWTH[1]

To dilute their fixed costs, groups in the consumer, technology and healthcare sectors are naturally governed by the same imperative of sales growth. However, commercial catalysts are tending to run out of steam, which impacts upon the financial equation and weighing on the financial equation and stock market performances of listed players. This is the dominant factor that has motivated many M&A operations in recent years and heightened valuation multiples on transactions (see section 3.2). As we see in section 2.1, attempts to make up for slim growth – for example the spin-offs carried out by retailer **Metro AG**, hotel group **Hilton**, the printer manufacturer **Xerox** and animal health specialist **Pfizer** – suggest that company financial equations have been undermined in a hitherto unseen way.

Fixed costs that evolve independently of business volumes represent a large share of the industrial P&L account. So with all other factors remaining equal, sales must increase in order for the contribution margin to cover not only these fixed costs, but also natural cost inflation. The recurring nature of this imperative growth is essentially driven by demographics and inflation.

However, many sectors are suffering sluggish demographic factors, deflation (or disinflation) and a saturation of the competitive space combined with a rise in capital intensity and a dilution in pricing power. Against a backdrop of disruption caused by **Amazon**, the persistent attitude of the small French group **Fnac** up against **Steinhoff** (owner of Conforama) therefore reflected a defensive strategy that consists of sharing costs with **Darty** instead of diluting them via growth. The same goes for **Ahold** and **Delhaize**, whose sales prospects are clearly limited in a very mature sector.

2. When the race for scale and cost-cutting is over, innovation is again at the heart of growth

The consequences of all-out diversification and cost-cutting were so significant that they brought some groups close to collapse.

2.1. PHASE 1: THE RACE FOR SCALE AND COST-CUTTING

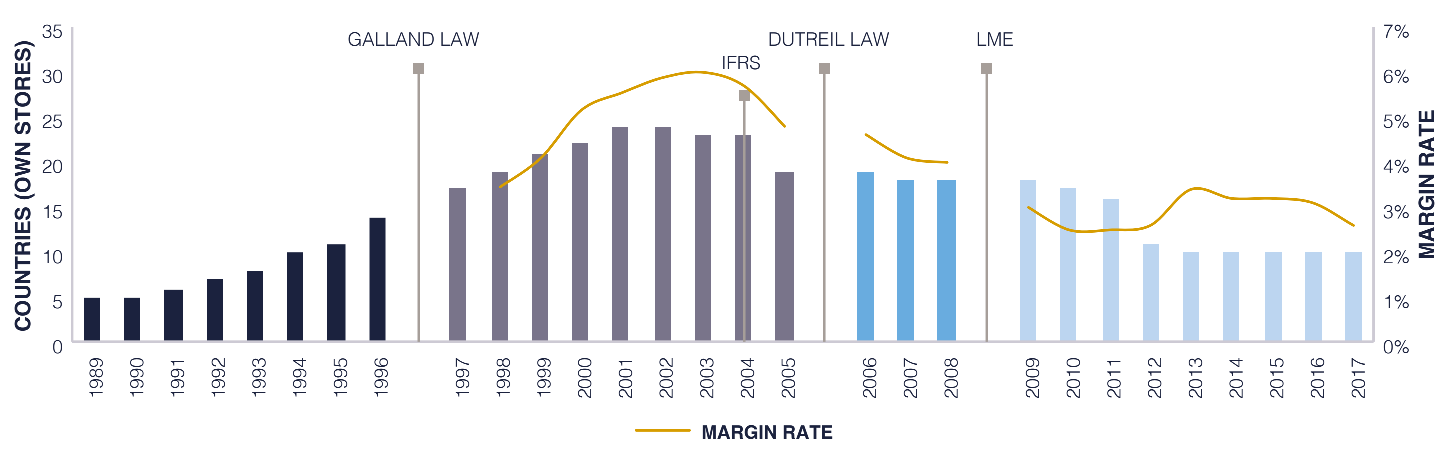
Faced with the dilution in their growth potential, companies initially looked for sales growth by diversifying their businesses and geographical locations. **Axa**'s move into the financial protection market resulted in an inflation in its goodwill that reached EUR17bn in 2008, or 55% of equity (vs. EUR1.8bn in 1998 or 13% of equity). In 2011, **Carrefour**'s geographical portfolio (See Fig. 3) included no less than 24 integrated countries (vs 10 in 2017). Its skills, capex and scale effects were diluted to such an extent that ROCE plummeted. The retailer also increased its exposure to non-food retailing, which is cyclical by nature, diluting its defensive status. Today, the opportunity cost can be seen in the group's lag in e-commerce (2000 saw the birth and take-off of **Amazon**, whereas **Carrefour** was expanding geographically) and an ambivalent stock market status (i.e. neither totally defensive nor genuinely cyclical).

Controlling costs then became a popular pastime, as shown by the drastic reduction in SG&A costs at IT services companies, which suffered a hefty deflation in sales following competition from Indian companies (growth levels struggled to reach 2-3% in the 2000s vs. around 10% the previous decade). Groups also drifted away from their core purpose when they aimed to create immediate stock market value, either from the ground up, for example using spin-offs to maintain the myth that the value of the whole is systematically enhanced by separating the parts, or by serving the short-term interests of shareholders through share buyback programmes and exceptional dividend payments (See Fig. 4).

Cost control and financial engineering have not always been fruitful, especially when they come at the expense of the business base or innovation. **Carrefour**, **Casino** and **Tesco** have under-invested in stores and the big pharma groups struggle to compensate for the 'patent cliff'. **Pfizer**, for example, clearly suffered from the loss of very lucrative patents such as **Lipitor**, an anti-cholesterol drug that generated almost USD12-13bn during its peak years. Combined with low productivity in internal R&D, this motivated **Pfizer** to acquire the biotech group **Medivation** from under the nose of **Sanofi**, with an offer of USD14bn vs. USD9.3bn offered by the French group.

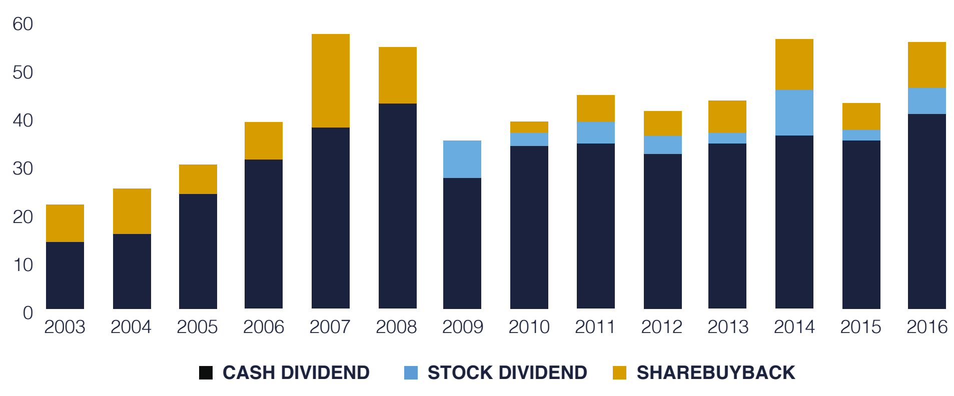
The consequences of all-out diversification and cost-cutting were so significant that they brought some groups close to collapse. Following the difficulties at **Carrefour**, this was reflected in the stock market misery that in 2012 saw **Tesco** tumble from its pedestal, with shares having dropped since 2007. Its troubles were also manifest in a GBP4.7bn depreciation in property, the value of which was irremediably associated with the waning quality of a business base that had long suffered under-investment. To generate the funds necessary to turn round its domestic activities, the UK retailer had no choice but to sell off its "crown jewel" South Korean business, sold in 2015 for GBP4.2bn.

FIG. 3: NO. OF COUNTRIES IN CARREFOUR'S PORTFOLIO AND EBIT MARGIN IN THE DOMESTIC MARKET



Source: company data; Bryan, Garnier & Co

FIG. 4: DIVIDENDS AND SHARE BUYBACKS AT CAC 40 COMPANIES (EUR BN)



Source: Vernimmen, Bryan, Garnier & Co

FIG. 5: A FEW DEALS MOTIVATED MAINLY BY SIZE, SYNERGIES AND DIVERSIFICATION

SECTOR	COMPANIES / DEAL	YEAR
BEVERAGES	Grand Met / Guinness => Diageo	1997
BUILDING MATERIALS	Holcim / Lafarge => LafargeHolcim	2015
BUILDING MATERIALS	HeidelbergCement / Italcementi	2016
BUSINESS SERVICES	Edenred / UTA + Embratec	2014-2016
BUSINESS SERVICES	Marriott / Starwood	2016
BUSINESS SERVICES	Eurofins / EAG Laboratories	Ongoing
FINANCIALS	Credit Suisse / Winterthur	1997
FOOD RETAIL	Carrefour / Promodes	1999
FOOD RETAIL	Ahold / Delhaize	2016
HEALTHCARE	Astra / Zeneca	1999
HEALTHCARE	Pfizer/Wyeth	2009
HEALTHCARE	Merck&Co / Schering Plough	2009
HEALTHCARE	Pfizer / Wyeth	2009
HEALTHCARE	Allergan / Actavis	2014
HEALTHCARE/MEDTECH	Novartis / Alcon	2010
INSURANCE	AXA/UAP	1997
INTERNET	America Online / Netscape	1998
IT HARDWARE	Compaq / Digital Equipment	1998
IT HARDWARE	Hewlett-Packard / Compaq	2002
IT HARDWARE	Oracle / Sun Microsystems	2010
IT HARDWARE	Dell / EMC	2015
MEDTECH	Fresenius / Akorn	2017
MEDTECH	Becton Dickinson / CR Bard	2017
MOTOR	Renault / Nissan	1999
MOTOR	Geely / Volvo	2010
MOTOR	PSA / DongFeng	2014
MOTOR	Plastic Omnium / FAE / Faurecia	2015
MOTOR	PSA / Opel	2017
NON-FOOD RETAIL	Fnac / Darty	2016
OIL&GAS	Total / Elf	2000
PAYMENTS	Worldpay / Vantiv	2018e
SEMICONDUCTORS	Broadcom / Qualcomm	2018e
SEMICONDUCTORS	Qualcomm / NXP	2017
SOFTWARE & IT SERVICES	Cap Gemini / Ernst & Young Consulting LLC	2000
SOFTWARE & IT SERVICES	Oracle / PeopleSoft	2004
SOFTWARE & IT SERVICES	Hewlett-Packard / EDS	2008
UTILITIES	E.ON / PowerGen	2001
UTILITIES	Suez / Electrabel	2005
UTILITIES	Iberdrola / Scottish Power	2006
UTILITIES	EDF / British Energy	2008
UTILITIES	Gaz de France / Suez	2008
UTILITIES	GDF Suez / International Power	2010

Source: company data; Bryan, Garnier & Co

One of the dominant concerns of groups is whether Amazon and its peers can disrupt any consumer segment they like.

2.2. PHASE 2: FROM THE RACE FOR SCALE TO A WELCOME STREAMLINING[2]

After the distractions of the drives for size and cost-cutting, companies made a welcome return to their core businesses. A wave of disposals/asset swaps (e.g. the IPO of **Covestro** by **Bayer**, the sale of **Novartis'** animal health activities, Carrefour's spin-off of **Dia** and **Sopra's of Axway**, the asset swap between **Novartis** and **Glaxo**) marked an end to all-out diversification. The issue of critical mass in essential segments therefore became more important – as shown by **Fnac-Darty** (the merger strengthened their market position in the face of Amazon) – as did control and protection of the value chain for players disrupted by **Amazon**.

In fact, one of the dominant concerns of groups is whether **Amazon** and its peers can disrupt any consumer segment they like, especially in light of the online giant's bid for **Whole Foods Market**. For example, the announcement by **Macy's** that it is to axe 10,000 jobs was the result of a wide-scale trend that has seen US department store sales collapse, primarily in favour of **Amazon**. If the US giant maintains its trajectory, it is set to generate sales of more than USD50bn in the US fashion segment in 2020 (i.e. c. 45% market share vs. c.25% in 2015), or more than the no. 2 and no. 3 groups (**Macy's** and **TJX**) combined. Apart from innovation, on which range positioning and pricing power is based (See section 2.3), integration of the value chain seems to be a good defence against **Amazon**.

This is probably what **Essilor** and **Luxottica** focused on with their strategic partnership. The optical groups saw what happened to US apparel players, just as **Amazon** is probably eyeing their margin levels (around 15% in terms of EBIT in eyewear retailing). On top of owning store networks, controlling the manufacture of innovative lenses and the making and distribution of frames (i.e. the integration of the value chain) allows brick-and-mortar players to manage entry barriers (this also motivated internet-only US group **Warby Parker** to open its first store in 2013). Without this, who knows whether **Amazon** would have managed to get its hands on **Luxottica** at the last moment as it apparently intended to also do with **American Apparel** (which finally did not go ahead).

A FEW DEALS MOTIVATED MAINLY BY STRATEGIC STREAMLINING

SECTOR	COMPANIES / DEAL	YEAR
BUSINESS SERVICES	Accor / Edenred	2010
BUSINESS SERVICES	Accor => Edenred	2010
BUSINESS SERVICES	AccorHotels => Spin-off of AccorInvest	Ongoing (initiated in 2016)
FINANCIALS	Fortis and ING tore apart	2008-2009
FINANCIALS	Dredsner Bank sold by Allianz to Commerzbank	2009
HEALTHCARE	Shire / Baxalta	2016
IT HARDWARE	IBM: PC business sold to Lenovo	2005
IT HARDWARE	HP / HP Enterprise split	2015
IT SOFTWARE	Atos / Worldline	2014
MOTOR	Faurecia / FAE / Plastic Omnium	2015
MOTOR	Delphi Spinoff	2017
MOTOR	GM / Opel	2017
MOTOR	Plastic Omnium/Environment business	2017
SOFTWARE & IT SERVICES	Dell EMC: Dell Services sold to NTT Data	2016
SOFTWARE & IT SERVICES	HP Enterprise: HPE Enterprise Services sold to CSC	2017
SOFTWARE & IT SERVICES	HP Enterprise: HPE Software sold to Micro Focus	2017
UTILITIES	E.ON => end of conglomerate following Via / Vega merger	Early 2000's
UTILITIES	RWE => disposals of water-related activities	2006-2008
UTILITIES	Engie / Suez	2008
UTILITIES	GDF-Suez / Suez Environnement	2008
UTILITIES	E.ON => spin-off of Uniper	2016
UTILITIES	RWE => spin-off of innogy	2016
UTILITIES	Veolia / Transdev	Ongoing (initiated in 2016)

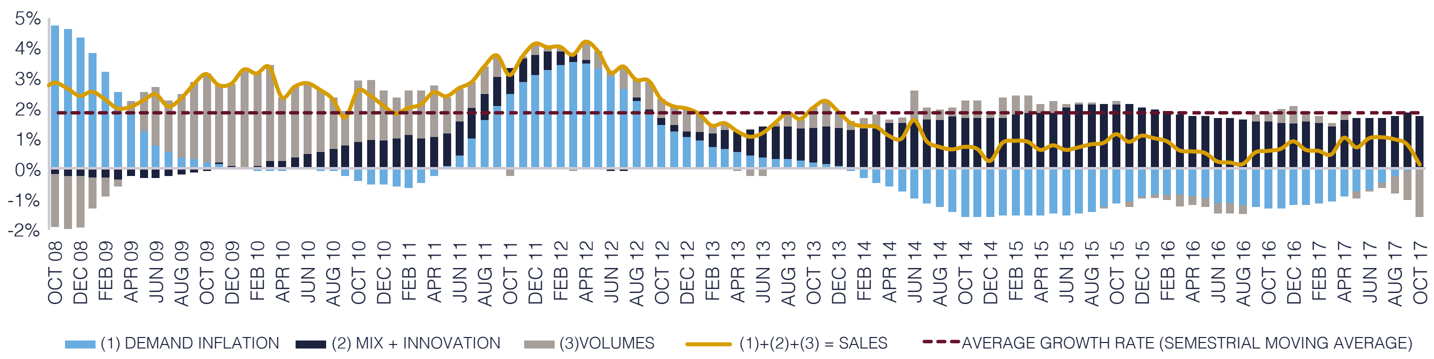
Source: company data; Bryan, Garnier & Co

2.3. PHASE 3: FROM STREAMLINING TO SPECIALIZATION VIA INNOVATION

Sluggish growth is now obliging companies to build their top-line rather than "receive it" i.e. through natural revenue drivers such as demographic change and inflation. They need to fight, and beg consumers for a modest increase in their sales by fine-tuning their offers. In France, for example, FMCG growth is now exclusively driven by a beneficial mix-innovation effect (see Fig. 6), which offsets deflation. The pricing power that stems from innovation and trading-up in niche segments (i.e. fresh, local and organic products which now represent virtually all growth in FMCGs in France) is therefore favoured as an endogenous growth factor (we believe the **Danone-Whitewave** deal is partly based on this logic). According to **Bain**, nothing influences profits more than pricing (see Fig. 7).

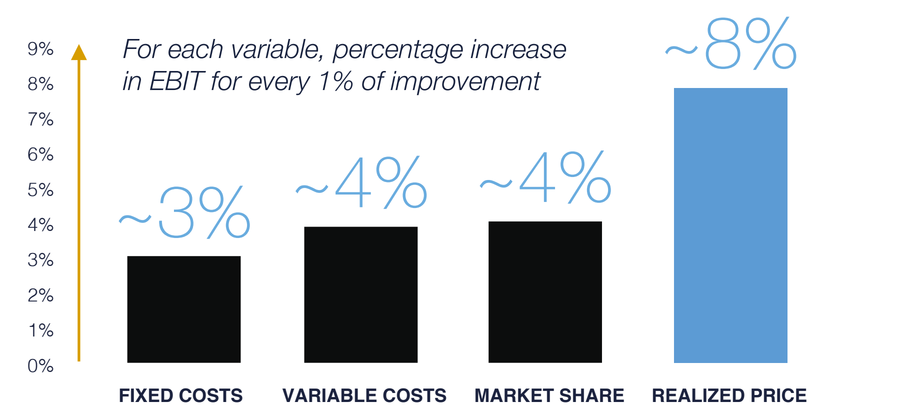
Innovation is currently at the heart of the alternative growth strategies of companies that are facing a breakdown in their commercial engines. A generic product with little innovation, affected by an approximate range positioning and sharp competition in supply, is by nature replaceable. It is therefore exposed to high price elasticity and stunted margin potential. In contrast, upscale products, which are more specific and have a high innovative or image content, combine low price elasticity with solid profitability. This reality is at the heart of a decade-long trend that has seen Germany pull away from France, especially in the manufacturing industry. The case of France is symptomatic as it shows an increase in wage costs in recent years together with the deflation of value added (see Fig. 8). This situation clearly contrasts with that of Germany (see Fig. 9)[3].

FIG. 6: BREAKDOWN OF GROWTH (HALF-YEARLY MOVING AVERAGE) AT FRENCH SUPERMARKETS AND HYPERMARKETS



Source: IRI; Bryan, Garnier & Co

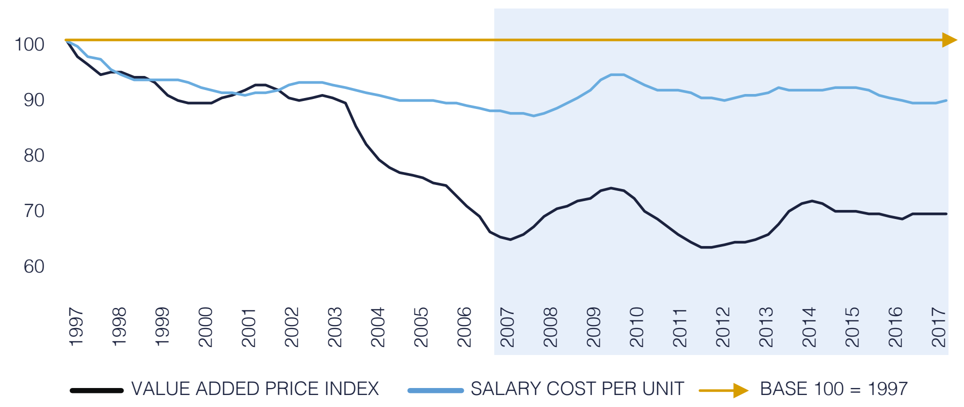
FIG. 7: NOTHING AFFECTS PROFITS MORE THAN PRICING



* Average impact measured across B2B industries

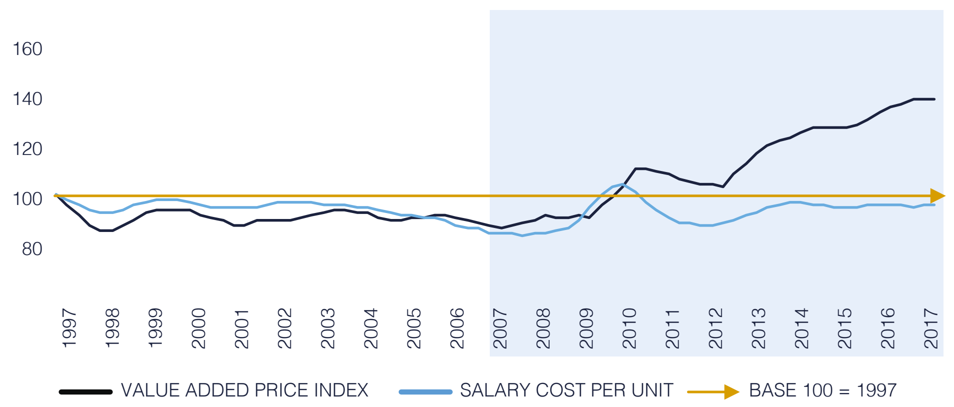
Source: Bain

FIG. 8: UNIT WAGE COSTS AND PRICE INDEX (IMPLICIT DEFLATOR) OF VALUE ADDED IN THE FRENCH MANUFACTURING INDUSTRY



Source: Eurostat, Bryan, Garnier & Co

FIG. 9: UNIT WAGE COSTS AND PRICE INDEX (IMPLICIT DEFLATOR) OF VALUE ADDED IN THE GERMAN MANUFACTURING INDUSTRY



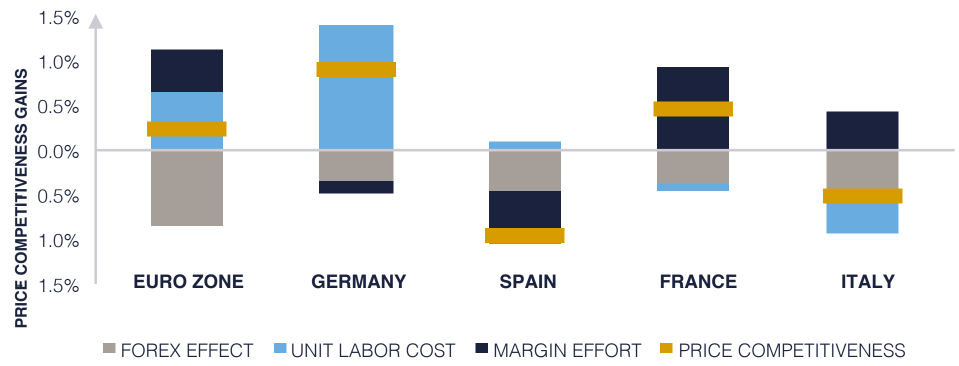
Source: Eurostat, Bryan, Garnier & Co

Innovation is currently at the heart of the alternative growth strategies of companies that are facing a breakdown in their commercial engines.

French groups have gradually eaten into their profitability as a means of safeguarding their price competitiveness and market share.

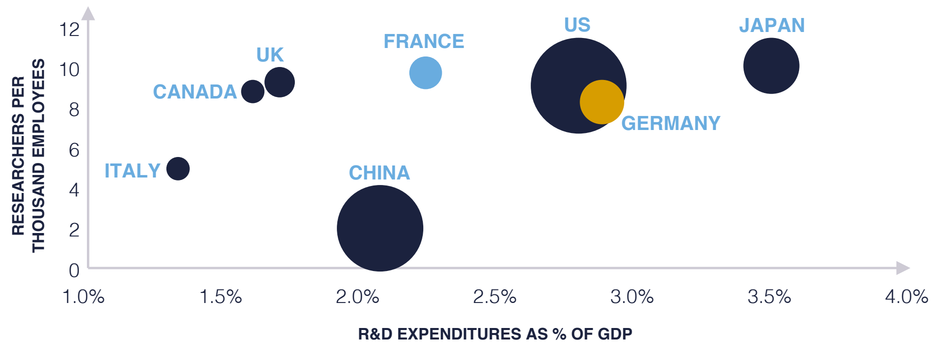
Positioned in the mid-range, French groups have gradually eaten into their profitability as a means of safeguarding their price-competitiveness and market share, especially in the light of competition from low-cost countries (see Gallois report on competitiveness[4]). The French Treasury Department[5] pointed this out when it broke down the average annual change in price-competitiveness for the 2001-2012 period (see Fig. 10). This position weighed on cash-flow levels (see Fig. 15) at French companies, thereby slowing R&D spending (Fig. 11) and their moves up-scale. It is a vicious circle that contrasts with the situation in Germany, which has nurtured its non-price competitiveness by focusing its investments on a qualitative and innovative offering since the 1990s.

FIG. 10: AVERAGE ANNUAL CHANGE IN PRICE-COMPETITIVENESS OVER 2001-12, THE PERIOD DURING WHICH GERMANY DISTANCED ITSELF FROM FRANCE



Source: French Direction Générale du Trésor (Economic Letter no. 134); Bryan, Garnier & Co ests.

FIG. 11: R&D SPENDING



Source: OCDE; Bryan, Garnier & Co

Moreover, against an erratic foreign exchange backdrop, an export group that has costs primarily denominated in euros and sales in local currencies may suffer a decline in profitability. To dilute this transactional impact, companies that are innovative and/or positioned in the upscale segment can increase their prices, rather than reduce their exported volumes. For example, **SEB** anticipated this effect and increased its prices by 10% in 2016 (doubling them in Russia and the Ukraine), which we estimate at least halved the contraction of profit caused by exchange rate fluctuations (i.e. EUR120m contraction effect upon an EBIT of EUR505m in 2016). This French household appliances group is a good example of a successful player whose constant innovations, for example Actifry – to which Oprah Winfrey took a shine – has enabled it to create solid pricing power with an R&D budget of 3.5%. The group should be strengthened by the recent acquisition of German upscale rival **WMF**, whose contribution to **SEB**'s sales is set to reach almost 25% in 2017.

FIG. 12: A FEW DEALS MOTIVATED MAINLY BY INNOVATION

SECTOR	COMPANIES / DEAL	YEAR
AUTONOMOUS CAR	Intel / Mobileye	2017
BUSINESS SERVICES	AccorHotels / Onefinestay	2016
BUSINESS SERVICES	AccorHotels / John Paul	2016
FOOD	Danone / WhiteWave	2017
FOOD RETAIL	Amazon / WFM	2017
HEALTHCARE	Roche / Genentech	2009
HEALTHCARE	Sanofi / Genzyme	2011
HEALTHCARE	Johnson&Johnson / Actelion	2017
HEALTHCARE	Gilead / Kite Pharma	2017
HPC	SEB / WMF	2016
MEDTECH	Zimmer Biomet / LDR Holding	2016
MEDTECH	Boston Scientifics / Symetis	2017
MEDTECH	Abbott / St Jude	2017
MOTOR	Renault / Devialet	2016
MOTOR	Faurecia / Parrot Automotive	2016/17
MOTOR	Delphi / NuTonomy	2017
MOTOR	Valeo / Gestigon	2017
UTILITIES	Total / Saft	2016

Source: company data; Bryan, Garnier & Co

3. Innovation and cherry picking at all costs

3.1 THE END TO STANDARDIZED MASS CONSUMPTION AT THE HEART OF INNOVATION

BIG DATA AND ARTIFICIAL INTELLIGENCE

Gartner estimates that 20.4bn connected objects will be in use by 2020, compared with 6.4bn in 2016. This will enable the collection of a colossal amount of information and make it possible to serve consumers and patients in a predictive manner. The 2.5 terabytes of data that we generate every day (it's estimated to be 22.5 by 2020) already feed databases with ever-increasing capacity that is bolstered by cloud computing.

In the consumer segment, retailers want to evolve towards an increasingly predictive way of trading. They have massive, well-established databases that have been unused for way too long. Interpreting this data is now an efficient way to estimate customer needs and offer personalized recommendations, limiting returns that weigh on profitability (in apparel, 50% of purchases are returned). The main players see artificial intelligence as the major challenge they must deal with in coming years[6].

FIG. 13: ESTIMATED IT SPENDING GLOBALLY

	2016 SPENDING	GROWTH	2017 SPENDING	GROWTH	2018 SPENDING	GROWTH
DATA CENTRE SYSTEMS	170	**-0.3%**	171	**0.3%**	173	**1.2%**
ENTERPRISE SOFTWARE	326	**5.3%**	351	**7.6%**	381	**8.6%**
DEVICES	630	**-2.4%**	654	**3.8%**	677	**3.6%**
IT SERVICES	894	**3.2%**	922	**3.1%**	966	**4.7%**
COMMUNICATION SERVICES	1,374	**-1.3%**	1,378	**0.3%**	1,400	**1.6%**
OVERALL IT	3,396	**0.3%**	3,477	**2.4%**	3,598	**3.5%**

Source: Gartner

In health, **Orange Healthcare**[7] sees data from Big Data and genomics multiplying 50x between now and 2020. Non-observance of treatments, estimated by the Montaigne Institute[8] in 2015 to cost up to EUR9bn a year, could be reduced by 80% by 2025. Big Data holds out the promise of more efficient medicine that could become more predictive, preventive, personalized and participative. This prospect has been behind several large mergers, for example the agreement made in January 2016 between **Novartis** and **Qualcomm** (to develop an inhaler connected to the Life's2net platform), or even the acquisition by **IBM** of **Truven Health Analytics** (cloud platform for medical analysis and data) in February 2016.

PERSONALIZING PRODUCTS, COUPLED WITH CONCERN FOR HEALTH, ETHICS AND ECOLOGY, ARE BECOMING DOMINANT FEATURES OF CONSUMPTION

Today's younger generations question traditional brands, which until recently have only offered mass produced standardized goods, in favour of niche products that reflect local, individualized know-how. Traditional companies can no longer just sit back and offer generic products. Like groups such as **L'Oréal**, they need to adopt a dynamic strategy to build relations with their customers, for example using social networks and online channels like YouTube, while offering a personalized purchase experience no matter which channel a customer uses. The physical network needs to be at the heart of this "omnichannel strategy", as illustrated by **Amazon**'s recent bid for **Whole Foods Markets**.

This personalization goes hand in hand with rising consumer demands for products that are ethically produced, healthy and environmentally friendly. At a time when consumers are concerned about ecological issues as well as financial debt, a general trend to get "back to nature" is at the heart of major financial opportunities driving the development of new eco services and products (organic products represent around 6-7% of the FMCG market in France and are posting growth of more than 20%). Against this backdrop, we believe a quality war (product, health, ethics and ecology) could replace the price war and prompt a reassessment of mass consumption (e.g. the tremendous success of the sustainable milk brand in France, "C'est qui le Patron!").

IN HEALTHCARE, THE PERSONALIZATION TREND IS GROWING TOO[9]

This goal of individualized know-how is also relevant in the healthcare segment. As research into the human genome progresses, it seems that there is neither a unique pathology, nor any single remedy common to all patients. On the contrary, when a threat is identified, healthcare staff can dig into a therapeutic arsenal and carry out a "surgical strike" – an individualized intervention – rather than a "mass bombardment".[10] Multifactor diseases therefore imply the use of a therapeutic cocktail, and ownership of the ingredients is becoming key.

This trend towards individualizing healthcare is feeding a wave of acquisitions that favors the most innovative niche-market players, at the price of stratospheric multiples. This is exactly what happened in the case of **Symetis** (a Swiss medtech specialized in transcatheter aortic valve implants – TAVI), ultimately bought by **Boston Scientific** at the end of March 2017 for c. EUR400m, just before the company's IPO for an estimated value of c. EUR250m. Nine clinical studies, some of which explicitly aimed to prove the efficacy of **Symetis** products relative to rivals, ended up disturbing the market dominance of an oligopoly made up of **Abbott, Edwards Life Science**, **Medtronics** and **Boston Scientific**. On the basis of this experience, we estimate that many companies could also be particularly attractive prey, with extremely high multiples.

3.2. VALUATION REVIEW: RECORD-HIGH TRANSACTION MULTIPLES FOR INNOVATIVE GROWTH VEHICLES

Putting the **Symetis** example into a wider valuation context, we noticed that sluggish growth is influencing changes in transactional multiples. The valuation of private groups is taking the same direction as that taken by listed companies, albeit with a time-lag (re. Fig. 14). However, depending on the sector, a number of these listed companies have contestable multiples in view of growth potential that is fading. As such, the 12 months forward P/E of the Stoxx 600 Europe stand at 15x, or a premium of 20% over the 10-year average. At first sight, valuation prospects are therefore not particularly engaging. However, based on the principle that what is rare is expensive, players offering genuine sales potential combined with clear visibility, naturally benefit from a solid premium. This premium is primarily justified by innovation potential and the ensuing pricing power.

Post Lehman Brothers, the financial rigour to which companies have restricted themselves is one of the reasons why the market valuation has held up, despite paltry growth prospects. In recent years, multiples have risen as companies have restored their margins and accumulated large cash reserves. Arbitrage between low interest rates and high ROCE was naturally set to play in favour of M&A activity in growth segments. Despite the increase in rates, financing conditions should clearly remain beneficial over the medium term. In contrast, having already rapidly eroded their cost base, we believe companies will now be fully dependent on their sales potential to generate cash profits and increase EPS. This is where things are likely to hot up. As Warren Buffett said: “only when the tide goes out do you discover who’s been swimming naked”.

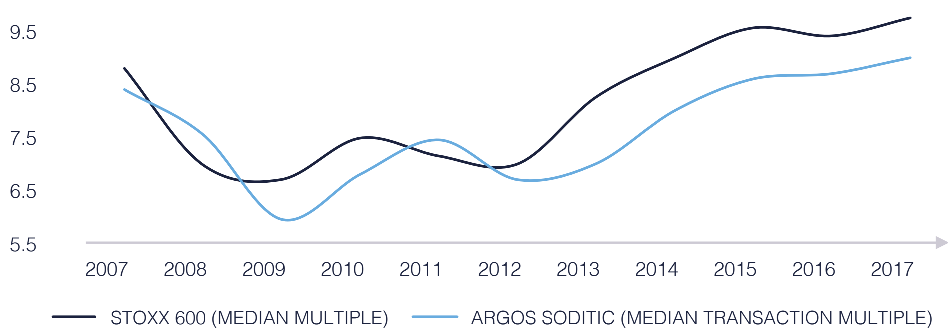
The mid-market segment (transactions with an equity value of between EUR15m and EUR500m) attracts our attention precisely because it harbours a number of these highly valuable sources of growth. Moreover, major M&A deals are merely visible markers of themes that are omnipresent in this category. The reference index for the eurozone, Argos Soditic, therefore provides valuable information:

1 after the logical collapse in the average transactional EBITDA multiple between 2007 (9.1x) and 2009 (5.7x), the multiple then enjoyed a constant increase and returned to its peak level of 9.5x in Q3 2017;

2 this trend has gone hand in hand with the evaporation in growth;

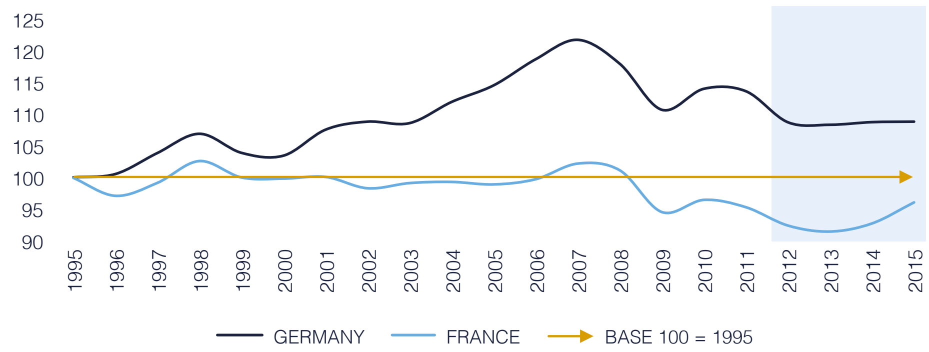
3 it has therefore been driven by the active M&A policies implemented by listed industrial companies (two-thirds of which are strategic acquirers) looking for innovation and commercial outlets.

FIG. 14: TRANSACTIONAL VALUATION (EV/EBITDA) OF PRIVATE COMPANIES (MEDIAN MULTIPLE) VS VALUATION OF STOXX 600



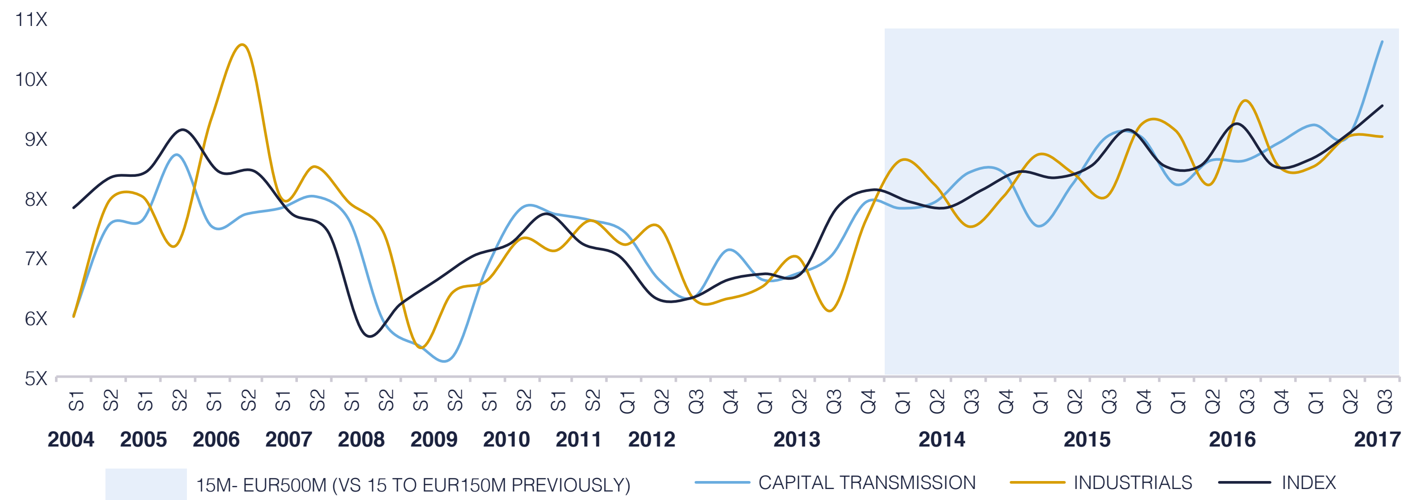
Source: Argos Soditic; Datastream; Bryan, Garnier & Co

FIG. 15: SHARE OF GROSS PROFITS AS A PERCENTAGE OF GROSS VALUE ADDED OF NON-FINANCIAL COMPANIES



Source: Eurostat; Bryan, Garnier & Co

FIG. 16: ARGOS SODITIC INDEX (MEDIAN TRANSACTIONAL EV/EBITDA MULTIPLE) IN THE MID-MARKET SEGMENT



Source: Argos Soditic; Bryan, Garnier & Co

Conclusion

Across the FMCG, healthcare and technology sectors, innovation has emerged as the important spur for growth – and targeted M&A is seen as the way to achieve it.

Groups are sensing a profound change in their markets. The decades-old model of 'mass consumption' – in which huge volumes of similar products and services are pushed out to broadly segmented audiences – is coming to an end. In its place is a new world of individualization and personalization, where custom products and offers are precision-targeted to tightly defined audiences.

This new paradigm is not what incumbents are accustomed to. Adapting to it will require a great shift in the way established companies think and operate. Growing this capacity organically is difficult, especially when competing against a giant like Amazon that has this super-personalized capability built in to its operating model.

M&A is one way to find the innovation that will drive growth. The groups that succeed will either be those that have shown a proven ability to innovate in the past, or those with a balance sheet strong enough to allow them to cherry-pick the best acquisitions. Whichever route they choose, data-driven innovation is essential if companies are to adapt to the new model of personalized consumption.

3.3. EXAMPLE OF COMPANIES LEADING THE INNOVATION CHALLENGE

SECTOR	STOCK	MARKET CAP (M).
BUSINESS SERVICES	Accor	11 999
CONSUMER GOODS	SEB	7 894
FOOD PRODUCERS	Danone	46 608
HEALTHCARE	AstraZeneca	63 386
HEALTHCARE	Ipsen	8 675
HPC	L'Oréal	104 160
LUXURY	LVMH	125 252
TECH	SAP	118 637
TECH	STMicroelectronics	18 623
UTILITIES	ENGIE	35 117

Source: Bryan, Garnier & Co

Footnotes

1: *In a* ***Bryan, Garnier & Co research report published November 2015 ("Anorexic growth… the bigger the better!")****, we questioned the rationale behind recent M&A deals in the food retail sector, where large mergers have often turned out to be a nightmare. Antoine Parison, Equity Research Analyst, wrote: "Why the flirting between Ahold and Delhaize or Auchan and Système U? Because we are witnessing a change in paradigm, which for a large number of mature retailers has meant that solid and recurring growth has sunk to a spasmodic pace limited to just a few points (a disruptive factor in a fixed-cost industry). Against this backdrop, size provides a key asset for large players who can dilute fixed costs over a far denser store network and obtain additional ammunition for nurturing their price and non-price competitiveness".*

2: *In a* ***Bryan, Garnier & Co research report published July 2016 ("Semiconductors Looking for lost growth")****, Dorian Terral, our Semiconductors Equity Research Analyst focused precisely on the evaporation of growth potential within the industry and the subsequent wave of M&A. He wrote: "While many observers consider that the record number of M&A operations seen in 2015 reflect a search for critical mass (and hence operating leverage), we are convinced that in the majority of cases, acquisitions are above all motivated by an aim to deliver short-term growth forecasts. We believe that, for the semiconductors industry, the preconceived idea that size is a success factor is no longer true. In contrast, we are convinced that in today's market focusing on unique expertise and a strong positioning in a small number of verticals is preferable".*

3: *See the industrial economy review no° 114, 4th quarter 2013*

4: *Pacte pour la compétitivité de l'industrie française (Pact for French industry competitiveness) | The Gallois Report | 2012*

5: *L'industrie: quels défis pour l'economie française? (Industry: what challenges for the French economy?) | Letter no. 134 | The French Treasury Department |September 2014*

6: ***In our white paper published November 2017 (The Future of Retail is Now - Today, success means mixing "phygital" and "retailtainment")****, we focused on the technological dimension of digital transformation. We wrote: « As traditional retailers rush to keep up with the revolution started by Amazon, they are initiating a wave of M&A activity that may see many retailers transform themselves, in effect, into technology companies ».*

7: *Big Data et santé: la révolution inéluctable | Orange Healthcare | 2016*

8: *Institut Montaigne | Faire de la France un champion de la révolution numérique | 2015*

9: *"The organisation of our healthcare system needs to evolve to improve the patient care-path and access to care, by using innovative organisational projects. Indeed, our healthcare system is characterised by a partitioned care offer, whereas patients are increasingly suffering from complex pathologies that require a coordinated care response. In addition, current financing models prevent us from moving towards an efficient and coordinated organisation of care". Ministry of Health, France, September 2017*

10: *In a recent Bryan, Ganier & Co research report ("Our key take-aways from ESMO 2017"), our healthcare team highlighted the need to find biomarkers to develop targeted treatments, while referring to 'payment on performance', which is becoming more widespread and aims just to remunerate the effective outcome of a treatment. We are moving further and further away from a "one size fits all" stance in all fields (i.e. detection, treatment and reimbursement).*

For the reports cited in the footnotes 1, 2 and 10, please write to your Bryan, Garnier & Co contact directly.

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