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Financialization and the "Down" Side of Shareholder Value

Case Opened: AstraZeneca R&D Södertälje

Abstract:

The explicit intrusion of financial markets into corporate governance stretched concerns beyond the traditional product market and brought about an increasingly normalized discourse concerned with "shareholder value" and so a shift in management and strategy. This paper qualitatively investigates how financialization and shareholder value primacy manifest themselves in AstraZeneca's downsizing of its R&D headquarters. The findings suggest the phenomenon represents another step in an overall process instigated by and whose wake mirrors a firming grip of the shareholder value norm as the product market frontier falters. As capital market patience wanes, senior management turns to performatives, manifest primarily in prompt cost recovery endeavors which safeguard returns when the share price disappoints, to pledge the existence of a privileging path to salvation for the shareholding faction of stakeholders in an industry increasingly epitomized by financialization and a beleaguered, disintegrating business model.

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Prologue

It was Thursday, February 2, 2012, 3:45 pm at Stockholm Arlanda Airport.

An hour earlier than scheduled, a person disembarked the airplane, stepping toward the luggage pickup. Switching the phone on, this early arriver was immediately greeted by a new text message, whose tag revealed the familiar name of a colleague.

There had been a very important meeting at their workplace earlier in the morning.

"Please call [back]..."

Minutes later, the mystery around the surprising message had been unmistakably cleared up – the whole unit was to shut down.

Later in the evening, local television news headlined:

"1 200 jobs lost in Södertälje."

Introduction

Research Background

Beginning in the 1980s, business press, stock analysts, consultants, senior managers and investors have been participating in progressively chorusing the mantra of "shareholder value" to frontal prominence in the realm of corporations, forging an increasingly normalized expectation of a managerial and organizational duty in assuring the un-disappointing delivery of shareholder returns (Alvehus & Spicer, 2012; Froud, et al., 2006; O'Sullivan, 2000; Rappaport, 1998; Shukla, 2009).

Following the explicit intrusion and increasing sway of capital markets in everyday corporate life, senior managers began diverting their attention away from the traditional product market toward the capital market to which they learned to proffer flattering discourses for the sake of appeasing stock price scrutinizers and together with whom they all gathered co-author credits for the corporate narratives developed over time. And while managers spoke incessantly of their new initiatives and "moves" that would corroborate their assurances of shareholder value, the result was often a discrepancy between the narrative and promised financial numbers (Aglietta, 2000; Andersson, et al., 2008; Froud, et al., 2006; Gleadle & Haslam, 2010; Newberry & Robb, 2008; Williams, 2000).

This increased control of the capital market over corporate resource allocation decisions pushed management toward building resumes as shareholder value-maximizers, becoming "unapologetic servants of capital", and was reflected in the propped-up corporate IR functions and private meetings firms now held with analysts and investors on a regular basis each year, at which executives stood at the weaker end of their asymmetrical power relation with fund managers to whom they were expected to conform to the principles of shareholder value creation by demonstrating themselves as "already wanting what the investor wants". Thus, where promises had been made, decided-on numbers such as EPS would then be turned back on the business reality to achieve what had already been pledged in the forecast models (Ezzamel, et al., 2008; Roberts, et al., 2006).

Lazonick and O'Sullivan (2000) termed this new trajectory of corporate control as "downsize and distribute", which was, however, not without its critics, who pointed to the vagueness in the definition and rational implications of the shareholder value model as well as how such rhetoric was leading to an obsessively intensive focus on metrics and numbers as in the share price and whose casualties included proper long-term planning and non-owner stakeholder interests, and ask for how long corporations can sustain stock prices through such logic, before concluding, "... the pursuit of shareholder value may be an appropriate strategy for running down a company – and an economy." (Barsky, et al., 1999; Bratton, 2002; Froud, et al., 2000a; Froud, et al., 2002; Lazonick & O'Sullivan, 2000, p. 33).

The shifting present-day capitalism thus merits an array of important questions: What are the implications for corporations governed under this shareholder-centered norm and how might their objectives, strategies, performance measures and verdicts of change form and develop following financialization?

In the pharmaceutical industry, the trend toward adherence to "shareholder value" becomes especially intriguing and conflicting for corporate governance as the traditional expectation of stakeholder value – the discovery and development of drugs for the sake of improving human well-being – is intruded upon and challenged. This, together with the social implications of financialization and shareholder value in said industry and seasoned scholars' calls for more of such research, is argued to warrant the capitalizing on an opportunity to follow and examine how these two interlinked phenomena have been unfolding, shaping up and are playing out in a modern, multinational pharmaceutical firm that is shedding one of its core units, in hope that the findings will add to the present debate on corporate and social life after the arrival of shareholder value primacy.

Purpose

With the above background in mind, this study set out to investigate the presence, influence and expressions of financialization and "shareholder value" in a large pharmaceutical corporation. The purpose of this study is to describe, interpret and explain how the notion of shareholder value creation is mirrored in the company's present downsizing decision.

Research Question

How do financialization and "shareholder value creation" manifest in the decision of an ongoing corporate unit downsizing?

Delimitations

The study is delimited by the selection of the particular case and its accompanying specificities such as corporation, unit location and timing. With regard to the last factor, the

examined downsizing will be placed within the firm's broader historical and cultural setting in order to gather a rich understanding of the origins from and processes through which the decision may have arisen. Although boundaries are believed to be indistinct so that no clearcuts in the form of a particular historical year that exactly demarks a new era can be straightforwardly derived, the time dimension will nevertheless be split in three phases for purposes of structuring and interlinking the later empirics and discussion. Pre-merger-wise, the focus is confined to studied site and its then-governing body. Also, the starting and focal point remains enrooted in the present downsizing, mainly from the perspective of the downsized unit. Finally, the focus will not stray far from management accounting.

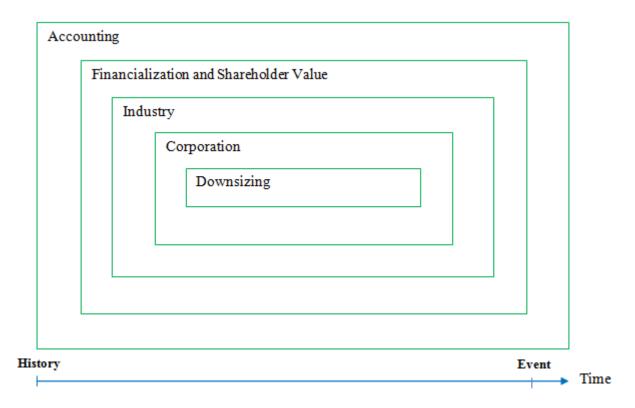


Figure 1: Delimitations of the study

Methodology

Assumptions

To begin with, the ontological assumptions held about the researched reality and their accompanying epistemology impact the subsequent methodology. In social sciences, an argument has been that an objectivist view of reality as "out there" and awaiting discovery has yielded unsatisfactory results due to the inconstancy and complexity inherent in social phenomena (Holden & Lynch, 2004; Hoque, 2006).

As accounting research is generally accepted as social scientific, a more interpretive stance is adopted for this study, subsuming, abstractly along a continuum, toward a subjectivist worldview: sense-making the contexts in which organizational members reside and understanding their historical and cultural settings. While positivist-laden quantitative generalizations do not always provide adequate explanations of the individual case, interpretive research views each case as an opportunity to help understand circumstance-bound phenomena through a (more) holistic orientation, thus reducing the exposure to catching the "tunnel view" syndrome^a whereby objects are inter-isolated, with sight lost of how parts relate to the whole. Furthermore, as the social world is studied, separating subjective values from "data" is often difficult as people's perceptions of and meanings about the world (also) become crucial to understand if they dynamically influence, in a recursive way, social behavior. Such a perspective is typically seen as an approach to qualitative studies (Alvesson & Sköldberg, 2008; Creswell, 2008; Evely, et al., 2008; Ryan, et al., 2002; Verschuren, 2001).

As such, reality is perceived as more of a "symbolic discourse", where meanings and norms, created through individual experiences of events and situations and then shared through social interaction, (also) structure the practices of human actors (Morgan & Smirich, 1980; Ryan, et al., 2002).

"Such an approach can be used to study the role of accounting in giving meanings to organizational activity, providing norms of behavior and structuring day-to-day social practices in organizations and society." (Ryan, et al., 2002, p. 37)

^a For example, studying an idiom's each separate word is not necessarily helpful in yielding the answer to the meaning of the whole expression.

As such, financialization and shareholder value primacy are (to a certain extent) subjectively and actively established social practices which preside in corporate behavior.

By critically contemplating and explicating the methodological underpinnings of the research, the appropriateness of its implementation can be better evaluated, guided and justified (Creswell, 2008; Hoque, 2006; Ryan, et al., 2002; Saunders, et al., 2009).

Research Design

Next, a primary question in research concerns their design. Creswell (2008) distinguishes between three such types: qualitative, quantitative and mixed. Qualitative research is mainly concerned with the description of social context, interpretation of subjective meaning and theory-building through discovering patterns and connections. The researcher also seeks to establish the meaning of a phenomenon from the views of informants. On the other hand, quantitative research commonly involves the testing of objective theories by examining the relationship between variables through statistical analyses of numerical data. Finally, a mixed method combines elements from both aforementioned designs and attempts to offer more than the sum of its parts (Creswell, 2008; Fossey, et al., 2002).

Given the aforementioned assumptions, a qualitative design was deemed as appropriate for this study's purpose. The case for such a choice is reinforced by also considering the qualitative research characteristics, which include but are not limited to the below (Creswell, 2008; Ryan, et al., 2002):

- a) Qualitative researchers collect data at the site of the identified problem, experiencing direct interaction with the involved people in their *natural setting*.
- b) The researcher plays a *key role* in the collection of data; pre-existing data such as those presented in prior studies will not be heavily relied upon.
- c) *Multiple forms of data* are gathered, for example interviews, internal documents and personal observation.
- d) Prescribing to an initial research plan is difficult as the design is expectedly *emergent*.
- e) The research is *interpretive*; different perspectives may be applied to the same problem.
- f) The research asks for the examination of a central phenomenon rather than closeended questions which test predictions of existing theory for example through statistical inference.

Lastly, this paper was written in English to enhance the congruence with relevant sources such journal articles.

Case Study

A qualitative case study is preferred when there is a need to develop theory and understand (accounting) practice. As prior empirical research within the interconnected areas of the fields of financialization, shareholder value primacy and corporate downsizing have been fairly limited in quantity, a new, different case was deemed as value-adding and also in accordance with relevant preceding suggestions for future research (Creswell, 2008; Ezzamel, et al., 2008; Gleadle & Cornelius, 2008; Gleadle & Haslam, 2010; Gleadle, et al., 2011; Ryan, et al., 2002; Yin, 2008).

Yin (2008) suggests three conditions which determine whether the case method ought to be applied:

- 1) A "how" or "why" a research question is being asked about the event or set of events.
- 2) The examined event is contemporary.
- 3) The examined behaviors cannot be manipulated by the investigator.

All were considered sufficiently fulfilled in this research.

Furthermore, a well-executed case study has the potential to stimulate learning and reflection about all the actions involved through the investigation of complex and dynamic phenomena with many enmeshed variables, practices in which the details of significant activities are ordinary, unusual or infrequent, and when there is mutual influence between the context and the studied phenomena. Finally, case studies can be used to understand discontinuity and disequilibrium and changes in organizational circumstances which serve as a cause for investigation (Cooper & Morgan, 2008; Smith, 2011).

Next, some classifications are made to better frame and convey the characteristics of this study.

First, as a single organization is examined, it classifies as a single-case study, which is favorably applied when the case is rare or unique. A multiple-case study, on the other hand, while possessing many relative advantages – for example often producing more robust results – is often not applicable to critical, rare or unique cases, as by logic the case would not have

been classified as such if the phenomenon investigated had been readily occurring elsewhere (Yin, 2008).

Moreover, Ryan et al. (2002) distinguish between five types of accounting case studies, of which the final classification depends on the intention of the researcher. Between the presented categories, overlaps may exist. This study aims, primarily, to seek an understanding of the observed phenomenon and interrelated accounting practices by linking these in an explanatory manner with the existing theoretical concepts of financialization and shareholder value primacy. Measuring causality is hereby not an objective.

This schema constitutes an a priori framework for the case selection.

Data Gathering

Selecting and Approaching the Subject

The subject's identification was made following the public announcement of AstraZeneca's decision to downsize its longstanding R&D unit in Södertälje on February 2, 2012. This case was chosen given the phenomenon's present nature and geographical proximity, for practical reasons, and considerable social impact with respect to the extensive media coverage, domestically and internationally, and public interest following the news' propagation. As such, the relevant taxonomy would be that of a "critical case", which raises the issues of interest to the surface (Ryan, et al., 2002).

Soon afterward, first contact with the site was established via a contact. A "Research participation consent letter" providing an outline of the thesis was sent via e-mail to the pioneering and later all subsequent informants. The first interview took place on March 9. Before this, however, briefings about the background and present situation were supplied by said contact.

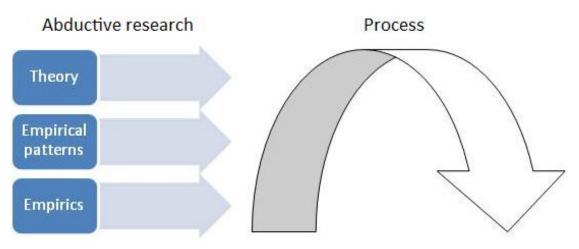
Data Recording

Different types of data were used for this research, including interviews, public and internal documents, news articles, company homepages and other electronic resources (e.g. databases).

Interviews comprised the primary and foundational source of data, and most involved employees from the downsized R&D unit and were conducted on-site to simulate the informants' natural setting; all visits were booked to last 90 minutes. A standardized protocol for informants belonging to the same category^b was used as the basis for subsequent, adapted versions prepared for each interview to better achieve proper coverage of important topics as well as tailoring to the informant's area of expertise. Questions were not always asked in accordance with their original formulation or order of inquiry. All oral interviews were fully audiotaped and transcribed. Follow-up questions were usually asked and in the majority of cases answers were received. Finally, to gather a richer and more balanced picture, interviewees with different backgrounds, roles and experiences were engaged.

Data Processing

This study employs abduction, comprising recursive switches between theory-laden elements of deduction and empirics-laden elements of induction - a widespread approach in case studies which serves as a tool for acquiring understanding (Alvesson & Sköldberg, 2008).





Note: The movement from empirics to theory or vice versa as depicted by the large arrow may not be straightforward, is not necessarily a one-time process and does not have to start at the empirics.

Research Quality

In interpretive case research, the notions of reliability and validity of evidence from quantitative research terminology are unlikely to be equally appropriate as they imply an independent, impersonal investigator and an objective reality. As such, these concepts are appropriately replaced with (1) procedural reliability, (2) transferability and (3) contextual validity (Ryan, et al., 2002).

^b AstraZeneca employee or analyst.

- Increasing the transparency of the data gathering enhances the reliability of findings and conclusions. The documentation of data has been regular and extensive, and the majority of versions were stored following updates instead of written over. Part of the material used during the research is displayed in the appendix.
- 2. In interpretive case studies, theoretical rather than statistical generalizations are looked for; a primary objective is to generalize theory either to a wider set of contexts or to extend and apply the findings to other contexts. Comparisons with prior research showed certain similarities between the results.
- 3. Data has been triangulated source-wise; researcher-wise, this was not achieved with respect to the inherent nature of single-author research. All informants accepted their transcript for review and most also made edits. One informant reviewed the paper pre-publication; comments were also received from people outside the study.

Literature Review

Prior research and applicable theoretical frameworks constitute the mainframe of this chapter. Searches for these were primarily confined to recommended academic journals and databases and incorporated key words such as "financialization", "shareholder value" and "downsizing", their permutations as well as authors with renowned publications in these fields.

Shareholder Value: Conception and Development

Historically, the notion of "shareholder value" and its rise to prominence in corporate governance made its mainstream entrance in the early 1980s in the U.S. when a number of factors gave rise to the (further) increasing role and weight of financial markets in American corporations and society, including the excessive growth of corporations, high inflation, internationalized competition following globalization, the nascent discourse of agency theory, the deregulation of financial markets which paved the way for the entry of institutional investors such as pension funds, hedge funds and insurance companies whose performances were often evaluated on a short-term basis, the rise of "junk bonds" in facilitating M&A to "discipline" managers of underperforming firms and consultants' promotional push for the adoption of measures such as EVA and MVA designed to "help" corporations trace and realize the maximization of shareholder returns. Value-based management was introduced and popularized as the tool with which corporate controls would be properly established in encouraging and certifying that organizational members align and act in accordance with owner interests. This new conception soon saturated Anglo-Saxon corporations, impacting elements as diverse as business philosophy, strategy, governance, culture, communication, organization, process systems, performance management and goodwill accounting, all redirected toward serving the normalizing expectations of shareholder value creation (Ding, et al., 2008; Eisenhardt, 1989; Fligstein & Shin, 2007; Froud, et al., 2000a; Gandolfi & Hansson, 2011; Ittner & Larcker, 2001; Lazonick & O'Sullivan, 2000).

Before this new era, most of the then relatively scarce number of giant U.S. firms followed a principle of what Lazonick and O'Sullivan (2000) call "retain and reinvest"; the corporation's focal point lay on the retention of both labor and earnings, the latter of which was reinvested in employees and capital as a means to sustain economic growth. By the 1980s, however, these large corporations were facing said mounting challenges and the ideological promotion of capital markets and shareholder value as the arbiters of performance was gauging top-level

management to turn away from the old ways and embrace the new vogue of "downsize^c and distribute" as returns disappointed (Lazonick & O'Sullivan, 2000; O'Sullivan, 2000).

Froud et al. (2000b; 2002) identify the waves of corporate restructurings encompassing activities such as divestments, rightsizing, closures, outsourcing, share-related executive incentive schemes and financial engineering through share buybacks and substituting debt for equity in the 1990s as reflecting the "emphasis upon the maximization of shareholder wealth" and term the phenomenon of financial markets evolving beyond a mere intermediary role to actively influencing the behavior of and relation between households and firms as "coupon pool capitalism". A financial analysis was conducted on quoted British firms, found to be averaging around zero in terms of EVA; thus, "underperformance" with regard to capital market expectations spurred corporate initiatives aimed at improving returns to capital at the expense of labor, at times when organic growth slowed, in order to prevent disappointed investor strow from "selling on a heard basis". Financialization thus widened a gap between investor expectations, which rose, and what management could readily deliver, pushing the latter toward an increasing concern for capital-market rather than product-market performance with implications for corporate governance even as competitors carried on with cost reduction programmes to compete for investor fondness.

Almond et al. (2003) examine the trend toward the shareholder value model in four countries, finding signs hinting at the erosion of the traditional "insider" system in Sweden, where owners of large, internationalized firms shared relatively close relations with managers. In countries such as the U.K. and U.S., the "outsider" system, characterized by a dominance of institutional owners often without much long-term interest in governance, was found to have settled as the norm to which corporations adhered. The established signs of the "insider" model's erosion were attributed to the reduced native concentration following the internationalization of investors, whose origins increasingly traced to countries housing shareholder value primacy. The merger between Astra and Zeneca was explicitly mentioned as an example in support of this line of argument.

^c Gandolfi & Hansson (2011) conduct a literature review of downsizing research, observing the 1990s as the "downsizing decade" and no signs of leveling off in such activity going into the present decade. Definition-wise, downsizing was found to characteristically involve "temporary or permanent job cuts, site closures, plant closings and layoffs".

Financialization and the Big Pharma Context

Froud et al. (2006) dispute Lazonick and O'Sullivan's political economy account on the consequential invariability of financialization^d, offering instead a cultural economy view whose central theme argues for the growing pressure from capital markets in redefining company strategy and management work so that the shareholder value rhetoric sets management on a "utopian quest for growth and higher returns for capital which has variable and uncertain consequences". Thus, managers engage in new and different strategies from those conceived in classical tradition as a constant need arises for a story of purpose and achievement intended for analysts and media, whose says impact the share price, and shareholders, to be backed by "performatives" such as immediate quality improvement programs. The problem for giant firm managers lies in the difficulty in delivering the financial numbers that "keep it going" for the stock market, owing to a "lack of levers" inherited from product market constraints, and which corroborate their story. These arguments on the explicit intrusion of the capital market and its impact on firm strategy are applied in the analysis of three historical case studies: GSK, Ford and GE.

The GSK case is of particular interest as it also examines a large British pharma and so forms a proximate basis for subsequent comparisons between contexts.

In the case, first identified is the increasing reputational struggle in the pharma industry in which the latter of two polarizing accounts – good, research-driven and innovative pharma versus bad, marketing-driven and profiteering pharma – is gaining ground. This represents critics' view of pharmas as "having licenses to print money" through premium-commanding patent-protected ethical drugs that seize therapeutic areas inherently insulated from competition given the common inability of a single drug to treat multiple indications; under the favorable regulatory conditions unto the early 1990s, these drugs often enjoyed gross margins in excess of 90 percent. But as the paying governments began pressing down on prices and tighten industry regulations following safety scandals among other reasons in the early 2000s, big pharma share prices tumbled and investor confidence was clutching on an

^d Epstein (2005) defines financialization as "the increased role of financial motives… markets… actors and… institutions in the operation of the domestic and international economies"; this "definitional approach" is, however, critiqued by Erturk et al. (2008) as focusing "on a development [the increasing role of finance] which is hardly new". Froud et al. (2006) instead distinguish the conception of shareholder value from financialization by classifying the former as "a malleable social rhetoric" and the latter as "the changes induced by the rhetoric of shareholder value".

eroding track. Moreover, as the widespread business model of blockbuster-creation^e, critically categorized as one of "productive conservatism", hinged on the securing of patent protections and targeted pipeline successes, the industry-wide slowdown in novel drug-making compared to earlier decades now pressured corporate objectives toward an increased reliance on marketing to boost existing sales and cover for the (partly consequential) lack of advances in biochemical R&D output. This point is illustrated by the exceptional sales of Glaxo's Zantac drug, responsible for a major share of Glaxo's market capitalization growth and favorable key ratios from 1980 to the mid-1990s: pre-tax ROCE in excess of 25 percent and labor share of internal costs well below 40 percent (Froud, et al., 1998; 2006).

For Glaxo, whose Zantac patent would start expiring in 1997 and pipeline did not suggest an immediate, apparent crown successor that could sustain a similar pace of organic growth, the first response to buzzing capital market concerns was defensive horizontal merger so as to buy time and "keep the share price going"; through the acquisition of the pharmaceutical firm Wellcome, a collapse in corporate sales as Zantac's and other patents expired was prevented and which together with cost savings from integrative rationalization and a combined portfolio buoyed the share price. But as the new millennium rang in, the fundamental issue of failure in stimulating R&D productivity despite increased investments had not been resolved. Following once more rising capital market discontent, a merger deal with SmithKline Beecham was struck and completed in late year 2000; once again, cost-cutting efforts followed, resulting in, among other things, the closure of some 30 manufacturing plants. Promises from executives were made as to how productivity and cost-efficiency would be attained through reorganization, vertical disintegration and activity externalization. However, this time around, the recipients of the showcase were not as easily convinced by the narrative and the company's share price declined by almost £6 over the period December 2000-2002 despite being mitigated by GSK's provision of generous dividend yields of 3.5 percent. The authors conclude by noting the growing difficulties and trend toward vertical disintegration in not only GSK but the entire big pharma industry - interpreted as an "admission of failure" and industry-wide attempt at "reinvention" for the future (Froud, et al., 2006).

Shareholder Value and the Intermediating Role of Accounting

Ezzamel et al. (2008) take a neo-Marxist perspective in a seven-year longitudinal investigation of the role of accounting in a large, multinational, U.S.-based, diversified, high-

^e A blockbuster is an ethical drug which sells at least \$1bn in a year.

tech conglomerate ("Conglom") in the articulation and translation of the manufacturing organization's new, explicit strategic pursuit of shareholder value creation into concrete activities and measures of control throughout its hierarchy and the consequences for organizational labor after the rise of "hegemonic despotism" from the "unchallenged rule of capital". Shopfloor workers, middle managers and VPs were enquired about their understandings of the new, shareholder-dominated corporate discourse and the implications for their work as Conglom's new CEO was recruited in the expectation to greatly hoist up the stock price by redirecting the focus through and through toward the appealing of financial markets and meeting of expected on-time deliveries of enhanced profitability and higher returns that would boost reputation and justify shareholder placements.

As a first stepping stone to the new, explicit "shareholder value" quest, Conglom commenced a substantial cost-cutting effort through the elimination of loss-making activities and a large share of the workforce. However, as financial markets reacted concernedly not long after to Conglom's growth potential in real productivity terms, such growth quickly joined the official overall strategy. Thus Conglom undertook a major reconstruction, motivated by its stock's "underperformance", to reconfigure the organization "as a discipline" to better realize its declared goals and self-elevated Wall Street expectations. Poor-performing businesses were sold off and believed-to-be undervalued targets with sufficient growth or cost savings potential through Conglom's growing rationalization capabilities were acquired. In addition, a four-cell matrix of accountability was installed, covering all the major parts of the business and which, in sum, held employees along the entire hierarchy accountable for failing to demonstrate the enhancement of shareholder value by the activities performed at their work. Another consequence of pressure to quickly lower costs was the striving for standardization; for example, through lean manufacturing, economies of scale and by reorganizing manufacturing activities around components to reduce bottlenecks, waiting time and thereby costs. Measures such as inventory levels, scrap quantities and scrap cost as a percent of product cost were adopted on the shopfloor to strengthen the link between costs, operational activities and the share price. The purpose was to metrics-wise identify and measure the value added at each element within all the activity of labor. Despite the aforementioned actions, as downward price pressure struck its products, Conglom deemed its share price in need of further improvement. Hence, three initiatives were taken:

 Elements of the business at all levels were scrutinized to determine what qualified as "core" contra "non-core"; activities judged not yielding any strategic advantage were divested and further acquisitions were carried out to achieve "complementarities" as measured by the target's contribution to synergistic cost savings.

- 2) Outsourcing supposed to bring a "favorable impact on share price" through the growth in market share, expansion without assets, reduction of in-house manufacturing complexity and allowance for a greater core focus was vividly pursued to attain immediate cheaper means of production; thus, several Conglom factories soon transformed into assemblies, coupled with significant staff reductions.
- 3) In response to instances of management satisficing rather than maximizing cost savings, a Programme Management Unit was installed as a "process of discipline"; a detailed handbook on cost and integration principles was crafted, identifying five major areas: programme integration, scope, schedule, resource and performance. Each linked directly to financial measures.

The intensifying spotlight on numbers and costs led to what one HR Director described as the "pizza principle" whereby the headcount was reduced through "reorganization" whenever the attainment of (expected) annual performance faced precarious outlooks. Employees were also sent to "education" of a minimum of 40 hours per year in a campaign to "make all employees cost-aware" and to "grow revenues". Additionally, lucrative share options were advocated to leave them undoubting of where the priorities lay. Finally, after a long period of serial restructuring, the exhausted space left for maneuvering led to merger. As the new CEO of the merged company took office, he presented a familiar message: first, exceed \$250 million in cost savings over the coming years and secondarily, fulfill the expectations of an "EPS growth on a sustained basis". All in all, the shareholder value discourse served to reassert and naturalize the prioritization of share valuation in corporate behavior. The authors assert shareholder value as a mobilized and sustained social movement that today dominates the rhetoric in many corporations, observing the devising and implementation of the aforementioned range of initiatives deployed in Conglom in response to satisfy the rising internal and external (and unrealistic) expectations and demands for its perpetual creation (Ezzamel, et al., 2008).

Research Implementation Basis

The above reviewed the concepts relevant to this study. But to achieve greater coherence in the empirics and discussion, an adapted framework of that suggested by Otley (1999) will be used to aid and structure comparative links of components in said chapters. The model

suggests five main sets of issues that need addressing when developing a framework for managing corporate performance.

- 1. Objectives: What goals are considered central to the organization's overall future success?
- 2. Strategies and plans: Through which processes and activities will these goals be attained and within what time frame?
- 3. Measures and targets: What mechanisms are put in place to measure and monitor strategy realization and what levels of performance are desired for these metrics?
- 4. Rewards: What incentives are offered to organizational members to encourage achievement of targets and what consequences follow from failure of such attainment?
- 5. Feedback: What information flows are needed for the organization to learn from experience and adapt its behavior to better realize its goals?

A selection of the above features of governance will in the case be traced and their developments duly interpreted in relation to and as expressions of financialization and shareholder value primacy.

To summarize, the review suggests to date there have been relatively few case studies of management accounting and control under financialization and the impact of shareholder value on R&D-intensive organizations (Gleadle & Haslam, 2010). Furthermore, many of the cited authors, such as Froud et al. (2006) and Ezzamel et al. (2008), adopt a critical view in their investigations, manifest in dissatisfaction with present ideologies and an advocacy for change^f, whereas this study is more interpretive. This has implications for the characteristics of potential, subconscious biases lurking within the differing kinds of studies. Finally, this study occurs concurrently with the downsizing and seizes informants' perceptions of the phenomenon afresh together with related historical developments, whereas prior cases have mostly accommodated a fairly even and spread-out, company-wide focus across events over time instead of assuming a specific, ongoing symptomatic event as the point of vantage and departure.

^f See for example Muniesa (2008) on Froud et al. (2006), Ryan, et al. (2002) on critical accounting and Smith (2011) on various journals.

Empirics¹

AstraZeneca PLC: Background

As of spring 2012, AstraZeneca PLC is a British multinational pharmaceutical company with corporate headquarters in London, R&D centers in Sweden, the U.K., U.S., Canada, France, India and Japan and 27 manufacturing sites in 19 countries. With a sales presence in more than 100 countries, an employee headcount of 57 000, \$33.6bn in revenues, an asset balance of \$52.8bn and a \$10bn bottom line, it makes one of the leading pharmas worldwide.²

AstraZeneca is listed on the London, Stockholm and New York stock exchanges.³ Presently, institutional fund investors comprise the largest shareholding group; for example, the largest owner, BlackRock, Inc., holds 9.69 percent of the shares outstanding and is an American and one the world's largest investment management corporations whose primary goals include providing acceptable investment returns on behalf of clients.⁴

In Sweden, AstraZeneca AB is the group's primary and a fully owned subsidiary, headquartered in Södertälje 36 kilometres south of Stockholm. Its two Swedish sites are Mölndal (near Gothenburg) and Södertälje. The latter constitutes two areas, Snäckviken and Gärtuna, which together feature activities of R&D, production and operations, marketing, and support functions such as legal, HR, accounting and finance.⁵

Astra and Zeneca: Late Pre-Merger to Merger

Before the would-be merger in 1999, the Södertälje site housed the longstanding headquarters of Swedish pharma Astra AB, founded in 1913, accommodating among others the subsidiaries Astra Arcus (CNS), Astra Pain Control and Astra Production Chemicals.⁶ In 1988, Astra had launched the hugely successful anti-ulcer drug Losec and was in the mid-1990s still riding on the tide of sales generated by this blockbuster.⁷

¹ Please view the appendix for complementary data. Some details withheld.

² AstraZeneca annual report 2011; Orbis

³ astrazeneca.com

⁴ http://articles.nydailynews.com/2009-06-12/news/17925137_1_barclays-global-investors-ishares-barclays-plc; http://topics.nytimes.com/top/news/business/companies/blackrock-inc/index.html; www2.blackrock.com; BlackRock annual report 2010

⁵ astrazeneca.se; AstraZeneca annual report 1999; Interviewee A; Interviewee B

⁶ Interviewee A; Interviewee C; Interviewee D

⁷ http://www.thepharmaletter.com/file/79901/losec-continues-to-drive-astra-sales-and-profits.html; astrazeneca.se

"[Now] there was a focus on [a few] products that could generate a lot of revenue – the blockbuster type of thing... That change came about in the early nineties." (Interviewee D)

By that time, Astra's profile had ascended to international limelight.⁸

"[Shareholders] were happy, because the share [price] was going up all the time." (Interviewee D)

In 1997, Astra had about 22 000 employees: 11 500 in marketing, 6 000 in R&D and 7 000 in Sweden. At this point in time, about 40 percent of shareholders were foreign. Sales growth continued strongly, and the pace of new recruitments locally in Södertälje kept up.⁹

"When I joined Astra, it was really on top [and] on a rising track." (Interviewee C)

The evaluation of employee work also differed rather markedly from that of today.

"There was no such thing as formal evaluation. Either... [they] said that you did a good job or not so good job, but there was no paper... [where] you had it written down, like nowadays." (Interviewee E)

"There was 'performance review', but... much less [comprehensive]. You [just] worked... there was a [formal] discussion with your manager... once a year. People knew what to do [without comprehensive goals, measures and top-down rhetoric]." (Interviewee A)

And unlike presently, rewards were mostly group-based and salaries did not vary much between employees.¹⁰

"Bonuses were given equally to almost everyone." (Interviewee C)

"You had a profit sharing program... The department head would get the same [share]... as the technician or cleaning lady." (Interviewee D)

https://docs.google.com/viewer?a=v&q=cache:Q3BxbJXsgGUJ:https://esiwebsite707.astrazeneca.biz/_mshost36 90701/content/resources/media/investors/announcement-

 $dec98.pdf+astra+6000+R\%26D+11500+marketing\&hl=sv\&gl=se\&pid=bl\&srcid=ADGEEShTCPB57JhkukUur\\1XyrYvckWY31IfDr8xps3I8kYmN74xJ6tzoezCZr7-Ke9zWPsWsbI0NlO8fpzDq-x7KdFn1iCvda3O5Gm-vo3P50gRSG982IjbO22nN5jVYngL8femVj06C\&sig=AHIEtbSb6CuF4IavbT8t3gTYJGi6_vOWxw;$

Interviewee C; Interviewee E

⁸ http://www.nytimes.com/1992/11/22/business/world-markets-a-certain-glow-on-sweden-s-astra.html?src=pm
⁹ http://www.thepharmaletter.com/file/62511/uk-launch-for-astras-ropivacaine.html; http://wwwc.aftonbladet.se/nyheter/9802/11/telegram/inrikes55.html;

¹⁰ Interviewee C; Interviewee E

Dissimilar was also the culture, which resembled that of a "family", with Christmas presents, social events on feasts and holidays such as Easter, small "nice-to-have" things as in cakes for lunch and sponsored apartments to accommodate moving employees. The attitude was more informal and R&D work more adventurous as in a biotech.¹¹

"There were absolutely no measures of productivity [lower down]." (Interviewee D)

Operatively, the emphasis of work was on quality.¹²

"... but that meant we became a bit slow [in R&D] as well." (Interviewee G)

The overall goals and strategy emphasized organic growth and expansions.¹³

Zeneca Group PLC was formed on June 1, 1993, when ICI demerged three businesses: Pharmaceuticals, Agrochemicals and Specialty Chemicals. In 1997, Zeneca's antischizophrenia (neuroscience) drug Seroquel was approved and debuted in various markets.¹⁴ By this time, it was the U.K.'s third largest and a fast-growing pharma perceived as confidence-invoking for the medium-term future.¹⁵ However, as a midsized firm a bit larger than Astra revenues-wise, Zeneca was facing rival consolidations as in Glaxo Wellcome and an increasing critique from stock analysts on its lack of new products in the pipeline to compensate for looming patent expiries in the first half of the next decade.¹⁶ Around this time, Zeneca employees worldwide amounted to 34 000.¹⁷

Toward the late 1990s, Astra was facing its own intensifying challenges, including a scandal involving its American subsidiary's CEO in 1996. Its stock was not doing as well as some analysts and investors had hoped and M&A speculations occupied various Astra-related news and analyst commentaries, augmented by concerns about other important issues such as the expiries of Losec's patent in the coming years, a thinning pipeline and the need for more competitive R&D investments as rival budgets accelerated.¹⁸ Astra's CEO, Håkan Mogren,

¹⁵ http://www.icis.com/Articles/1997/03/17/10462/zeneca-enjoys-year-of-substantial-success.html; http://www.icis.com/Articles/1998/01/27/52254/zeneca-sees-strong-pharma-growth-in-1997.html

http://www.independent.co.uk/news/business/comment-zeneca-price-a-poison-pill-for-potential-predators-1306998.html; http://www.thepharmaletter.com/file/16975/astra-zeneca-join-in-euro-merger-mania.html ¹⁷ astrazeneca.com

¹¹ Interviewee D; Interviewee E; Interviewee F

¹² Interviewee G

¹³ Astra annual report 1996; Interviewee D

¹⁴ http://www.thepharmaletter.com/file/57165/zenecas-seroquel-nears-market-approval.html

¹⁶ http://www.fundinguniverse.com/company-histories/AstraZeneca-PLC-Company-History.html;

¹⁸ http://www.referenceforbusiness.com/history2/76/Astra-AB.html; http://www.businessweek.com/1998/51/b3609195.htm

fuelled the buzzing discussions in 1998 by publicly announcing a desire to merge with a drugmaker of similar size.¹⁹

"[Astra] needed more candidates in the pipelines, which required a lot of capital, and great marketing... and a strong partner to keep the growth [going]." (Interviewee C)

After discussions with various players in the pharmaceutical industry already since 1996 and shareholders such as Investor AB who had until then spoken of a focus on "long-term value growth", a consolidation deal for Astra had finally become fact: AstraZeneca PLC was to be formed through the merger of Swedish up-and-rising pharma Astra AB and British bioscience firm Zeneca Group PLC on April 6, 1999.²⁰ Upon the official announcement on December 9, 1998, both Astra and Zeneca share prices rose remarkably.²¹

AstraZeneca's global homepage in 2012 explains:²²

"The merger aimed to improve the combined companies' ability to deliver long-term growth and enduring shareholder value through: global power and reach in sales and marketing, stronger R&D platform for innovation-led growth and greater financial strategic flexibility."

An independent news article from that time gave its own account, remarking that reasons for the deal included imminent patent expiries in both firms, which could be cushioned by potential pre-tax cost savings of \$1.1bn within three years by slashing the post-merger workforce by some 6 000 and the elimination of duplicate infrastructure, synergy and scale benefits, resource pooling opportunities and shareholder pressure.²³ Analysts had also earlier been criticizing the vagueness of Astra's strategy in addressing the nearing patent expiries.²⁴

Subsequent to the announcement, a JP Morgan spokesperson commented:²⁵

8&blobkey=id&blobtable=MungoBlobs&blobwhere=1285616438989&ssbinary=true; http://www.independent.co.uk/news/business/corporate-profile-the-arranged-marriage-1072830.html²⁴ http://www.economist.com/node/113843

¹⁹ http://www.nytimes.com/1998/03/07/business/astra-chief-says-he-would-like-merger-partner.html?src=pm
²⁰ Orbis; Nilsson (2010)

²¹ http://www.skatteverket.se; http://money.cnn.com/1998/12/09/europe/zeneca/;

http://www.independent.co.uk/news/business/zenecaastra-merger-will-cost-companies-over-pounds-38bn-1190459.html

²² astrazeneca.com

²³ http://news.bbc.co.uk/2/hi/business/231468.stm; http://wwwc.aftonbladet.se/nyheter/9812/09/astra.html; http://www.astrazeneca.com/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1= Content-Disposition&blobheadername2=MDT-Type&blobheadervalue1=inline%3B+filename%3DView-thefull-Press-Release.pdf&blobheadervalue2=abinary%3B+charset%3DUTF-

²⁵ http://www.nytimes.com/1998/12/10/business/zeneca-buying-astra-as-europe-consolidates.html?pagewanted=all&src=pm

"The wave of [merger] deals had been driven... by increasing pressure on executives and directors to create shareholder value."

Zeneca would control 53.5 percent of the new AstraZeneca, with Astra owners taking the remainder.²⁶ Combined, the group would rank third in the industry by sales.²⁷

"After merger... [we] became a British company." (Interviewee C)

"The reason told by top management was that it was not possible for Astra to survive... it was either a merger or to be bought up by a large pharma... I think that was the only option to have some of Astra left." (Interviewee E)

The future envisaged for AstraZeneca was to become a creative, fast and effective, focused, research-based and performance-driven pharma. In a 1999 CFO presentation, dividends and share repurchases were declared as subordinate to the primary priority of investing for future growth.²⁸

With the merger, the Swedish subsidiary AstraZeneca AB was created and assumed responsibility for the administrative coordination of the group's business and operations in Sweden. The Södertälje site became the group's R&D headquarters.²⁹

Early Post-Merger Life

Following the consolidation, the Södertälje site's expansion accelerated and construction began of some of the newest buildings which still stand today. The problem earlier had been a lack of space for more R&D activities, which had resulted in the temporary renting of the Novum building in Huddinge. During this time, the site was also recruiting many FTEs to fill the different jobs generated by the expansion as well as some local, voluntary resignations. Except for postdocs, contract employees were virtually unheard of.³⁰

8&blobkey=id&blobtable=MungoBlobs&blobwhere=1285616438989&ssbinary=true

²⁶ http://ec.europa.eu/competition/mergers/cases/decisions/m1403_en.pdf;

http://www.nytimes.com/1998/12/10/business/zeneca-buying-astra-as-europe-

consolidates.html?pagewanted=all&src=pm

http://www.astrazeneca.com/cs/Satellite?blobcol=urldata&blobheader=application&2Fpdf&blobheadername1=Content-Disposition&blobheadername2=MDT-Type&blobheadervalue1=inline&3B+filename&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3B+charset&3DUTF-Content-Disposition&DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blobheadervalue2=abinary&3DView-the-full-Press-Release.pdf&blo

²⁸ astrazeneca.com

²⁹ astrazeneca.se; AstraZeneca annual report 1999

³⁰ http://www.svd.se/naringsliv/sodertalje-drar-vinstlott_75022.svd; Interviewee A; Interviewee C

"After the merger, AstraZeneca in Södertälje expanded. We had big investments in real estate, in world-class instruments and we also increased our manpower and human resources. At that time, it was very easy to find a job as a scientist." (Interviewee C)

The investments in the R&D bases in Sweden, the U.K. and North America were described as serving to ensure and enhance the efficiency and productivity of the drug discovery process in the face of "a dynamic industry environment... full of changes".³¹

With recent sell-offs of the Agrochemicals and Specialty Chemicals businesses, AstraZeneca's intention "to focus on our core business - medicines" was also stressed. Corporate priorities included growth through key products and securing the flow of new ones. In R&D, goals comprised increasing the number of CDs and improving their success rates within specified time frames. In production and sales, the strategy involved developing a more flexible organization to readily meet demands from markets worldwide.³² The immediate focus, post-merger, however, was on successfully integrating the organizations.³³

Going into the new millennium, significant shifts could already be felt locally.

"At Södertälje, the first big change was that the ... product companies were merged... the idea of product companies disappeared... [replaced by] therapy areas. It became gradually more bureaucratic... and increased risk aversion... In the old organization you're chasing profit; in the new... chasing costs... The message that came down became also more focused on number of transitions and milestones." (Interviewee D)

Performance evaluation and rewards became noticeably more formal, individualized and differentiated.

"[Now it was] everybody should have their own goals." (Interviewee E)

The development of an effective and results-oriented culture and evaluation system so that all employees understood the importance of creating value for customers and shareholders was conceived to be an "important factor for future success".³⁴

The R&D strategy had also clearly embarked on a new path.

³¹ AstraZeneca annual report 2000

³² Ibid

 ³³ AstraZeneca annual report 2000; Interviewee D
 ³⁴ AstraZeneca annual report 2000

"If we go back ten years, our strategy was to have as large number of candidate drugs as possible." (Interviewee C)

On an overall level, top management decided how many projects there ought to be in each respective discovery and development phase, with the details inherited and sorted out by local portfolio management teams; a model based on project failure rates in the different stages over the preceding ten years or more derived the number of projects required at each stage in order to overcome the attrition hurdle and meet the decided-on numbers by the next time frame. This translated into a reliance on statistical probabilities and "hope that one of the projects succeeds by sheer luck" and was described as "the [random] shots-on-goal approach".35

At this point in time, sales and growth had been going quite well for the group.³⁶

The Chief Executive's Review concluded:³⁷

"In 2003, AstraZeneca made excellent progress..."

The next year, however, the Chairman noted:³⁸

"For AstraZeneca, the year was characterised not only by good sales growth, productivity gains and continued investment in innovation but also by the disappointments [involving prospective products such as Crestor, Iressa and Exanta]..."

The CEO reviewed:³⁹

"We are determined to apply the learning from these recent experiences and ensure that we... deliver an innovative and valuable pipeline that will sustain the Company over the long term whilst allowing us to return value to our shareholders in the short term."

In the big pharma skies, clouds were encroaching.⁴⁰

³⁵ Interviewee C; Interviewee G; Interviewee H

³⁶ Interviewee D
³⁷ AstraZeneca annual report 2003, p. 6

³⁸ AstraZeneca annual report 2004, p. 4

³⁹ AstraZeneca annual report 2004, p. 7

⁴⁰ Cuatrecasas (2006)

CEO Change to Present Day

On January 1, 2006, Sir Thomas McKillop, 62, a chemist by training and former CEO of Zeneca's pharmaceutical unit, retired as AstraZeneca's CEO. His successor, David Brennan, had ascended from a marketing background in one of the group's U.S. subsidiaries.⁴¹

A Merrill Lynch analyst commented:⁴²

"We feel that the long-term future ... remains a concern due to a lack of pipeline assets... Mr. Brennan's first major task as CEO will be to address the issues for AstraZeneca's growth beyond 2007."

By this time, the expansion activities in the Södertälje site had slowed significantly and while some buildings were still awaiting construction or renovation, FTE recruitments had waned. Contract employees with uncertain term renewals now began to constitute most of the new faces among staff, most of whom, unlike the earlier postdocs, did not eventually receive a permanent offer.⁴³

Locally, employees began noticing more organizational change in the winds.

"There was a clear strategy change... five, six years ago... Top management indicated clearly we were about to outsource more and more." (Interviewee C)

Longstanding in-house activities were now being assessed for their outsourcing potential to partners such as CROs and CMOs, lowering the need for more FTEs.⁴⁴ Parts of production were also relocated from Gärtuna to countries offering cheaper labor such as Poland or Czech Republic; in R&D, various indication areas were partially or completely externalized or discontinued altogether.⁴⁵

"In Södertälje, we've worked with the same areas, mostly. But some... have disappeared; multiple sclerosis was dropped [sometime after 2005]..." (Interviewee I)

Also around that time, the discovery phase for Parkinson's was abandoned.⁴⁶

⁴¹ http://www.thestreet.com/story/10235389/2/astrazenecas-sir-tom-to-retire.html; astrazeneca.com; Interviewee A; Interviewee G

⁴² http://www.thestreet.com/story/10235389/2/astrazenecas-sir-tom-to-retire.html

⁴³ Interviewee A; Interviewee C; Interviewee E

⁴⁴ Interviewee A; Interviewee C

⁴⁵ Interviewee C; Interviewee I

⁴⁶ Interviewee I

The organizational focus was felt by employees to be shifting from "science" to "business".

"Our previous CEO... was a scientist and that showed... In the past years [post-CEO change], we've been more focused on... performance, marketing – all these kinds of measures rather than science... But I don't know if it's because of the new CEO or the trends. If you look back... you can see [the industry] is susceptible to trends; if one starts with something, then all others follow. It's very difficult to stand out and be different, especially if you are a publicly owned company." (Interviewee G)

Meanwhile, the anticoagulant Exanta, a major hope as a future blockbuster, was, in 2006, due to safety concerns withdrawn from markets worldwide and all development discontinued.⁴⁷ Earlier in 2005, the oncology drug Iressa had struggled with regulatory approvals.⁴⁸ In late spring 2006, the diabetes-treating drug Galida had to be scrapped after failing late Phase III trials.⁴⁹ These constituted major setbacks, as at least hundred millions of pounds had been poured into developing each of such drugs.⁵⁰

Analysts expressed growing concerns over the need for the firm to restore its clinical development reputation.⁵¹ The absence of new, big launches was predicted to push the group toward having to weather the coming years by "tightening its belt".⁵²

"That was the first time I had heard [from top management] that we had to save money." (Interviewee E)

Thus AstraZeneca's 2007 second quarter presentation identified four strategic priorities:

- Strengthen the pipelines
- Grow the business
- Reshape the business
- Change our behavior and culture

This translated to, among other things, focusing on driving increased externalization, further improve existing sales and marketing efforts, become an even leaner organization, embed a stronger culture of accountability and strengthen performance-driven reward structures, all

⁴⁷ http://pharmagossip.blogspot.se/2006/02/astrazeneca-exanta-blockbuster-that.html

⁴⁸ http://www.icis.com/Articles/2005/01/14/643807/iressa-disappointment-is-third-strike-for-astrazeneca.html

⁴⁹ http://articles.economictimes.indiatimes.com/2006-05-05/news/27423596_1_galida-clinical-trials-pargluva

⁵⁰ http://campaignfortruth.com/Eclub/100406/CTM%20-%20exanta.htm; Interviewee C

⁵¹ http://www.icis.com/Articles/2005/01/14/643807/iressa-disappointment-is-third-strike-for-astrazeneca.html

⁵² http://www.pharmaprojects.com/company_analysis/AstraZeneca_light-at-end-of-tunnel.htm

intended to lead to "creating sustained shareholder value".⁵³ Strengthening the pipeline was identified as the number one priority.⁵⁴

In early 2007, a company-wide restructuring programme had thus been initiated.⁵⁵ Employee layoffs were announced with the intent of aiding the streamlining of operations to help mitigate the impending challenges posed by factors such as escalating generic competition, pipeline failures and tightening governmental regulations which held back the share price.⁵⁶ The strategic focus now explicitly turned toward cutting down on costs while expanding the portfolio through increased acquisitions of projects or smaller R&D firms, collaborations and investment in lab facilities to stimulate work productivity.⁵⁷ Over the course of two years, 12 600 jobs worldwide would be slashed.⁵⁸

In Södertälje, a series of voluntary redundancy packages within operations had been offered to employees since 2006.⁵⁹

"The problem was there weren't a lot of products coming; they were failures. So... the products we made room for in operations didn't come. They [top management] also tried to be much more efficient and effective, as they called it... 'lean'... That was the first time since I joined Astra that they'd said, 'Now we have to be not as many as we were.'" (Interviewee E)

At this time, the Södertälje site housed around 8 000 employees, 5 000 of which belonged to operations.⁶⁰

Later in 2007, AstraZeneca made a move and acquired vaccines and biologics firm MedImmune for \$15.2bn in line with "strengthen the pipeline". However, many analysts reacted unfavorably to the high price tag and its eventual disappointing yield.⁶¹

As the global financial crisis took off in 2008, the pharmaceutical industry was fairly insulated in terms of the nature of its products – (patented) medicines needed by patients regardless of economic downturns. However, the recession further weakened governments'

⁵³ astrazeneca.com

⁵⁴ http://www.in-pharmatechnologist.com/Industry-Drivers/AstraZeneca-s-job-cuts-latest-symptom-of-widespread-trend

⁵⁵ AstraZeneca annual report 2007; Analyst report, 2011-05-24, HCM

⁵⁶ http://www.rsc.org/chemistryworld/News/2007/February/02020702.asp; Interviewee C

⁵⁷ http://www.in-pharmatechnologist.com/Materials-Formulation/Sweden-next-to-be-hit-by-AstraZeneca-jobcuts

⁵⁸ http://online.wsj.com/article/SB10001424052970203711104577198264263381758.html

⁵⁹ Interviewee A; Interviewee E

⁶⁰ Interviewee E

⁶¹ http://online.wsj.com/article/BT-CO-20120202-709920.html; Analyst report, 2011-05-24, HCM

willingness to pay for big pharmas' drugs, which in turn put all the more price and regulatory pressure on the industry as medical side-effects were also less and less accepted. To preserve profitability ratios in the absence of sufficient amounts of new blockbusters, corporate expenses demanded additional cuts, as share prices also suffered.⁶² The crisis thus provided a further argument for big pharma executives to undertake more layoffs to quickly ax overheads.⁶³

In 2009, AstraZeneca's Swedish production site in Umeå housing 150 people was announced for shutdown by summer 2011.⁶⁴ Also around this time, in Södertälje, an explicit scorecard was introduced as a means to further emphasize the importance of linking and aligning goals and performance within all of the organization; two or three years earlier, a global scorecard had been implemented.⁶⁵

In addition, the longstanding on-site canteen was externalized in the summer, with employees noticing a subsequent drop in the food quality as stringent restrictions were also imposed on the distributed portion of seafood and meat. Inside work buildings, coffee machines were removed or had all but their simplest functions disabled. Other once internal activities that were now being or already externalized included IT-support, cleaning, facilities management, company cars, printing, chemistry and safety.⁶⁶

In December 2009, the local headcount was as follows:⁶⁷

AstraZeneca Södertälje	5 680
Within R&D	1 440
Within operations	3 000

⁶² http://www.frost.com/prod/servlet/market-insight-top.pag?docid=155855105; Interviewee C; Interviewee G

⁶³ http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2009_04_10/caredit.a0900048 ⁶⁴ http://sverigesradio.se/sida/artikel.aspx?programid=109&artikel=2696033

⁶⁵ Interviewee A; Interviewee D; Interviewee E

⁶⁶ Interviewee A; Interviewee E; Interviewee F; Interviewee H

⁶⁷ Interviewee E

R&D Restructuring

In spring 2010, AstraZeneca announced the downsizings of its R&D sites in Charnwood (U.K.), Wilmington (U.S.) and Lund (Sweden), amounting to a headcount reduction of 2 650.⁶⁸ Officially, the communicated strategy was to reduce the firm's "geographic footprints" in the world.⁶⁹ Earlier in January, another wave of workforce cuts by 12 percent or 8 000 jobs by 2014 had made its way into public knowledge.⁷⁰ The word from the company was that it now faced a "challenging" five years ahead.⁷¹ The cuts would hit all parts of the organization, from marketing to operations to R&D.⁷²

In summer 2010, a new R&D management team was installed: Martin Mackay as President of Global R&D and Menelas Pangalos as EVP of the newly formed iMed.⁷³ Previously, there had been no single global R&D unit; research and development were separate. The new corporate discourse was: One R&D.⁷⁴

"We merged early and late research... to cut costs." (Interviewee C)

The new management was partially a result of the void created by the departure of the previous head of Discovery Research, Jan Lundberg, who had left for rival Eli Lilly promptly after his resignation in fall 2009 together with Christer Nordstedt, VP for CNS&P Södertälje.⁷⁵ Christer Köhler, head of global discovery for CNS&P, was named interim substitute.⁷⁶ He later retired in February, 2012.⁷⁷

Soon after the new R&D management's arrival, a restructuring in R&D was initiated. In Södertälje, the line between the early and late stages of the CNS&P drug-making process was redrawn and postponed from Phase I-A to late Phase II. This move marked a renewed focus

⁶⁸ http://www.guardian.co.uk/business/2010/mar/02/astrazeneca-close-uk-research-centre; http://www.pharmatimes.com/Article/10-03-

^{02/}AstraZeneca_closes_sites_exits_much_of_discovery_research.aspx;

 $http://www.industryweek.com/articles/astrazeneca_to_shut_rd_sites_21228.aspx;$

http://www.inpharm.com/pharma_company/astrazeneca

⁶⁹ Interviewee C; Interviewee H; Interviewee I

 $^{^{70}\} http://www.pharmaceutical-jobs.com/pharmaceutical-news/astrazeneca-to-cut-550-pharmaceutical-jobs-in-wilmington$

⁷¹ http://www.telegraph.co.uk/finance/newsbysector/epic/azn/7095816/AstraZeneca-plans-8000-job-cuts-ahead-of-tough-period.html

⁷² http://www.fiercepharma.com/story/astrazeneca-adds-8-000-job-cuts-toll/2010-01-28

⁷³ http://www.affarsvarlden.se/hem/nyheter/article788168.ece; Interviewee A; Interviewee I

⁷⁴ Interviewee A; Interviewee C; Interviewee I

⁷⁵ http://www.affarsvarlden.se/hem/nyheter/article677091.ece; Interviewee A; Interviewee E

⁷⁶ http://www.thepharmaletter.com/file/88644/astrazenecas-jan-lundberg-to-be-head-of-global-discovery-research-at-eli-lilly.html

⁷⁷ Interviewee A

on quality and a recalibration of the balance between quality and numbers. Under the previous way of working, problems of running too fast and neglect of responsibility had been experienced.⁷⁸

"It was ten years where we had just been looking at... the number of transitions... If you just put the number hat on... there was a risk that you just threw projects over the fence to our clinical colleagues, thinking, 'We've done our part, so now you do yours.' [And] the later a project fails, the more money is wasted." (Interviewee G)

AstraZeneca's \$12bn R&D spending per launch placed it as the costliest in the industry.⁷⁹

"This [new focus] was communicated extremely clearly... I've got documents, paperwork printed out; targets – very, very clear. We get e-mail updates, webcasts, PowerPoint presentations, site visits... it's very easy for me as a manager to know what they are looking for in us. And the head of research is very, very clear in what the overall strategy of the company is, and at the moment... is cost savings, reorganizations and... get as much value as possible out of emerging markets." (Interviewee H)

In terms of scientific work carried out, however, the restructuring did not always bring significant novelties. Incumbent scientists would, after the reorganization, work with at least 50 percent of the same activities they performed earlier.⁸⁰ Meanwhile, the acceptance for smaller indications was gradually regaining acceptance.⁸¹

About 900 employees left Södertälje in 2010, mostly from operations and R&D.⁸² Other local functions, such as marketing and finance, also experienced redundancies; for example, the finance function's headcount descended from 150 to a present 20.⁸³

"It's all about the 'lean' process." (Interviewee F)

"I think everybody realized we were in danger. But how many years will we get to deliver results?" (Interviewee E)

⁷⁸ Interviewee G; Interviewee H

⁷⁹ http://www.forbes.com/sites/matthewherper/2012/02/10/the-truly-staggering-cost-of-inventing-new-drugs/

⁸⁰ Interviewee A

⁸¹ Interviewee D

⁸² Interviewee E

⁸³ Interviewee F

And while there were no more restructurings within operations after 2010, the R&D restructuring carried on. Local outsourcing initiatives intensified.⁸⁴

"We were heavily looking into outsourcing options for everything... Almost everything was up for review: in vivo, in vitro, histology, safety... [as] part of a cost-reduction programme..." (Interviewee H)

In November 2011, following disappointing results of the antidepressant (neuroscience) drug TC-5214 in a late-stage trial, AstraZeneca shares fell 3.8 percent in London, reinforcing capital market concerns over the company's all the more limited pipeline with which to counter the patent cliff it faced over the next several years, among others the expiries of Seroquel and Crestor in various markets during 2012. This dealt another blow to the already thin neuroscience pipeline.⁸⁵

CNS&P Downsizing

On February 2, 2012, the closure of AstraZeneca's CNS&P sites in Södertälje and Montreal was announced to the public alongside the latest quarterly results: neuroscience research would be nearly entirely terminated; all R&D activities at the Södertälje site would (basically) cease by the end of the year and most employees would exit before late summer. After the update, AstraZeneca shares had fallen 2.8 percent by 08:35 GMT.⁸⁶

Senior managers had arrived at the site to talk about the decision in the morning.⁸⁷

"Our R&D chief, Martin Mackay, [among others] came here and in the lunch restaurant he made the announcement... They told us, 'Our budget does not support our expenses in research, so we have to be more efficient and quickly transform our R&D organization into a more efficient [one]."" (Interviewee C)

"Top management has a very clear view of each unit's spending and what is your profit... and, unfortunately, CNS Pain does not look good." (Interviewee H)

⁸⁴ Interviewee E; Interviewee I

⁸⁵ http://www.reuters.com/article/2011/11/08/astrazeneca-targacept-idUSL6E7M80SI20111108; http://www.ft.com/intl/cms/s/0/7e5d142a-4d74-11e1-b96c-00144feabdc0.html#axzz1tVneNQXc; Analyst reports, 2011-08-15, 2011-11-07, 2012-02-03, HCM; Interviewee J

⁸⁶ http://www.marketwatch.com/story/astrazeneca-cuts-7300-jobs-warns-of-lower-profit-2012-02-02;

http://www.dn.se/ekonomi/lagre-vinst-for-astra-4; Interviewee A; Interviewee D; Interviewee H; Interviewee J ⁸⁷ Interviewee C; Interviewee D

"They said the reason... was we hadn't produced a new medicine within CNS and Pain for the last fifteen years, so now they had to try another way..." (Interviewee E)

Senior management had flown from the Montreal R&D site to Södertälje immediately after announcing the former's closure, whose shutdown meant a loss of 132 jobs.⁸⁸ In Södertälje, about 2 600 in operations and 280 in marketing would comprise the respective headcount in the two remaining major functions after R&D's departure.⁸⁹

Externally, the Q4-event was closely followed by healthcare stock analysts.

"[AstraZeneca disclosed] how many... why they had to leave and how much [money] would be saved from the maneuver." (Interviewee J)

"The firm's a bit in a fox trap... [It's] either invest even more in R&D, which is controversial because the background is... low productivity... or cut costs, achieve a greater flexibility... This is the path we've... thought they could build some credibility around... It wouldn't be very credible if they carried on with large reinvestments in research areas where they haven't been successful." (Interviewee K)

The annual report published on March 26 emphasized the need to accelerate the R&D transformation strategy to "sustain acceptable returns to shareholders" even as another round of buybacks of \$4.5bn was promised for delivery together with a CEO remuneration raise.⁹⁰

"The [internal] communication of how to create value for the company has been much [more] in the past years, [although] it's been very much 'create value for the patients' and you never talk [exclusively] about creating value for the stockholders." (Interviewee I)

Looking Back... and Ahead

The announcement had come as a shock for many local employees due to the short passage of time since the 2010 reorganization. The decision itself was, however, for many, not entirely unexpected but more a daunting question of time.

⁸⁸ http://www.canada.com/business/Hard+times+pharmaceutical+industry/6097329/story.html;

http://www.theglobeandmail.com/report-on-business/international-news/european/astrazeneca-closing-montreal-rd-plant/article2323645/; Interviewee A; Interviewee D

⁸⁹ Interviewee B; Interviewee E

⁹⁰ http://www.guardian.co.uk/business/2012/feb/02/astrazeneca-cuts-7300-jobs;

http://www.fiercepharma.com/story/azs-brennan-nabs-11-pay-hike-589m/2012-03-26; AstraZeneca annual report 2011

"We [R&D] were not successful in delivering products." (Interviewee C)

"Back in 2010, people thought we were going to be safe, because... we had a three year business plan. People interpreted it as, 'Okay, we have [at least] three years to show we can still do this."" (Interviewee I)

"But they did not wait three years." (Interviewee E)

With the closure, the next step in line with the corporate strategy will be to move all continuing work within CNS&P to a new, virtual unit comprising of 40 to 50 employees to be based in Cambridge, U.K. and Boston, U.S., with close proximity to academic institutions.⁹¹

"The new virtual iMed... means there will not be anyone doing lab work... at all." (Interviewee H)

Pipelines will be developed together with external partners such as CROs and public research institutions so as to better utilize outside competence, with projects and studies deemed prospective bought in.⁹²

"The virtual iMed is an experiment that is the extreme end of the spectrum. They will... pay for everything to be done externally... You can pick the phone up and ask, 'How much will it cost me to do this?' and... run drug discovery programs without any infrastructure. So you keep your costs low." (Interviewee H)

In the recent years, this trend toward externalization has been industry-wide; competitors have also initiated waves of outsourcing and downsizings toward and into the 2010-decade.⁹³ A comparison was drawn to the pre-closure situation at Pfizer's R&D site in Sandwich (U.K.), shut down in early 2011.

"Shortly after I left, the site closed... Now that I look back, many of the activities the site was going through was preparing for the closure... First thing you notice is that luxuries are gone." (Interviewee H)

Stately indoor plants serviced weekly had one day suddenly vanished, the canteen's food quality was falling even as prices rose and employees now had to pay for their coffee.⁹⁴

⁹¹ Interviewee A; Interviewee H

⁹² Interviewee G; Interviewee H

⁹³ Interviewee F; Interviewee I

⁹⁴ Interviewee H

"So these were really the little signs that [Pfizer] was, wherever possible, trying to save money... and [then] everything started to escalate; there was a hiring freeze. [Then] you close the labs... and demolish buildings." (Interviewee H)

"Everybody [in the industry] is looking at their costs." (Interviewee F)

From an external point of view, AstraZeneca's decision to downsize did not entirely surprise analysts.

"... felt like it was a defensive move, to preserve the cash flow at any price... They'd promised the market certain numbers [e.g. margins or returns] and to reach those they had to cut somewhere... the question was... where." (Interviewee J)

"We deviated from what they [AstraZeneca] had said... and we anticipated... a new downsizing with the Q4-report... [Because] it's not very credible, year after year spending so much money without a change – either downsize or do things a bit differently." (Interviewee K)

The downsizing meant a decrease in AstraZeneca's R&D and various overhead allocation expenses and an increase in margins, profit and cash flow.⁹⁵

Analysts will now closely follow for what the freed-up cash will be used.

"With the large savings... my curiosity is strongest regarding in what they will invest... [because] it's not enough to all the time payback to shareholders... I judge this [right now] as a rather unsustainable situation, with little clarity on [long-term corporate] priorities. We [analysts] expect this to change in the coming years." (Interviewee K)

Looking back, AstraZeneca's share price has not been performing very lucratively.

"... however, they have delivered good dividends [and stock repurchases]. [But] the key is their lack of new products... Generally, this has been an issue for the entire industry." (Interviewee J)

"[AstraZeneca] owners of course feel a strong frustration over this... manifest in a low valuation – very low." (Interviewee K)

And the importance and influence of owners and capital markets have been observable.

⁹⁵ Interviewee F; Interviewee J; Interviewee K

"Every little opinion makes a difference..." (Interviewee J)

Analysts have generally not awarded the firm cheerful verdicts over the years, and two months after the Q4-report, shareholders were calling for a board and executive team shakeup.⁹⁶

"The capital market is less important for successful firms, while being the opposite for those with problems... A high [but not grossly overvalued] share price is quite important... [Otherwise] there's discontent toward present senior management. It could also be that the pressure increases... from both shareholders and media... and [it's important] for firms growing through acquisitions... A firm can also be more exposed to hostile bids and consolidation..." (Interviewee K)

"Investors are very sensitive about our strategy... some are still positive about things because they... got dividends [for example following the sale of Astra Tech last year]. Before, investors were willing to wait a bit longer, but it has been a while [that] we don't have good medicines coming, so some are losing patience." (Interviewee F)

"Now, after so many years of failure of all players in this sector, it has told investors it was not easy to succeed... [They] start to think, 'I want my dividends; I do not expect you can launch any new product because I don't see it in your pipeline.' Therefore, it is quite natural shareholders are getting less... confident. They want money now." (Interviewee C)

"We have heard for a couple of years that our most difficult discussions are with the shareholders, because they want to see evidence that we are making... AstraZeneca a strong company... that AstraZeneca is trying to do something... We heard from the management team and David Brennan himself, he said, 'Nearly every day I have discussions with the shareholders and they are asking me, "When will we get a new drug?"" (Interviewee E)

Looking ahead, prospects are predicted to remain shrouded in clouds for some time.

"Now, it's to consolidate, try to gather pace on their newly approved products and hope products in research make progress. But in near future, it's cutting costs and expanding in emerging markets – that's what it's [all] about for AstraZeneca." (Interviewee J)

⁹⁶ http://www.ft.com/intl/cms/s/0/08b7eece-8187-11e1-b39c-00144feab49a.html#axzz1sObWP8mz; http://www.ft.com/cms/s/0/ce3fa354-8186-11e1-b39c-00144feab49a.html#axzz1sObWP8mz; Interviewee J; Interviewee K

"We are in a very challenging time. We have to prove for the world and employees that we are doing the right things. We are at the bottom – so to say – right now." (Interviewee E)

Hopes are that more products will emerge from R&D. The current top three sellers all face expiries over the coming two years.⁹⁷ Half of the \$33bn annual revenues are expected to disappear due to the patent cliff.⁹⁸ Brilinta makes up one of the few promising new products.⁹⁹

"... but they cannot compensate yet." (Interviewee G)

Besides shareholders and employees, the downsizing had implications for other stakeholder groups.

"Customers, the patients, are disappointed. Many are expecting medicines for... especially Alzheimer and difficult diseases. Now, one of the hopes has been taken away from them." (Interviewee C)

While Alzheimer's was generally considered complicated, such a conception of analgesia was not always shared.

"I don't think analgesia is particularly difficult [scientifically]; it's difficult because there's so much incompetence in the [internal] governance bodies... [which] don't make the right decisions." (Interviewee D)

"The suppliers I've talked to have been shocked... this is a big customer for them." (Interviewee I)

As an example, the Swedish CRO partner Syntagon immediately cut its labor force after the announcement.¹⁰⁰

AstraZeneca has also traditionally had rich interaction with academia, for example providing machines for the Karolinska Institute and University Hospital.¹⁰¹

"It'll over the next few years have consequences, with one less place for students to go to." (Interviewee D)

⁹⁷ http://www.ft.com/cms/s/0/86776766-7a81-11e1-9c77-00144feab49a.html#axzz1rXwT5n4k

⁹⁸ http://www.ft.com/intl/cms/s/3/15e7a9ca-831e-11e1-9f9a-00144feab49a.html#axzz1sObWP8mz

⁹⁹ http://www.telegraph.co.uk/finance/newsbysector/pharmaceuticalsandchemicals/8642246/AstraZeneca-pins-hopes-on-heart-drug-approval.html

¹⁰⁰ Interviewee C

¹⁰¹ Interviewee D; Interviewee I

This also marked one step closer to the exit of big pharma R&D from Sweden.

"The drug industry has been extremely important for the Swedish economy... I think it's gonna have much more impact than people believe. This is one of the few organizations that have the competence and resources to bring a compound to the market on its own merit, and that expertise is going to be very difficult to bring together once it breaks." (Interviewee D)

As pharmaceutical R&D is a very unpredictable and time-consuming process, the burden of meeting expectations of fast returns and dynamic advances in shareholder wealth generation was not perceived as well-fitted with how the drug-making process intrinsically operates.¹⁰²

"Big [pharma] companies have used the same consultants, made the same mistakes and have to pay the same price." (Interviewee D)

"I think the shareholders should be a bit more patient, because, to deliver new drugs, you don't do that with a finger snap – it takes some fifteen years." (Interviewee E)

On April 26, the day of the Q1-report and AGM, David Brennan, 58, announced his retirement as CEO.¹⁰³ The local word internally was that shareholder tolerance had depleted.

In a webcast to employees, David Brennan said, "... I am confident that AstraZeneca will continue to have a positive impact on the lives of patients... and... so will deliver real value to our shareholders."

¹⁰² Interviewee C; Interviewee E

¹⁰³ http://www.guardian.co.uk/business/nils-pratley-on-finance/2012/apr/26/david-brennan-successor-astrazeneca; astrazeneca.com

Discussion

The manifestations of financialization and the shareholder value norm in the phenomenon of AstraZeneca's R&D Södertälje downsizing may appropriately be understood as entwined to the larger social system in which the firm resides. Thus, its historical and contextual development will be chronologically interpreted and the downsizing eventually "picked up" down a road that is established as one toward a firming chokehold of "shareholder value".

Late Pre-Merger to Merger

In the early 1990s, Astra was, culturally, a very Swedish company with a traditional focus on product quality and enjoying a continually rising share price. The work atmosphere was informal and creativity well accommodated in everyday science work, with few measures for ordinary employees to worry about. However, both Astra and Zeneca, as listed, international and fast-growing pharmas, also lived under the increasing threat of a takeover by a larger competitor, reflecting the presence and significance of financial markets in corporate considerations already at this point in time.

For Astra, whose owners were primarily institutional and of which foreign as from the U.K. and U.S. constituted a substantial fraction, the merger provided a means to steer clear of this threat (this time around) while also bringing scale benefits such as synergistic cost savings and a strengthened pipeline, something watched increasingly closely by the commentating public – competitors and financial markets alike – at a time when the product market frontier, for example Losec sales, was under siege. The deal thus gave the capital market a renewed reason to maintain faith in the firm's ability to sustain shareholder returns and quench any such short- and medium-term doubts about the future, which would have been injurious to both corporate reputation and returns.

Furthermore, discussions and negotiations with shareholders when Astra's outlook and blazing stock price deteriorated reflected their reflexive influence, although at this point in time financialization was not yet as strong due to a sizable fraction of owners being Swedish, with closer relations to executives and more patience with respect to returns. Goals within Astra were thus more focused on organic growth and reinvestments rather than costing and controls as in an array of value-driven metrics of accountability and distributions, although the frenzy of consolidating peers owing to shareholder value primacy was increasingly putting its mark upon Astra's strategic options forward. This was also accentuated in the company's adherence to the industry-wide move toward the blockbuster model, aimed at aiding the meeting of expectations of shareholder value creation through large, stable streams of earnings, and urgency to tap more into the large, lucrative U.S. market (e.g. NYSE listing) in which the norm of shareholder value nonetheless prowled.

Post-Merger to CEO Change

Following the merger, AstraZeneca became one the largest pharmas by size, but also a British company; with the corporate headquarters situated in London, such proximity to an environment inhabited by firms collectively operating under shareholder value primacy inevitably influenced subsequent business conduct as those of senior management not already accustomed now faced the constant exposure to and standards of such rhetoric and expectations. This cultural shift was reflected in the rise of "productive conservatism", "core" focus on blockbusters and a system of accountability. And while the post-merger integration, whose cost savings potential preoccupied the corporate focus in the early 2000s, was deemed as progressing according to plan and investors excited in waiting for what the new AstraZeneca had to offer over the coming years, a cautionary note was nonetheless placed on the evolving industry environment and potential pitfalls ahead.

Corporate goals were after the integration process still mostly concerned with sustaining growth and successfully developing and launching new drugs, especially in the U.S., and while there were several successful launches, for example Nexium and Seroquel, the subsequent failure of promising drugs such as Exanta entailed an encroaching pipeline drought. And when not enough new products materialized, the ammunition was displaced toward boosting existing sales, initiatives of cost savings to realize promised margins and targets such as EPS and payouts to remain attractive on the capital market and acquiring projects from outside, all the while relying on statistical chance to soon deliver the next blockbuster. Far-reaching measures of accountability and control were thus devised to promote the alignment of organizational behavior with that of shareholder interests and flaunt where the priorities lay when troubles arose.

Internally and locally, this was reflected in the growing focus on milestones and number of transitions within R&D, as quality could not be as precisely measured. And as risk aversion thrived, it spun on the downward spiral of low R&D output as projects were increasingly

terminated based on resourcing and costing arguments instead of scientific merit; managers in charge became – voluntarily or forcedly – more concerned with overseeing and ensuring the implementation of "strategy" rather than that of drug-making.

These scenes were, of course, all followed by the capital market, which, with the CEO change, served as an exacerbating catalyst for a fresh round of managerial "performatives" as in costcutting, bolt-on acquisitions and "non-core"-driven divestments when the product market frontier was losing ground.

Post-CEO Change and Beyond

By the mid-2000s, pressure from a deteriorating industry environment was becoming increasingly a real and serious concern for big pharmas. For AstraZeneca, problems of continued, disappointing late-stage trials and product rejections by all the more stringent regulatory bodies were not well-received by the now highly present institutional and Anglo-Saxon shareholders, who saw little prospects of new blockbusters emerging out of the disclosed pipeline and their short-term returns stagnated by a faltering stock price as analysts remained tepid about outlooks.

Since big pharmas' primary income source, medicines, could take more than a decade to bring to markets from scratch, few magical levers existed with which to pull launches out of thin air. For AstraZeneca, such issues meant the coming years were visibly glooming. Hence, to keep things going for the worrying capital market until promising drugs came to the rescue, senior management took to demonstrate conspicuous initiatives of ceaseless activity in attempts to improve the dire outlook while also making the numbers expected by analysts and shareholders alike in order not to compromise credibility.

As many patents inevitably neared their expires, corporate goals and focus thus moved away from sustaining growth toward escalated cost-cutting, which buys senior management time and buffers against shareholder discontent as cash is freed up for swift, increased distributions when the stock fails to appreciate as sales streams await breaking up. The corporate response since the intensification of the aforementioned problems comprises a familiar set of activities of a financialized firm standing in the face of tougher times: intensifying discussions of what constitutes "core" business, embarkation on a full-scale exploration of outsourcing options, large and extensive restructurings to improve "efficiency and effectiveness", enhancement of a culture and system of formal measures and accountability among all of staff, acquisitions for bolt-on solutions while divesting more "non-core" areas and laying off employees in serial downsizings even as dividends and buybacks march on unyieldingly.

Meanwhile, the financial crisis served as adding oil to the fire as share prices sunk, pushing pharmas toward competing for capital market approval on payouts as evidenced by their rearing ascent in AstraZeneca since then and whose backing belonged to that of prompt cost-shedding.

In addition, the continued departure of Swedish members from the SET reflected the fortification of shareholder value; little room was yielded for alternatives. And when the costly gamble on MedImmune did not pay off, the surefire option still able to ensure a steady flow of returns was that of continued, intensified cost-cutting, of which the downsizing of R&D Södertälje eventually comprised yet another display of this endeavor. Although effort was put into renewing a quality focus within R&D, it was a little too late for the would-be downsized sites as drug-making inevitably takes time.

These activities all show that the corporation, despite residing in the pharmaceutical industry and communicating an inexplicit rhetoric internally downward about the need for shareholder value creation above all else, is increasingly turning priorities toward catering to the shareholder face of stakeholders.

Finally, although prolonging the office life of executives, shareholders were eventually not satisfied with the efforts, hence the CEO's announcement at the AGM to step down from the "utopian" quest of generating shareholder value. The shakeup also accorded with analysts' ordaining of "do things a bit differently", reflecting their part played in this development and request for new performatives. And from the CEO's speech, it appears arguably evident that "shareholder value" has, on this level, firmly internalized; expectedly, the successors shall be ready to "deliver real value to… shareholders".

Summary

To conclude, the presence, influence and articulations of financialization and shareholder value primacy were, to begin with, already solemnly bubbling under Astra's skin in the 1990s, with the merger marking the duo's full-fledged entrance into corporate governance matters. From that point onward, the corporation AstraZeneca increasingly evolved, on the capital market, toward serving as all but one of fund managers' portfolio constituent alternatives, and no longer competed only with peers on products but against an ocean of public stock. The subsequent setbacks experienced on the product dimension since the mid-2000s served to erode capital market confidence, pushing management toward a greater cost recovery focus, of which the downsizing of R&D Södertälje eventually constituted yet another step in the ongoing process undertaken so as to demonstrate management and the corporation's obdurate ability to punctually summon the delivery of shareholder value.

The familiarity of the measures taken reflects that executives have many "moves" but few real "levers" with which to greatly impact the numbers. However, even though the ways to "keep things going" for the stock market may vary unpredictably across corporations such as GSK, Ford and GE, a contextual comparison between this study and the cases of GSK and Conglom found a certain stability and uniformity in the articulations of corporate behavior under the advancement of the shareholder value norm, thus contesting the view of considerable uncertainty and variability in the outcomes – at least on a more holistic level with respect to said set of settings and for the time being.

In this study, the manifestations of financialization and shareholder value in Astra and AstraZeneca have been chronologically presented, examined and interpreted, mirrored in the transformation of corporate goals, strategies and measures and activities in the R&D headquarters site. The two tables below summarize the development of assorted variables both at the group and local levels.

Group								
Time frame	Late pre-merger → Merger	Merger \rightarrow CEO change	CEO change \rightarrow Present day					
Period	Early 1990s – 1999	1999 – 2006	2006 – Spring 2012					
Company	Astra AB	AstraZeneca PLC	AstraZeneca PLC					
Objectives								
Value creation	Create shareholde	r (and stakeholder) value \rightarrow Sustain	immediate shareholder value					
Focus	Organic growth → Resolve pending challenges (e.g. some patent expiries)	Integration and sustain growth → Prepare for and cope with challenges ahead (e.g. product failures, thinning pipeline, tightened regulations)	Cope with increasingly pressing challenges (e.g. price pressure, low pipeline productivity, rising expenses, imminent patent cliff)					
Strategies								
Acquisitions	Not instrumental	Some; small, complementary	Increased; also large-scale (e.g. MedImmune)					
Core versus non- core business	No significant related rhetoric	Through divestments (e.g. Specialty Chemicals)	Increasing rhetoric; outsourcing, downsizing and continued divestments (e.g. Astra Tech)					
Cost savings	Not a primary concern	Related to merger and integration, otherwise not priority	Initiatives \rightarrow Intensification					
Marketing	Increasing importance, although function not very strong	Important; win in the US; life cycle management	Added importance and emphasis; also explicit focus on emerging markets					
Outsourcing	Very little	Exploration of options	Intensification \rightarrow Heavy usage					
Payouts	Stable, relatively slow increments	Stable, relatively slow increments → Increased use	Acceleration					

R&D	Creativity	Increased controls	Controlled
Restructuring	Not significant	Related to merger and	New initiative takes off \rightarrow
		integration, otherwise not priority	Ongoing implementation and
			acceleration
Measures			
Accountability	Low	Higher	Much higher
Hierarchal	Low	Higher	Much higher
linkages			
Numerical focus	Low	Higher	Much higher
Proliferation and	Low	Higher	Much higher
quantity			

Figure 3: Development of group objectives, strategies and performance measures

Södertälje								
Time frame	Late pre-merger \rightarrow Merger	Merger \rightarrow CEO change	CEO change → Present day					
Period	Early 1990s – 1999	1999 – 2006	2006 – Spring 2012					
Activities								
Asset development	Planning or installment of new buildings and equipment	Accelerated expansion; construction of buildings and continued investments in equipment	Completion of unfinished constructions → Downsizing and selling off					
Culture	Informal, plenty of "nice-to-have" things	Formalizing, some "nice- to-have" things left	Formal, few "nice-to-have" things					
Outsourcing	Hardly any	Exploration of options	Intensified initiatives to reduce costs → Heavy outsourcing					
Performance evaluation	Scant formal evaluation	Noticeably more formal and individualized	Much stronger formal and individual evaluation; linkage to a system of accountability (e.g. explicit scorecard use)					
Personnel	New recruitments	New recruitments → Leveling off	Leveling off → Workforce redundancies					
R&D approach	Quality focus in drug-making	Quantity focus in drug- making	Quantity focus in drug-making \rightarrow Renewed attempt at quality focus					
Rewards	Group and equal share	Individualization and linking to performance	Increasingly individualized and linked to accountability					
Top management	Not intensive or	Increasing	Intensified communication (e.g. e-					
communication downward	rhetorical		mails, site visits and webcasts)					

Figure 4: Development of activities in the Södertälje unit

To end with, this research has served to acquire insight and understanding of accounting practice as well as support, dispute and extend findings of the past, for example those of Froud et al. (2006) and Ezzamel et al. (2008), by outlining and explaining how the examined phenomena manifest, similarly and differently to before, in the investigated social setting.

Limitations

As mentioned, the quality of the study is vulnerable to a variety of hitches, and bias, such as fading memories and personal feelings toward the event or job loss, may subsist in the data and interpretations. Although most interviewees belonged to AstraZeneca Södertälje and R&D, their limited quantity and the unit's vastness imply a risk of misrepresentation. Furthermore, due to practical reasons, certain interviews did not take place. Also, limited linguistic prowess means expressional defects may haunt the text. Finally, as the research is context-specific caution ought to be taken in discussing and extending the results in relation to other circumstances. Thus, future research may opt to continue study the implications of financialization and shareholder value for firm governance and behavior in new and imperative settings.

Epilogue

Amid these happenings, talks of M&A have resurfaced. If that also transpires to be the case as a permanent CEO replacement is found, time will tell.

References

Aftonbladet, 1998. *Astra och Zeneca i dag: Vi går samman*. [Online] Available at: <u>http://wwwc.aftonbladet.se/nyheter/9812/09/astra.html</u>

Aglietta, M., 2000. Shareholder value and corporate governance: some tricky questions. *Economy and Society*, 29(1), pp. 146–159.

Almond, P., Edwards, T. & Clark, I., 2003. Multinationals and changing national business systems in Europe: towards the 'shareholder value' model?. *Industrial Relations Journal*, 34(5), pp. 430-445.

Alvehus, J. & Spicer, A., 2012. Financialization as a strategy of workplace control in professional service firms. *Critical Perspectives on Accounting*, 23 February.

Alvesson, M. & Sköldberg, K., 2008. *Tolkning och reflektion: vetenskapsfilosofi och kvalitativ metod.* 2nd ed. Lund: Studentlitteratur.

Andersson, K., 2002. *Södertälje drar vinstlott*. [Online] Available at: <u>http://www.svd.se/naringsliv/sodertalje-drar-vinstlott_75022.svd</u>

Andersson, T., Haslam, C., Lee, E. & Tsitsianis, N., 2008. Financialization directing strategy. *Accounting Forum*, 32(4), pp. 261–275.

Anon., 1998. [Online]

Available at:

https://docs.google.com/viewer?a=v&q=cache:Q3BxbJXsgGUJ:https://esiwebsite707.astrazeneca.biz/ _mshost3690701/content/resources/media/investors/announcement-

dec98.pdf+astra+6000+R%26D+11500+marketing&hl=sv&gl=se&pid=bl&srcid=ADGEEShTCPB57 JhkukUur1XyrYvckWY31IfDr8xps3I8kYmN74xJ6tzoezCZr7-Ke9zWPsWsbI0NlO8fpzDqx7KdFn1iCvda3O5Gmvo3P50gRSG982IjbO22nN5jVYngL8femVj06C&sig=AHIEtbSb6CuF4IavbT8t3gTYJGi6_vOWxw

Arnold, M., 2012. *AstraZeneca gives workers a bitter pill*. [Online] Available at: <u>http://www.ft.com/cms/s/0/86776766-7a81-11e1-9c77-</u>00144feab49a.html#axz1rXwT5n4k

AstraZeneca, 1998. *Astra and Zeneca in Merger of Equals to Create a Global Leader in Pharmaceuticals*. [Online]

Available at:

http://www.astrazeneca.com/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadername1=Content-Disposition&blobheadername2=MDT-

Type&blobheadervalue1=inline%3B+filename%3DView-the-full-Press-

Release.pdf&blobheadervalue2=abinary%3B+charset%3DU

Augustsson, T., 1998. *Astras beroende av Losec fortsätter öka*. [Online] Available at: <u>http://wwwc.aftonbladet.se/nyheter/9802/11/telegram/inrikes55.html</u>

Barsky, N., Hussein, M. & Jablonsky, S., 1999. Shareholder and stakeholder value in corporate downsizing - The case of United Technologies Corporation. *Accounting, Auditing & Accountability Journal*, 12(5), pp. 583-598.

BBC News, 1998. *Europe's giant drug merger explained*. [Online] Available at: <u>http://news.bbc.co.uk/2/hi/business/231468.stm</u>

Bloomberg News, 2009. *BlackRock Inc. buys Barclays unit to become world's largest money manager; manages \$2.7 trillion.* [Online] Available at: <u>http://articles.nydailynews.com/2009-06-12/news/17925137_1_barclays-global-investors-ishares-barclays-plc/4</u>

Bratton, W., 2002. Enron and the Dark Side of Shareholder Value. Tulane Law Review, pp. 1275-1361.

Bureau van Dijk, 2012. *Orbis*. [Online] Available at: <u>https://orbis-bvdinfo-com</u>

Burgess, K. & Jack, A., 2012. *AstraZeneca faces calls for shake-up*. [Online] Available at: <u>http://www.ft.com/cms/s/0/ce3fa354-8186-11e1-b39c-</u> 00144feab49a.html#axz1sObWP8mz

CNN Money, 1998. *Another drug giant created*. [Online] Available at: <u>http://money.cnn.com/1998/12/09/europe/zeneca/</u>

Cooper, D. & Morgan, W., 2008. Case Study Research in Accounting. *Accounting Horizons*, 22(2), pp. 159-178.

Cooper, R., 2011. *AstraZeneca pins hopes on heart drug approval*. [Online] Available at:

http://www.telegraph.co.uk/finance/newsbysector/pharmaceuticalsandchemicals/8642246/AstraZeneca -pins-hopes-on-heart-drug-approval.html

Cowell, A., 1998. Zeneca Buying Astra as Europe Consolidates. [Online] Available at: <u>http://www.nytimes.com/1998/12/10/business/zeneca-buying-astra-as-europe-consolidates.html?pagewanted=all&src=pm</u>

Creswell, J., 2008. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 3rd ed. Thousand Oaks: Sage Publications.

Cuatrecasas, P., 2006. Drug Discovery in Jeopardy. *Journal of Clinical Investigation*, 116(11), pp. 2837-2842.

Ding, Y., Richard, J. & Stolowy, H., 2008. Towards an understanding of the phases of goodwill accounting in four Western capitalist countries: From stakeholder model to shareholder model. *Accounting, Organizations and Society*, 33(7-8), pp. 718–755.

DN, 2012. *Lägre vinst för Astra Zeneca*. [Online] Available at: <u>http://www.dn.se/ekonomi/lagre-vinst-for-astra-4</u>

Eisenhardt, K., 1989. Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), pp. 57-74.

Epstein, G., 2005. *Financialization and the World Economy*. 1st ed. Northampton: Edward Elgar Publishing.

Erturk, I., Froud, J., Johal, S., Leaver, A. & Williams, K., 2008. *Financialization at work: Key texts and commentaries*. 1st ed. London: Routledge.

Evely, A., Fazey, I., Pinard, M. & Lambin, X., 2008. The Influence of Philosophical Perspectives in Integrative Research: a Conservation Case Study in the Cairngorms National Park. *Ecology and Society*, 13(2), pp. 52-68.

Ezzamel, M., Willmott, H. & Worthington, F., 2008. Manufacturing shareholder value: The role of accounting in organizational transformation. *Accounting, Organizations and Society*, 33(2-3), pp. 107-140.

Findlay, S. M., 2009. *What Does the Global Economic Downturn Mean to the Pharma Industry?*. [Online]

Available at: http://www.frost.com/prod/servlet/market-insight-top.pag?docid=155855105

Fligstein, N. & Shin, T.-J., 2007. Shareholder Value and Changes in American Industries, 1983-2000. *Sociological Forum*, 22(4), pp. 399-424.

Flynn, J., 1998. *Astra Investors Breathe a Sigh of Relief*. [Online] Available at: <u>http://www.businessweek.com/1998/51/b3609195.htm</u>

Fossey, E., Harvey, C., McDermott, F. & Davidson, L., 2002. Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36(6), pp. 717-732.

Froste, C., 2009. *En svensk kvar i Astra Zeneca-toppen*. [Online] Available at: <u>http://www.affarsvarlden.se/hem/nyheter/article677091.ece</u>

Froste, C., 2010. *Siste svensken lämnar Astratoppen*. [Online] Available at: <u>http://www.affarsvarlden.se/hem/nyheter/article788168.ece</u>

Froud, J., Haslam, C., Johal, S., Williams, K. & Willis, R., 1998. British pharmaceuticals: a cautionary tale. *Economy and Society*, 27(4), pp. 554-584.

Froud, J., Haslam, C., Johal, S. & Williams, K., 2000a. Shareholder value and financialization: consultancy promises, management moves. *Economy and Society*, February, 26(1), pp. 80-110.

Froud, J., Haslam, C., Johal, S. & Williams, K., 2000b. Restructuring for shareholder value and its implications for labour. *Cambridge Journal of Economics*, November, 24(6), pp. 771-797.

Froud, J., Johal, S., Leaver, A. & Williams, K., 2006. *Financialization and Strategy: Narrative and Numbers*. 1st ed. London: Routledge.

Froud, J., Johal, S. & Williams, K., 2002. Financialisation and the coupon pool. *Capital & Class*, 26(3), pp. 119-151.

Fundinguniverse, 2003. *AstraZeneca PLC*. [Online] Available at: <u>http://www.fundinguniverse.com/company-histories/AstraZeneca-PLC-Company-History.html</u>

Gandolfi, F. & Hansson, M., 2011. Causes and consequences of downsizing: Towards an integrative framework. *Journal of Management and Organization*, 17(4), pp. 498-521.

Gill, V., 2007. *AstraZeneca follows Pfizer in slashing workforce*. [Online] Available at: <u>http://www.rsc.org/chemistryworld/News/2007/February/02020702.asp</u>

Gleadle, P. & Cornelius, N., 2008. A case study of financialization and EVA. *Critical Perspectives on Accounting*, 19(8), pp. 1219-1238.

Gleadle, P. & Haslam, C., 2010. An exploratory study of an early stage R&D-intensive firm under financialization. *Accounting Forum*, 34(1), pp. 54-65.

Gleadle, P., Haslam, C., Simonetti, R. & Tsitsianis, N., 2011. Call for papers for Special issue: Financialization: A meaningful new 'ization'?. *Critical Perspectives on Accounting*, 22(2), pp. 244–246.

Grogan, K., 2010. *AstraZeneca closes sites, exits much of discovery research*. [Online] Available at: <u>http://www.pharmatimes.com/Article/10-03-</u>02/AstraZeneca closes sites exits much of discovery research.aspx

Hadekel, P., 2012. *Hard times for pharmaceutical industry*. [Online] Available at: <u>http://www.canada.com/business/Hard+times+pharmaceutical+industry/6097329/story.html</u>

Herper, M., 2012. *The Truly Staggering Cost Of Inventing New Drugs*. [Online] Available at: <u>http://www.forbes.com/sites/matthewherper/2012/02/10/the-truly-staggering-cost-of-inventing-new-drugs/</u>

Holden, M. & Lynch, P., 2004. Choosing the appropriate methodology: Understanding research philosophy. *The Marketing Review*, 4(4), pp. 397-409.

Hoque, Z., 2006. *Methodological Issues in Accounting Research: Theories and Methods*. Illustrated ed. London: Spiramus.

ICIS, 1997. Zeneca enjoys year of 'substantial success'. [Online] Available at: <u>http://www.icis.com/Articles/1997/03/17/10462/zeneca-enjoys-year-of-substantial-success.html</u>

ICIS, 1998. Zeneca sees strong pharma growth in 1997. [Online] Available at: <u>http://www.icis.com/Articles/1998/01/27/52254/zeneca-sees-strong-pharma-growth-in-1997.html</u>

ICIS, 2005. Iressa Disappointment Is Third Strike for AstraZeneca. [Online] Available at: <u>http://www.icis.com/Articles/2005/01/14/643807/iressa-disappointment-is-third-strike-for-astrazeneca.html</u>

IndustryWeek, 2010. *AstraZeneca to Shut R&D Sites*. [Online] Available at: <u>http://www.industryweek.com/articles/astrazeneca_to_shut_rd_sites_21228.aspx</u>

InPharm, 2011. *AstraZeneca*. [Online] Available at: <u>http://www.inpharm.com/pharma_company/astrazeneca</u>

Irving, R., 2006. *Exanta Withdrawn After Liver Damage to Patient*. [Online] Available at: <u>http://campaignfortruth.com/Eclub/100406/CTM%20-%20exanta.htm</u>

Ittner, C. & Larcker, D., 2001. Assessing empirical research in managerial accounting: a value-based management perspective. *Journal of Accounting and Economics*, 32(1-3), pp. 349-410.

Jack, A., 2012. *AstraZeneca chief in need of a tonic*. [Online] Available at: <u>http://www.ft.com/intl/cms/s/0/08b7eece-8187-11e1-b39c-00144feab49a.html#axz1sObWP8mz</u>

Jack, A., 2012. *AstraZeneca unveils plans to cut 7,300 jobs*. [Online] Available at: <u>http://www.ft.com/intl/cms/s/0/7e5d142a-4d74-11e1-b96c-00144feabdc0.html#axz21tVneNQXc</u>

Kollewe, J. & Neate, R., 2012. *AstraZeneca to cut 7,300 jobs*. [Online] Available at: <u>http://www.guardian.co.uk/business/2012/feb/02/astrazeneca-cuts-7300-jobs</u>

Lazonick, W. & O'Sullivan, M., 2000. Maximizing shareholder value: a new ideology for corporate governance. *Economy and Society*, 29(1), pp. 13-35.

Lewcock, A., 2007. *AstraZeneca's job cuts latest symptom of widespread trend*. [Online] Available at: <u>http://www.in-pharmatechnologist.com/Industry-Drivers/AstraZeneca-s-job-cuts-latest-symptom-of-widespread-trend</u>

Lewcock, A., 2007. *Sweden next to be hit by AstraZeneca job cuts*. [Online] Available at: <u>http://www.in-pharmatechnologist.com/Materials-Formulation/Sweden-next-to-be-hit-by-AstraZeneca-job-cuts</u>

Marowits, R., 2012. *AstraZeneca closing Montreal R&D plant*. [Online] Available at: <u>http://www.theglobeandmail.com/report-on-business/international-news/european/astrazeneca-closing-montreal-rd-plant/article2323645/</u>

Mathiason, N., 2010. *AstraZeneca to close UK research centre with 1,200 job losses*. [Online] Available at: <u>http://www.guardian.co.uk/business/2010/mar/02/astrazeneca-close-uk-research-centre</u>

Mintz, C., 2009. *Financial Crisis Reshaping the Life Sciences Industry*. [Online] Available at:

http://sciencecareers.sciencemag.org/career magazine/previous issues/articles/2009 04 10/caredit.a0 900048

Morgan, G. & Smirich, L., 1980. The Case for Qualitative Research. *The Academy of Management Review*, 5(4), pp. 491-500.

Morrow, D., 1998. *Astra Chief Says He Would Like Merger Partner*. [Online] Available at: <u>http://www.nytimes.com/1998/03/07/business/astra-chief-says-he-would-like-merger-partner.html?src=pm</u>

Muniesa, F., 2008. Book Review of Financialization and Strategy: Narrative and Numbers. *European Accounting Review*, 17(3), pp. 590-592.

Newberry, S. & Robb, A., 2008. Financialization: constructing shareholder value... for some. *Critical Perspectives on Accounting*, 19(5), pp. 741-763.

Nilsson, T., 2010. När Sverige sålde Nobelprisindustrin. 1st ed. Stockholm: SNS.

O'Sullivan, M., 2000. Contests for Corporate Control. 1st ed. Oxford: Oxford University Press.

Otley, D., 1999. Performance management: a framework for management control systems research. *Management Accounting Research*, 10(4), pp. 363-382.

Pharmaceutical Jobs, 2010. *AstraZeneca To Cut 550 Pharmaceutical Jobs In Wilmington*. [Online] Available at: <u>http://www.pharmaceutical-jobs.com/pharmaceutical-news/astrazeneca-to-cut-550-pharmaceutical-jobs-in-wilmington</u>

PharmaGossip, 2006. *AstraZeneca - Exanta: the "blockbuster" that never was*. [Online] Available at: <u>http://pharmagossip.blogspot.se/2006/02/astrazeneca-exanta-blockbuster-that.html</u>

Pratley, N., 2012. *David Brennan's successor faces unenviable task at AstraZeneca*. [Online] Available at: <u>http://www.guardian.co.uk/business/nils-pratley-on-finance/2012/apr/26/david-brennan-successor-astrazeneca</u>

Rappaport, A., 1998. Creating Shareholder Value. 2nd ed. New York: Free Press.

Reference for Business, n.d. *Astra AB - Company Profile, Information, Business Description, History, Background Information on Astra AB.* [Online] Available at: <u>http://www.referenceforbusiness.com/history2/76/Astra-AB.html</u>

Reuters, 2011. *AstraZeneca, Targacept drug fails depression test.* [Online] Available at: <u>http://www.reuters.com/article/2011/11/08/astrazeneca-targacept-idUSL6E7M80SI20111108</u>

Roberts, J., Sanderson, P., Hendry, J. & Baker, R., 2006. In the mirror of the market: the disciplinary effect of company / fund manager meetings. *Accounting, Organizations and Society*, 31(3), pp. 277-294.

Ruddick, G., 2010. AstraZeneca plans 8,000 job cuts ahead of tough period. [Online] Available at: <u>http://www.telegraph.co.uk/finance/newsbysector/epic/azn/7095816/AstraZeneca-plans-8000-job-cuts-ahead-of-tough-period.html</u>

Ryan, B., Scapens, R. & Theobald, M., 2002. *Research Method and Methodology in Finance and Accounting*. 2nd ed. Hampshire: Cengage Learning EMEA.

Saunders, M., Lewis, P. & Thornhill, A., 2009. *Research Methods for Business Students*. 5th ed. Harlow: Prentice Hall.

Shukla, H., 2009. Creating and Measuring Shareholder Value: A Study of Cadila Healthcare Limited. *Paradigm*, 13(1), pp. 66-72.

Skatteverket, 2012. [Online] Available at: <u>http://www.skatteverket.se</u>

Smith, M., 2011. Research Methods in Accounting. 2nd ed. London: Sage.

Staton, T., 2010. *AstraZeneca adds 8,000 to job-cuts toll*. [Online] Available at: <u>http://www.fiercepharma.com/story/astrazeneca-adds-8-000-job-cuts-toll/2010-01-28</u>

Staton, T., 2012. *AZ's Brennan nabs 11% pay hike to \$5.89M*. [Online] Available at: <u>http://www.fiercepharma.com/story/azs-brennan-nabs-11-pay-hike-589m/2012-03-26</u> Stevenson, R., 1992. *World Markets; A Certain Glow on Sweden's Astra*. [Online] Available at: <u>http://www.nytimes.com/1992/11/22/business/world-markets-a-certain-glow-on-sweden-s-astra.html?src=pm</u>

Steyer, R., 2005. *AstraZeneca's Sir Tom to Retire*. [Online] Available at: <u>http://www.thestreet.com/story/10235389/2/astrazenecas-sir-tom-to-retire.html</u>

Stirzaker, T., 2007. *Company Analysis - AstraZeneca*. [Online] Available at: <u>http://www.pharmaprojects.com/company_analysis/AstraZeneca_light-at-end-of-tunnel.htm</u>

Stovall, S., 2012. *AstraZeneca cuts 7,300 jobs, warns of lower profit.* [Online] Available at: <u>http://www.marketwatch.com/story/astrazeneca-cuts-7300-jobs-warns-of-lower-profit-2012-02-02</u>

Stovall, S., 2012. *AstraZeneca Cuts More Jobs And R&D, Warns Of Lower Profits*. [Online] Available at: <u>http://online.wsj.com/article/BT-CO-20120202-709920.html</u>

Sverigesradio, 2009. *Astra Zeneca stänger i Umeå*. [Online] Available at: <u>http://sverigesradio.se/sida/artikel.aspx?programid=109&artikel=2696033</u>

The Economic Times, 2006. *Another setback for AstraZeneca*. [Online] Available at: <u>http://articles.economictimes.indiatimes.com/2006-05-05/news/27423596_1_galida-clinical-trials-pargluva</u>

The Economist, 1998. *Too much sex, not enough drugs*. [Online] Available at: <u>http://www.economist.com/node/113843</u>

The European Communities, 1999. *Case No COMP/M.1403 - ASTRA / ZENECA*. [Online] Available at: <u>http://ec.europa.eu/competition/mergers/cases/decisions/m1403_en.pdf</u>

The Financial Times, 2012. *AstraZeneca*. [Online] Available at: <u>http://www.ft.com/intl/cms/s/3/15e7a9ca-831e-11e1-9f9a-</u>00144feab49a.html#axz1sObWP8mz

The Independent, 1996. *Comment: Zeneca price a poison pill for potential predators*. [Online] Available at: <u>http://www.independent.co.uk/news/business/comment-zeneca-price-a-poison-pill-for-potential-predators-1306998.html</u>

The Independent, 1998. Zeneca/Astra merger will cost companies over pounds 3.8bn. [Online] Available at: <u>http://www.independent.co.uk/news/business/zenecaastra-merger-will-cost-companies-over-pounds-38bn-1190459.html</u>

The Independent, 1999. *Corporate Profile: The arranged marriage*. [Online] Available at: <u>http://www.independent.co.uk/news/business/corporate-profile-the-arranged-marriage-1072830.html</u>

The New York Times, 2012. *BlackRock Inc.*. [Online] Available at: <u>http://topics.nytimes.com/top/news/business/companies/blackrock-inc/index.html</u>

The Pharma Letter, 1997. *UK Launch For Astra's Ropivacaine*. [Online] Available at: <u>http://www.thepharmaletter.com/file/62511/uk-launch-for-astras-ropivacaine.html</u> The Pharma Letter, 1997. *Zeneca's Seroquel Nears Market Approval*. [Online] Available at: <u>http://www.thepharmaletter.com/file/57165/zenecas-seroquel-nears-market-approval.html</u>

The Pharma Letter, 1998. *Astra & Zeneca Join In Euro Merger Mania*. [Online] Available at: <u>http://www.thepharmaletter.com/file/16975/astra-zeneca-join-in-euro-merger-mania.html</u>

The Pharma Letter, 1998. *Losec Continues To Drive Astra Sales And Profits*. [Online] Available at: <u>http://www.thepharmaletter.com/file/79901/losec-continues-to-drive-astra-sales-and-profits.html</u>

The Pharma Letter, 2009. *AstraZeneca's Jan Lundberg to be head of global discovery research at Eli Lilly*. [Online]

Available at: <u>http://www.thepharmaletter.com/file/88644/astrazenecas-jan-lundberg-to-be-head-of-global-discovery-research-at-eli-lilly.html</u>

Verschuren, P., 2001. Holism Versus Reductionism in Modern Social Science Research. *Quality & Quantity*, 35(4), pp. 389-405.

Whalen, J. & Stovall, S., 2012. *AstraZeneca Plans to Cut 7,300 Jobs*. [Online] Available at: <u>http://online.wsj.com/article/SB10001424052970203711104577198264263381758.html</u>

Williams, K., 2000. From shareholder value to present-day capitalism. *Economy and Society*, 29(1), pp. 1-12.

Yin, R., 2008. Case Study Research: Design and Methods. 4th ed. Thousand Oaks: Sage Publications.

Company annual reports and homepages								
Company Annual report(s) Homepage								
Astra AB	1996-1998	n / a						
AstraZeneca AB	1999-2010	http://www.astrazeneca.se						
AstraZeneca PLC	1999-2011	http://www.astrazeneca.com						
BlackRock, Inc.	2010	https://www2.blackrock.com						

Additional secondary data							
Туре	Time	Organization	Name (first / last)				
AstraZeneca analyst reports	May 2011-February 2012	НСМ	n / a				

Interviews

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Interview	Date (year 2012)	Format	Length (minutes)	Title	Organization	Language	Name (first / last)	Present since Astra or subsidiary ^I
1.	March 9	Face-to- face	124	Senior Research Scientist	AstraZeneca	English	n / a	n / a
2.	March 13	Face-to- face	84	Associate Principal Scientist	AstraZeneca English		Wei Tian	Yes
3.	March 14	Face-to- face	79	Associate Principal Scientist	AstraZeneca	English	n / a	n / a
4.	March 15	Face-to- face	87	Team Leader	AstraZeneca	English	Carina Stenfors	Yes
5.	March 16	Face-to- face	97	Section Head	AstraZeneca	English	Steven England	No
6.	March 21	Face-to- face	49	Accountant	AstraZeneca	English	n / a	n / a
7.	March 23	Telephone	24	Stock Analyst	Handelsbanken	Swedish ^{II}	n / a	-
8.	March 28	Face-to- face	66	Stock Analyst	Swedbank	Swedish ^{III}	Johan Unnerus	-
9.	April 5	Face-to- face	67	Chairman ^{IV}	Unionen, Södertälje	English	Malin Linnér	Yes
10.	April 19	Face-to- face	75	Senior Principal Scientist	AstraZeneca	English	n / a	n / a
11.	May 2 ^v	E-mail	n / a	Business Intelligence Manager	AstraZeneca	English	n / a	n / a

^I In total, there were five interviewees with a "Yes". ^{II} Quotes in the empirics translated by author. ^{III} Quotes in the empirics translated by author. ^{IV} Also with experience from AstraZeneca Södertälje's operations unit. ^V Date on which the reply was received.

Additional primary data							
Туре	Time	Organization Name (first / las					
Briefing	Spring 2012	AstraZeneca	n / a				

Appendix

Abbreviations

- AGM Annual General Meeting
- Anon. Anonymous
- CD Candidate Drug
- CEO Chief Executive Officer
- CFO Chief Financial Officer
- CMO Contract Manufacturing Organization
- CNS&P Central Nervous System and Pain
- CRO Contract Research Organization
- EPS Earnings per Share
- EVA Economic Value Added
- EVP Executive Vice President
- FTE Full-Time Equivalent
- GE General Electric
- GSK-GlaxoSmithKline
- HCM Handelsbanken Capital Markets
- HR Human Resources
- ICI Imperial Chemical Industries
- IR Investor Relations
- iMed Innovative Medicines
- M&A Merger(s) and Acquisition(s)

MVA - Market Value Added

- n / a Not available
- NYSE New York Stock Exchange
- P&L Profit and Loss
- PLC Public Limited Company
- $R\&D-Research \ and \ Development$
- ROCE Return on Capital Employed
- SET Senior Executive Team
- VP Vice President

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AstraZeneca PLC:

"The Company is the holding company for [33] subsidiaries which principal activities are discovering, developing, manufacturing and marketing prescription pharmaceuticals for important areas of healthcare, specifically: cardiovascular, gastrointestinal, neuroscience, oncology, respiratory and inflammation, and infection... [AstraZeneca] aims to be one of the world's leading companies through innovation and the delivery of value to its shareholders."

AstraZeneca AB:

"... is a pharmaceutical company based in Sweden. The company, along with its [24] subsidiaries and affiliates, is primarily involved in the research, development, manufacture, marketing and distribution of various pharmaceutical products and preparations (prescription pharmaceuticals), as well as healthcare products. The company has leading positions in the production and sales of gastrointestinal, oncology, cardiovascular, neuroscience and respiratory products."

Exhibit 1: AstraZeneca PLC and AstraZeneca AB company information (Source: Orbis, retrieved in March 2012)

A brochure about the abandoned buildings and equipments to be auctioned or sold off following the firm's exit from R&D in Södertälje in 2012 describes:

"The R&D unit at Snäckviken comprises 110 000 square metres with a mix of labs, clinical manufacturing, research areas and office buildings." Apart from the numerous facilities dedicated to drug development, there are also conference halls, an on-site canteen and parking space.

"The 42 000 square metres R&D unit at Gärtuna is spread across two main buildings, housing a mix of labs, research areas, offices and supporting functions." Toxicology studies were conducted here.

Exhibit 2: Description of Snäckviken and Gärtuna (Source: Physical brochure from March 2012: "Investment opportunity: AstraZeneca R&D unit Södertälje, Sweden")

Oxford dictionary:

Manifest (verb)

Show (a quality or feeling) by one's acts or appearance; demonstrate

Exhibit 3: Definition of "manifest" (Source: Oxford dictionary)

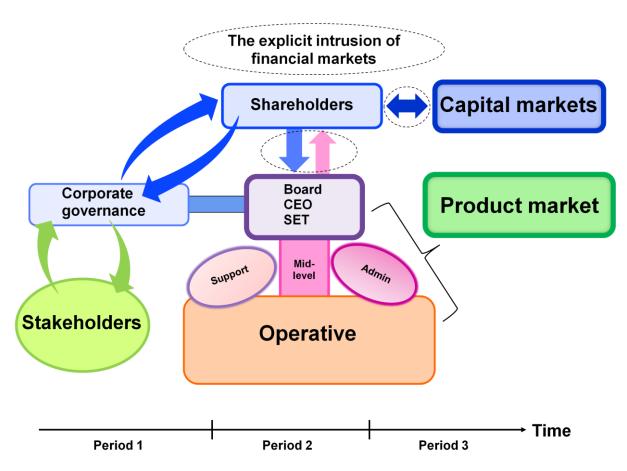


Exhibit 4: The explicit intrusion of financial markets in corporate behavior

ASTRA-AKTIENS KURSUTVECKLING PÅ STOCKHOLMSBÖRSEN

(avser högsta/lägsta betalkurs per månad)



Under perioden 1989-98 steg börskursen på Astras A-aktie med i genomsnitt 31 procent per år. Motsvarande ökning för generalindex var 12 procent.

Exhibit 5: Development of Astra AB's share price, SEK, against the general index (Source: Astra AB annual report 1998)

Stock Price AZN

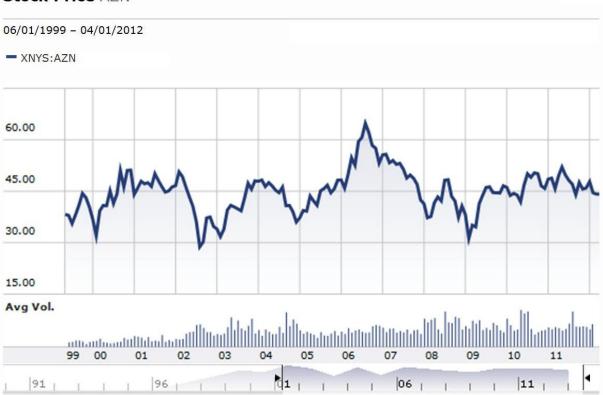


Exhibit 6: Development of AstraZeneca PLC's share price, USD, from June 1999 to April 2012 (Source: morningstar.com)

				Ownership		Source			Company i	nformation
	Shareholder name	Coun- try	Туре	Direct (%)	Total (%)	Source ident.	Date of info.	Vari- ation	Op. Revenue (mil	No of employees
	BLACKROCK, INC. via its funds	US	F	-	9.69	FS	02-2012	2	9 081	10 100
2.	JUPITER DIVIDEND & GROWTH TRUST PLC	GB	E	6.50	n.a.	RM	12-2010	-	0	n.a.
	INVESCO LTD. via its funds	BM	F	-	6.33	FS	02-2012	2	3 488	5 617
4.	LEGAL & GENERAL GROUP PLC via its funds	GB	A	-	4.49	FS	01-2011	a	8 369	8 662
5.	INVESTOR AB	SE	F	4.02	n.a.	SE	02-2012	2	587	2 546
6.	LEGAL & GENERAL ASSURANCE (PENSIONS MANAGEMENT) LIMITED	GB	A	3.99	n.a.	SE	06-2010	-	n.a.	n.a.
7.	AXA via its funds	FR	А	-	3.77	FS	02-2012	⋈	113 564	102 957
8.	WELLINGTON MANAGEMENT COMPANY, LLP via its funds	US	F	-	2.76	FS	02-2012	₽	n.a.	n.a.
9.	LLOYDS BANKING GROUP PLC via its funds	GB	В	-	2.70	FS	02-2012	2	32 104	98 538
10.	STATE STREET CORPORATION via its funds	US	В	-	1.97	FS	02-2012	ß	9 594	29 740
11.	GOVERNMENT OF NORWAY via its funds	NO	S	-	1.66	FS	02-2012	\$	-	-
	<u>UBS AG via its funds</u>	СН	В	-	1.28	FS	02-2012	2	29 677	n.a.
	SCHRODERS PLC via its funds	GB	В	-	1.23	FS	02-2012	⇒	1 824	2 668
14.	AMERIPRISE FINANCIAL INC. via its funds	US	A	-	1.20	FS	02-2012	₽	1 421	n.a.
15.	NORTHERN TRUST CORPORATION via its funds	US	В	-	1.07	FS	02-2012	[™]	3 648	12 834
16.	GRANTHAM, MAYO, VAN OTTERLOO & CO, LLC via its funds	US	E	-	1.05	FS	02-2012	2	36	238
17.	PRUDENTIAL PLC via its funds	GB	А	-	0.96	FS	02-2012	S	38 448	25 992
	STANDARD LIFE PLC via its funds	GB	А	-	0.96	FS	02-2012		5 077	9 752
19.	CAPITAL GROUP COMPANIES, INC., THE via its funds	US	E	-	0.88	FS	02-2012	₽	195	3 180
20.	VANGUARD GROUP, INC. THE via its funds	US	E	-	0.79	FS	02-2012	2	2 018	9 500
21.	JUPITER FUND MANAGEMENT PLC via its funds	GB	E	-	0.76	FS	02-2012	⇔	361	444
22.	STICHTING PENSIOENFONDS ABP via its funds	NL	A	-	0.74	FS	02-2012	⇔	10 959	4 248
23.	BRANDES INVESTMENT PARTNERS, L.P. via its funds	US	F	-	0.71	FS	02-2012	₽	22	150
24.	ARROWSTREET CAPITAL LTD PARTNER via its funds	US	E	-	0.65	FS	02-2012	2	4	28
	AVIVA PLC via its funds	GB	А	-	0.63	FS	02-2012	2	56 767	45 341
	OLD MUTUAL PLC via its funds	GB	A	-	0.58		02-2012	Ś	5 606	55 730
27.	WINDY CITY INVESTMENTS HOLDINGS, L.L.C. via its funds	US	F	-	0.57	FS	02-2012	₽	0	2
28.	AFFILIATED MANAGERS GROUP INC via its funds	US	F	-	0.51	FS	02-2012	⇔	1 705	2 020
29.	BANK OF NEW YORK MELLON CORPORATION via its funds	US	В	-	0.51	FS	02-2012	[™]	14 682	48 700
	JP MORGAN CHASE & CO. via its funds	US	В	-	0.50	FS	02-2012	2	97 234	260 157
	INVESTEC PLC via its funds	GB	В	-	0.47		02-2012	a	1 781	n.a.
	FMR LLC via its funds	US	F	-	0.46	FS	02-2012	2	3 591	41 050
	REGERINGSKANSLIET via its funds GOVERNMENT OF SINGAPORE via its funds	SE SG	S S	-	0.46 0.43	FS FS	02-2012 02-2012	2	-	4 500
35	SVENSKA HANDELSBANKEN via its funds	SE	В	-	0.43	FS	02-2012	æ	4 762	11 184
	ABERDEEN ASSET MANAGEMENT PLC via	GB	В	-	0.41	FS	02-2012	2	1 214	1 851
37.	CREDIT SUISSE GROUP AG via its funds	СН	В	-	0.41	FS	02-2012	S	24 317	49 700
	HSBC HOLDINGS PLC via its funds	GB	B	-	0.41	FS	02-2012	⇒	68 347	298 000
	MAJEDIE ASSET MANAGEMENT LIMITED via its funds	GB	E	-	0.39	FS	02-2012	SI SI	83	31
40.	<u>SKANDINAVISKA ENSKILDA BANKEN AB</u> <u>via its funds</u>	SE	В	-	0.39	FS	02-2012	₽	5 464	17 633

Exhibit 7: Top 40 shareholders of AstraZeneca PLC by ownership percent in 2012, data retrieved on April 1, 2012 (Source: Orbis)

I. BLACKROCK, INC, via its funds US F -9.62 FS 12-2011 S 8.612 9.12 2. JUPTTER DIVIDEND & GROWTH TRUST PLC GB F -6.50 n.a. RM 12-2010 - 0 n.a. 3. INVESCO LTD, via its funds BM F - 6.28 FS 12-2011 # 3 528 n.a. 4. LEGAL & GENERAL ASOUP PLC via its GB A - 4.46 FS 01-2011 # 3 528 n.a. 5. INVESTOR AB SE F 4.02 n.a. SE 06-2010 - n.a. n.a. N.C. n.a. N.C. N.C. <th>1. BI 2. JU 3. IN 4. LE fu 5. IN 6. LE (P 7. A2 8. FJ 9. W</th> <th>Shareholder name</th> <th>Coun</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	1. BI 2. JU 3. IN 4. LE fu 5. IN 6. LE (P 7. A2 8. FJ 9. W	Shareholder name	Coun								
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18.GRANTHAM, MAYO, VAN OTTERLOO & CO, LLC via its fundsUSE $ 1.00$ FS $12-2011$ $?$ 36 22 19.STANDARD LIFE PLC via its fundsGBA $ 0.98$ FS $12-2011$ $\$$ 5077 977 20.CAPITAL GROUP COMPANIES, INC., THE via its fundsUSE $ 0.88$ FS $12-2011$ $\$$ 5077 977 21.VANGUARD GROUP, INC. THE via its fundsUSE $ 0.78$ FS $12-2011$ $\$$ 2018 950 22.JUPITER FUND MANAGEMENT PLC via its fundsGBE $ 0.76$ FS $12-2011$ $\$$ 361 44 23.STICHTING PENSIOENFONDS ABP via its fundsNLA $ 0.74$ FS $12-2011$ $?$ 10959 424 24.BRANDES INVESTMENT PARTNERS, L.P. via its fundsUSF $ 0.71$ FS $12-2011$ $?$ 22 195			US	В	-	1.12	FS	12-2011	a	3 648	12 834
LLC via its fundsGBA $ 0.98$ FS $12-2011$ \otimes 5077 975 19.STANDARD LIFE PLC via its fundsGBA $ 0.98$ FS $12-2011$ \otimes 5077 975 20.CAPITAL GROUP COMPANIES, INC., THE via its fundsUSE $ 0.88$ FS $12-2011$ \Rightarrow 195 318 21.VANGUARD GROUP, INC. THE via its fundsUSE $ 0.78$ FS $12-2011$ \Rightarrow 2018 950 22.JUPITER FUND MANAGEMENT PLC via its fundsGBE $ 0.76$ FS $12-2011$ \Rightarrow 361 44 23.STICHTING PENSIOENFONDS ABP via its fundsNLA $ 0.74$ FS $12-2011$ \Rightarrow 10959 424 24.BRANDES INVESTMENT PARTNERS, L.P. via its fundsUSF $ 0.71$ FS $12-2011$ a 22 15	17. <u>P</u>	PRUDENTIAL PLC via its funds	GB		-	1.03	FS	12-2011	[™]	38 448	25 992
20.CAPITAL GROUP COMPANIES, INC., THE via its fundsUSE-0.88FS12-2011A1953 1821.VANGUARD GROUP, INC. THE via its fundsUSE-0.78FS12-2011S2 0189 5022.JUPITER FUND MANAGEMENT PLC via its fundsGBE-0.76FS12-2011S3 614423.STICHTING PENSIOENFONDS ABP via its fundsNLA-0.74FS12-2011A10 9594 2424.BRANDES INVESTMENT PARTNERS, L.P. via its fundsUSF-0.71FS12-2011A2215			US	E	-	1.00	FS	12-2011	2	36	238
via its funds via its funds US E - 0.78 FS 12-2011 S 2 018 9 50 22. JUPITER FUND MANAGEMENT PLC via its funds GB E - 0.76 FS 12-2011 S 361 44 23. STICHTING PENSIOENFONDS ABP via its funds NL A - 0.74 FS 12-2011 S 10 959 4 24 24. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 0.71 FS 12-2011 2 15	19. <u>S</u>	STANDARD LIFE PLC via its funds	GB	А	-	0.98	FS	12-2011	8	5 077	9 752
22.JUPITER FUND MANAGEMENT PLC via its fundsGBE-0.76FS12-2011 \Rightarrow 3614423.STICHTING PENSIOENFONDS ABP via its fundsNLA-0.74FS12-2011 \Rightarrow 10 9594 2424.BRANDES INVESTMENT PARTNERS, L.P. via its fundsUSF-0.71FS12-2011 \Rightarrow 2215			US	E	-	0.88	FS	12-2011	~	195	3 180
funds STICHTING PENSIOENFONDS ABP via its NL A - 0.74 FS 12-2011 A 10 959 4 24 24. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 0.71 FS 12-2011 A 22 15	21. <u>V</u>	VANGUARD GROUP, INC. THE via its funds	US	E	-	0.78	FS	12-2011	Ŷ	2 018	9 500
funds 24. BRANDES INVESTMENT PARTNERS, L.P. US F - 0.71 FS 12-2011 A 22 15 via its funds Via its funds - 0.71 FS 12-2011 A - 0.			GB	E	-	0.76	FS	12-2011	₽	361	444
via its funds			NL	А	-	0.74	FS	12-2011	2	10 959	4 248
25. OLD MUTUAL PLC via its funds GB A - 0.65 FS 12-2011 2 5 606 55 7			US	F	-	0.71	FS	12-2011	2	22	150
	25. <u>o</u> r	OLD MUTUAL PLC via its funds	GB	А	-	0.65	FS	12-2011	2	5 606	55 730
26. ARROWSTREET CAPITAL LTD PARTNER via US E - 0.63 FS 12-2011 1 4 2 its funds			US	E	-	0.63	FS	12-2011	Ŷ	4	28
27. AVIVA PLC via its funds GB A - 0.60 FS 12-2011 🖉 56 767 45 34	27. <u>A</u>	AVIVA PLC via its funds	GB	А	-	0.60	FS	12-2011	2	56 767	45 341
28. WINDY CITY INVESTMENTS HOLDINGS, US F - 0.57 FS 12-2011 № 0 L.L.C. via its funds 0			US	F	-	0.57	FS	12-2011	Ŷ	0	2
29. REGERINGSKANSLIET via its funds SE S - 0.55 FS 12-2011 2 1 4 50	29. <u>R</u>	REGERINGSKANSLIET via its funds	SE	S	-	0.55	FS	12-2011	2	1	4 500
30. CREDIT SUISSE GROUP AG via its funds CH B - 0.54 FS 12-2011 32 073 50 10	30. <u>C</u>	CREDIT SUISSE GROUP AG via its funds	СН	В	-	0.54	FS	12-2011	<i>∕</i> ⊒	32 073	50 100
31. BANK OF NEW YORK MELLON US B - 0.52 FS 12-2011 14 730 48 70 CORPORATION via its funds US B - 0.52 FS 12-2011 14 730 48 70			US	В	-	0.52	FS	12-2011	[™]	14 730	48 700
32. AFFILIATED MANAGERS GROUP INC via its funds US F - 0.51 FS 12-2011 7 1 705 1 80			US	F	-	0.51	FS	12-2011	2	1 705	1 800
33. INVESTEC PLC via its funds GB B - 0.46 FS 12-2011 🍳 1 781 n.	33. <u>I</u>	INVESTEC PLC via its funds	GB	В	-	0.46	FS	12-2011	~	1 781	n.a.
					-						239 831
35. <u>ABERDEEN ASSET MANAGEMENT PLC via</u> GB B - 0.42 FS 12-2011 ♂ 1 214 1 85 <u>its funds</u>			GB	В	-	0.42	FS	12-2011	a	1 214	1 851
36. <u>GOVERNMENT OF SINGAPORE via its</u> SG S - 0.42 FS 12-2011 № - <u>funds</u>			SG	S	-	0.42	FS	12-2011	Ŷ	-	-
37. HSBC HOLDINGS PLC via its funds GB B - 0.41 FS 12-2011 A 68 310 307 00	37. <u>H</u>	HSBC HOLDINGS PLC via its funds	GB	В	-	0.41	FS	12-2011	~	68 310	307 000
38. MAJEDIE ASSET MANAGEMENT LIMITED GB - 0.41 FS 12-2011 83 3 via its funds - - 0.41 FS 12-2011 83 3			GB	E	-	0.41	FS	12-2011	2	83	31
											10 850 33 068

Exhibit 8: Top 40 shareholders of AstraZeneca PLC by ownership percent in 2011, data retrieved on February 28, 2012 (Source: Orbis)

Shareholder name try lype (%) ident. info. (mil USD) emp Current shareholders: First 50 out of 138 current shareholders. View all current shareholders 9.73 FS 01/2008 195 2. CAPITAL RESEARCH AND MANAGEMENT COMPANY US E 4.89 n.a. RS 01/2008 104,230 3. AXA FR A 4.87 n.a. RS 01/2008 2,200 4. INVESTOR AB SE F 4.30 FS 01/2008 8,369 5. LEGAL & GENERAL GROUP PLC via its funds GB B 4.24 n.a. RS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. RS 01/2008 27,932 10. INVESCO HOLDING COMPANY LIMITED via its funds GB A 1.69 FS 01/2008 2	n
Instruction try VyPe (%) (%) ident. info. (mil USD) emp Current shareholders: First 50 out of 138 current shareholders. View all current shareholders View all current shareholders 1. CAPITAL GOUP COMPANIES, INC., THE via its funds US E 9,73 FS 01/2008 195 2. CAPITAL RESEARCH AND MANAGEMENT COMPANY US E 9,73 FS 01/2008 104,230 3. AXA FR A 4.87 n.s. RS 01/2008 104,230 4. INVESTOR AB SE F 4.36 n.s. RS 01/2008 45,220 5. LEGAL & GENERAL GROUP PLC via its funds GB B 4.24 n.s. RS 01/2008 45,225 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.s. RS 01/2008 247 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 0.60 n.s. RS 01/2008	
First 50 out of 138 current shareholders. 1. CAPITAL GROUP COMPANIES, INC., THE via its funds US E - 9.73 FS 01/2008 195 2. CAPITAL RESEARCH AND MANAGEMENT COMPANY US E 4.89 n.a. RS 01/2008 104230 3. AXA FR A 4.87 n.a. RS 01/2008 104230 4. INVESTOR AB SE F 4.30 FS 01/2008 8,369 6. BARCLAYS PLC GB A - 4.30 FS 01/2008 45,725 7. WELINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. RS 01/2008 2.7921 10.	o of loyees
1. CAPITAL GROUP COMPANIES, INC., THE via its funds US E 9.73 FS 01/2008 195 2. CAPITAL RESEARCH AND MANAGEMENT COMPANY US E 4.89 n.s. RS 01/2008 39 3. AXA FR A 4.87 n.s. RS 01/2008 104,230 4. INVESTOR AB SE F 4.36 n.s. RS 01/2008 8,369 6. BARCLAYS PLC GB A - 4.30 FS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.s. RS 01/2008 447 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.s. RS 01/2008 447 9. CAPTITAL GROUP INTERNATIONAL INC US E 2.67 n.s. SE 01/2008 27,932 10. INVESCO HOLDING COMPANY LIMITED via its funds GB A 1.60 FS 01/2008 27,932 11. UBS AG via its funds GB A	
2. CAPITAL RESEARCH AND MANAGEMENT COMPANY US E 4.89 n.a. RS 01/2008 39 3. AXA FR A 4.87 n.a. RS 01/2008 104,230 4. INVESTOR AB SE F 4.30 FS 01/2008 2,200 5. LEGAL & GENERAL GROUP PLC via its funds GB A - 4.30 FS 01/2008 8,369 6. BARCLAYS PLC GB B 4.24 n.a. RS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.a. RS 01/2008 45,725 9. CAPITAL GROUP INTERNATIONAL INC US F 4.16 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US F 4.06 n.a. RS 01/2008 27,932 11. UBS AG via its funds GB A - 1.69 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds US F -	
3. AXA FR A 4.87 n.s. RS 01/2008 104,230 4. INVESTOR AB SE F 4.36 n.s. RS 01/2008 2,200 5. LEGAL & GENERAL GROUP PLC via its funds GB A - 4.30 FS 01/2008 8,369 6. BARCLAYS PLC GB B 4.24 n.s. RS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.s. RS 01/2008 49 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.s. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.s. SE 06/2007 n.s. 10. INVESCO HOLDING COMPANY LIMITED via its funds GB A - 1.69 FS 01/2008 27,932 11. UBS AG via its funds GB A - 1.69 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB	3,180
INVESTOR AB SE F 4.36 n.a. RS 01/2008 2,200 5. LEGAL & GENERAL GROUP PLC via its funds GB A - 4.30 FS 01/2008 8,369 6. BARCLAYS PLC GB B 4.24 n.a. RS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.a. RS 01/2008 49 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. SE 06/2007 n.a. 10. INVESCO HOLDING COMPANY LIMITED via its funds GB B - 2.19 FS 01/2008 27,932 11. UBS AG via its funds GB A - 1.69 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB A - 1.60 FS 01/2008 38,448 13. AVIVA PLC via its funds GB	700
5. LEGAL & GENERAL GROUP PLC via its funds GB A - 4.30 FS 01/2008 8,369 6. BARCLAYS PLC GB B 4.24 n.a. RS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.a. RS 01/2008 49 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. SE 06/2007 n.a. 11. UBS AG via its funds GB A - 1.69 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB A - 1.69 FS 01/2008 27,932 13. AVIVA PLC via its funds GB A - 1.69 FS 01/2008 38,448 13. AVIVA PLC via its funds US F - 1.58 FS 01/2008 36,071 15. STATE STREET CORPORATION via its funds	.02,957
6. BARCLAYS PLC GB B 4.24 n.s. RS 01/2008 45,725 7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.s. RS 01/2008 49 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.s. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.s. SE 06/2007 n.s. 10. INVESCO HOLDING COMPANY LIMITED via its funds GB B - 2.19 FS 01/2008 27,932 11. UBS AG via its funds GB A - 1.69 FS 01/2008 26,932 12. PRUDENTIAL PLC via its funds GB A - 1.60 FS 01/2008 46,368 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US B - 1.40 FS 01/2008 32,104 15. STATE STREE	11,303
7. WELLINGTON MANAGEMENT COMPANY, LLP US F 4.16 n.s. RS 01/2008 49 8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.s. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.s. SE 06/2007 n.s. 10. INVESCO HOLDING COMPANY LIMITED via its funds GB B - 2.19 FS 01/2008 27,932 11. UBS AG via its funds GB A - 1.69 FS 01/2008 38,448 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 38,448 13. AVIVA PLC via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US F - 1.58 FS 01/2008 9,594 16. HBOS PLC via its funds US B - 1.40 FS 01/2008 32,104 17. LLOYDS BANKING GROUP P	8,662
8. LEGAL & GENERAL INVESTMENT MANAGEMENT LIMITED GB F 4.06 n.a. RS 01/2008 247 9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.a. SE 06/2007 n.a. 10. INVESCO HOLDING COMPANY LIMITED via its funds GB B - 2.19 FS 01/2008 27,932 11. UBS AG via its funds CH B - 1.69 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB A - 1.60 FS 01/2008 38,448 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B - 1.40 FS 01/2008 36,011 17. LLOYDS BANKING GROUP PLC via its funds US <t< td=""><td>41,100</td></t<>	41,100
9. CAPITAL GROUP INTERNATIONAL INC US E 2.67 n.s. SE 06/2007 n.s. 10. INVESCO HOLDING COMPANY LIMITED via its funds GB B - 2.19 FS 01/2008 19 11. UBS AG via its funds CH B - 1.79 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB A - 1.69 FS 01/2008 38,448 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B - 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 32,104 17. LLOYDS BANKING GROUP PLC via its funds US B - 1.25 FS 01/2008 3,770 19. SCHRODERS PLC	741
INVESCO HOLDING COMPANY LIMITED via its funds GB B 2.19 FS 01/2008 19 11. UBS AG via its funds CH B 1.79 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB A - 1.69 FS 01/2008 38,448 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B - 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 32,104 17. LLOYDS BANKING GROUP PLC via its funds GB B - 1.25 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B - 1.05 FS	n.a.
11. UBS AG via its funds CH B - 1.79 FS 01/2008 27,932 12. PRUDENTIAL PLC via its funds GB A - 1.69 FS 01/2008 38,448 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B - 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 32,104 17. LLOYDS BANKING GROUP PLC via its funds GB B - 1.20 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B - 1.05 FS 01/2008 3,770 19. SCHRODERS PLC via its fu	n.a.
12. PRUDENTIAL PLC via its funds GB A - 1.69 FS 01/2008 38,448 13. AVIVA PLC via its funds GB A - 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B - 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 32,104 17. LLOYDS BANKING GROUP PLC via its funds US B - 1.25 FS 01/2008 32,700 18. NORTHERN TRUST CORPORATION via its funds US B - 1.05 FS 01/2008 3,770 19. SCHRODERS PLC via its funds IT B - 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & C	п.а.
AVIVA PLC via its funds GB A 1.60 FS 01/2008 46,368 14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds US B 1.30 FS 01/2008 16,071 17. LLOYDS BANKING GROUP PLC via its funds GB B 1.25 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B 1.05 FS 01/2008 3,770 19. SCHRODERS PLC via its funds US B 1.05 FS 01/2008 3,770 19. SCHRODERS PLC via its funds US B 0.81 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds US B 0.79 FS 01/2008 5,077	64,820
14. BRANDES INVESTMENT PARTNERS, L.P. via its funds US F - 1.58 FS 12/2007 22 15. STATE STREET CORPORATION via its funds US B - 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds GB B - 1.30 FS 01/2008 16,071 17. LLOYDS BANKING GROUP PLC via its funds GB B - 1.25 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B - 1.20 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B - 1.20 FS 01/2008 3,770 19. SCHRODERS PLC via its funds US B - 1.05 FS 01/2008 34,615 20. UNICREDIT SPA via its funds US B - 0.81 FS 01/2008 23,173 21. MERRILL LYNCH & CO., INC. via its funds US B - 0.80 FS 01/2008 5,077 23.	25,992
15. STATE STREET CORPORATION via its funds US B 1.40 FS 01/2008 9,594 16. HBOS PLC via its funds GB B 1.30 FS 01/2008 16,071 17. LLOYDS BANKING GROUP PLC via its funds GB B 1.25 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B 1.20 FS 01/2008 3,770 19. SCHRODERS PLC via its funds US B 1.05 FS 01/2008 3,804 20. UNICREDIT SPA via its funds IT B 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds US B 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B 0.72 FS 01/2008 30,751 <td>45,341</td>	45,341
HBOS PLC via its funds GB B - 1.30 FS 01/2008 16,071 17. LLOYDS BANKING GROUP PLC via its funds GB B - 1.25 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B - 1.20 FS 01/2008 3,770 19. SCHRODERS PLC via its funds GB B - 1.05 FS 01/2008 3,770 20. UNICREDIT SPA via its funds IT B - 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B - 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	150
17. LLOYDS BANKING GROUP PLC via its funds GB B - 1.25 FS 01/2008 32,104 18. NORTHERN TRUST CORPORATION via its funds US B - 1.20 FS 01/2008 3,770 19. SCHRODERS PLC via its funds GB B - 1.05 FS 01/2008 1,804 20. UNICREDIT SPA via its funds IT B - 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B - 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	29,740
NORTHERN TRUST CORPORATION via its funds US B - 1.20 FS 01/2008 3,770 19. SCHRODERS PLC via its funds GB B - 1.05 FS 01/2008 1,804 20. UNICREDIT SPA via its funds IT B - 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B - 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	52,029
SCHRODERS PLC via its funds GB B - 1.05 FS 01/2008 1,804 20. UNICREDIT SPA via its funds IT B - 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B - 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	.03,000
20. UNICREDIT SPA via its funds IT B - 1.05 FS 01/2008 34,615 21. MERRILL LYNCH & CO., INC. via its funds US B - 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	14,018
MERRILL LYNCH & CO., INC. via its funds US B - 0.81 FS 01/2008 23,173 22. STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	2,848
STANDARD LIFE PLC via its funds GB A - 0.80 FS 01/2008 5,077 23. DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	62,009
DEUTSCHE BANK AG via its funds DE B - 0.79 FS 01/2008 43,145 24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	n.a.
24. MORGAN STANLEY via its funds US B - 0.72 FS 01/2008 30,751	9,752
	.00,996
25. OLD MUTUAL PLC via its funds GB A - 0.66 FS 01/2008 5.606	61,899
	55,730
	59,000
27. <u>REGERINGSKANSLIET via its funds</u> SE S - 0.65 FS 01/2008 1	4,500
28. BNP PARIBAS via its funds FR B - 0.63 FS 01/2008 53,291	п.а.
29. WINDY CITY INVESTMENTS HOLDINGS, L.L.C. via its funds US F - 0.61 FS 12/2007 0	2
	98,000
	60,157
32. GRANTHAM, MAYO, VAN OTTERLOO & CO, LLC via its funds US E - 0.58 FS 01/2008 36	238
33. PEARL GROUP HOLDINGS (NO. 1) LIMITED via its funds GB A - 0.57 FS 10/2007 372	4
34. RENAISSANCE TECHNOLOGIES LLC via its funds US F - 0.57 FS 12/2007 1,245	42
35. SVENSKA HANDELSBANKEN via its funds SE B - 0.56 FS 12/2007 4,762	11,184
36. UNIVERSITIES SUPERANNUATION SCHEME LIMITED via its funds GB E - 0.54 FS 01/2008 0	271
37. SKANDINAVISKA ENSKILDA BANKEN AB via its funds SE B - 0.53 FS 01/2008 5,533	18,912
38. F&C ASSET MANAGEMENT PLC via its funds GB E - 0.52 FS 01/2008 381	n.a.
39. GOVERNMENT OF NORWAY via its funds NO S - 0.52 FS 12/2007 -	-
40. AEGON NV via its funds NL A - 0.49 FS 01/2008 25,254	27,474

Exhibit 9: Top 40 shareholders of AstraZeneca PLC by ownership percent in 2008, data retrieved on April 19, 2012 (Source: Orbis)

2007						
Largest	Capital	Axa	Investor	Barclays	Wellington	Legal &
owners	Research and	SA	AB	PLC	Management	General
	Management				Со	Investment
	Company					Management
						Limited
Ownership %	4.89	4.87	4.36	4.24	4.16	4.06
Year of	2007	2007	2004	2006	2006	2007
information						

Exhibit 10: Major owners of AstraZeneca PLC, data from 2007 (Source: AstraZeneca annual report 2007)

2003				
Largest owners	The Capital	Investor	Putman	Legal & General
	Group	AB	Investment	Investment
	Companies		Management,	Management
			LLC and The	Limited
			Putman Advisory	
			Company, LLC	
Ownership %	15.01	5.41	3.11	3.10
Year of	2004	1999	2002	2002
information				

Exhibit 11: Major owners of AstraZeneca PLC, data from 2003 (Source: AstraZeneca annual report 2003)

2000		
Largest	The Capital	Investor AB
owners	Group	
	Companies	
Ownership %	10.02	5.18
Year of	n / a	n / a
information		

Exhibit 12: Major owner of AstraZeneca PLC, data from 2000 (Source: AstraZeneca annual report 2000)

1996						
Largest	Investor	Fjärde	SPP	Sparbankernas	Skandia	AMF
owners	AB	AP-		aktiefonder		pensionsförsäkring
		fonden				
Ownership %	10.0	4.5	3.7	2.5	2.2	2.1
Year of	1996	1996	1996	1996	1996	1996
information						

Exhibit 13: Major owners of Astra AB, data from 1996 (Source: Astra AB annual report 1996)

1996					
Owner country	Sweden	U.S.	U.K.	Rest of Europe	Others
Ownership %	53	23	9	12	3

Exhibit 14: Ownership structure in Astra AB by foreign and domestic percentage, data from 1996 (Source: Astra AB annual report 1996)

Company overview

P&L USD	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012e	2013e
Sales, bn	7.7	8.4	8.5	9.1	17.7	15.8	16.5	17.8	18.8	21.4	24.0	26.5	29.6	31.6	32.8	33.3	33.6	30.2	29.5
growth (%)	12	0	1	7	93	-11	745	8	76 7	14	12	11	12	70.1	en 4	1	1	-10	-2
Gross margin %	61.0 29.8	62.1 29.3	66.1 30.0	65.4 29.5	74.4	73.5 33.2	74.5	74.7	76.3	75.8 39.4	77.6 37.2	79.0 35.2	79.7	79.1 35.5	82.4 35.5	80.8 32.4	82.1 34.3	80.0	80.0 32.1
SG&A to sales % EBITDA, bn	1.3	1.9	2.1	29.5	3.0	4.5	4.8	5.0	5.3	5.8	7.7	9.5	9.8	11.1	14.9	14.2	15.3	12.1	12.2
margin %	17.0	22.5	25.1	24.1	16.0	28.7	29.3	27.8	28.1	27.0	32.3	35.8	33.3	35.2	45.3	42.8	45.7	30.0	41.4
EBITA, bn	1.0	1.6	1.8	1.8	2.3	3.9	4.2	4.3	4.3	4.9	6.8	8.5	8.8	10.1	12.8	12.1	12.8	9.8	10.0
margin %	13.0	18.4	20.9	10.0	12.8	24.9	25.5	23.0	22.9	22.7	28.3	32.3	20.0	32.0	39.0	36.3	38.1	32.3	33.8
EBIT, bn	1.0	1.6	1.8	1.8	1.9	3.7	4.0	4.0	4.0	4.5	6.5	8.2	8.1	9.1	11.5	11.5	12.8	9.8	10.0
margin %	13.0	18.4	20.9	19.6	11.0	23.2	24.0	22.5	21.3	21.2	27.1	31.0	27.4	28.9	35.2	34.5	38.1	32.3	33.8
Net Income, bn	0.5	1.0	1.2	1.2	1.1	2.5	2.9	2.8	3.0	3.7	4.7	6.0	5.6	6.1	7.5	8.1	10.0	7.0	7.1
growth %	-22	90	18	-1	-4	123	15	-2	7	21	28	28	-7	0	23	7	24	-30	2
Balance sheet	0.3357	11213	0.2162	1,575	2028	112024	0.000	1232	2123	0.003	-0523221	0.582	1213	999	12.33	0.2522	1 10255	80.02	12/3
Tangible assets, bn	3.0	3.1	3.2	3.6	6.0	5.0	5.4	6.6	7.5	8.1	7.0	7.5	8.3	7.0	7.3	7.0	6.4	6.7	6.9
Goodwill, bn				0.4	1.1	0.9	0.8	0.9	0.8	0.8	1.0	1.1	9.9	9.9	9.9	9.9	9.9	9.9	9.9
Current assets, bn Cash, bn	4.7	4.9	4.5	4.3	9.3 3.3	10.2	9.6 3.8	11.7	12.5	14.0 5.1	13.5 6.6	16.7	16.9 5.9	15.9 4.4	23.8 11.4	25.1 12.6	23.5	21.9	22.2
Total assets, bn	7.8	8.5	8.2	9.0	19.3	18,4	18.0	21.6	23.6	25.6	24.9	29.9	48.0	47.0	54.9	56.1	52.8	51.4	52.0
Equity, bn	2.9	3.5	3.6	4.2	10.3	9.5	9.8	11.2	13.2	14.4	13.6	15.3	14.8	15.9	20.7	23.2	23.2	22.6	22.9
Minority, m			0.0		10.0	5.0	5.0		10.2		10.0		137	148	161	197	226	262	298
LT int bearing debt, b	0.9	0.8	0.9	0.8	0.7	0.6	0.6	0.3	0.3	1.0	1.1	1.1	10.9	10.9	9.1	9.1	7.3	7.3	7.3
ST int bearing debt, b	0.4	0.4	0.3	0.3	0.4	0.2	0.3	0.5	0.2	0.1	0.1	0.1	4.3	1.0	1.9	0.1	2.0	2.0	2.0
Current llab, bn	3.1	3.2	3.1	3.3	7.0	6.9	6.5	8.2	7.7	7.8	6.8	9.4	15.2	13.4	17.6	16.8	15.8	14.4	14.1
Total llabilities, bn	7.8	8.5	8.2	9.0	19.3	18.4	18.0	21.6	23.6	25.6	24.9	29.9	48.0	47.0	54.9	56.1	52.8	51.4	52.0
Net int bearing debt, t	0.3	-0.2	0.2	0.6	-1.7	-3.0	-2.5	-3.7	-3.5	-4.1	-4.2	-4.0	10.9	9.7	2.6	-1.4	-0.4	0.1	-0.5
Cash flow																			
NOPLAT, bn	0.6	1.0	1.2	1.2	1.1	2.5	2.9	2.9	3.1	3.5	4.6	5.8	5.7	6.5	8.7	8.8	9.4	7.3	7.5
Capex, bn	-0.4	-D.6	-0.7	-0.7	-1.5	-1.3	-1.4	-1.6	-1.6	-1.4	-1.1	-1.2	-1.9	-4.8	-1.2	-1.9	-1.3	-2.5	-2.5
FCF to firm, bn	0.3	1.0	0.7	0.8	2.3	2.4	1.5	2.5	1.2	3.1	6.0	5.7	7.5	5.1	9.3	8.8	9.4	6.9	7.2
FCF to equity, bn	0.3	1.0	0.7	8.0	2.2	2.5	1.6	2.5	1.3	3.4	6.2	5.7	7.4	4.8	9.3	8.4	5.7	7.1	7.5
Acquisitions, bn	-0.2	0.0	-0.3	-0.6	0.0	-0.2	-0.1				0.0	-1.2	-19.3	-	-	-0.3			-
Divestments, bn	0.0	0.3	0.0	0.1	2.0	0.0	0.1	0.1	0.1	0.4	0.1	0.0			10 m - 12		0.1		
Dividends, bn	-0.4	-0.5	-0.6	-0.6	-1.2	-1.2	-1.2	-1.2	-1.2	-1.4	-1.7	-2.2	-2.6	-2.7	-3.0	-3.4	-3.8	-3.1	-2.9
FFO, bn	0.8	1.4	1.4	1.6	2.5	3.4	3.5	3.8	4.4	4.7	6.0	7.3	7.6	8.9	9.2	10.6	11.6	9.6	9.7
CFFO, bn	0.7	1.6	1.4	1.5	3.7	3.8	3.0	4.1	2.9	4.7	7.3	6.9	9.3	9.6	10.5	10.3	7.0	9.7	9.9
Ratios (%)	0000	220	199	11/2	389.0	1000	0.00	1222	100	1222		292	120			0.000	0.00	1970	196
Pre-tax ROIC	30.9	45.6	49.0	41.5	28.9	48.3	57.8	54.7	47.0	45.6	65.6	79.7	43.6	35.5	47.0	50.6	56.7	42.3	43.7
ROE reported	19.2	31.8	34.0	30.6	15.7	25.5	30.1	27.1	24.8	26.6	33.6	41.8	37.2	39.8	41.1	36.7	43.0	30.4	31.4
ROCE Capex to sales	24.4	30.6	33.5 8.8	34.0	45.8	34.1 8.5	37.0	36.7	30.1 8.4	30.0	39.8 4.5	46.5	37.3 6.4	34.9 15.1	41.3	37.2	36.0	31.3 8.4	32.1
NWC to sales	9.2	5.5	5.7	6.5	-3.7	-6.1	-2.5	-3.7	5.4	5.6	0.56	2.4	0.44	-3.0	-10.2	-12.3	-6.2	-6.2	-6.2
Sales/assets (x)	1.03	1.03	1.02	1.07	1.25	0.84	0.91	0.90	0.84	0.87	0.95	0.97	0.76	0.67	0.64	0.60	0.62	0.58	0.57
Sales/IC (x)	2.38	2.47	2.34	2.12	2.62	2.08	2.38	2.40	2.18	2.12	2.42	2.57	1.59	1.23	1.34	1.47	1.49	1.31	1.29
Net debt/equity	10	-5	5	15	-16	-32	-25	-33	-26	-28	-31	-26	73	60	12	-6	-2	0	-2
Equity/total assets	38.9	43.0	44.1	47.2	53.4	51.8	54.6	52.1	56.3	56.7	54.6	51.2	31.1	34.2	37.9	41.7	44.4	44.5	44.6
Share data																			
Avg no shares (m)	946	947	948	950	1,776	1,768	1,758	1,733	1,709	1,673	1,617	1,564	1,495	1,452	1,448	1,411	1,378	1,244	1,154
change (%)		0	0	0	87	0	-1	-1	-1	-2	-3	-3	-4	-3	0	-3	-2	-10	-7
Bought back shares (+1	-	6 - SH		-	-		-	-	-	-	-	70.4	10.4	-	26.9	85.2	47.9	42.6
Dilutive no shares (m)			1.00			-			2000		-		2.0	2.0	and the second second		i		
Avg diluted shares (m	946	947	948	950	1,776	1,768	1,758	1,733	1,709	1,673	1,617	1,564	1,498	1,453	1,448	1,438	1,361	1,313	1,271
change (%)	•	0	0	0	87	0	-1	-1	-1	-2	-3	-3	-4	-3	0	-1	-5	-4	-3
Share price YE (USD)	19.3	28.2	35.5	43.8	41.5	50.4	45.1	35.6	47.6	36.3	48.9	53.9	43.2	40.7	46.8	45.6	46.2	47.0	
Market cap (USD), bn	17.9	26.0	32.8	40.6	71.8	89.1	78.7	61.1	80.6	59.7	77.3	82.5	59.9	58.5	67.9	64.2	51.9	51.7	48.2
EV (USD), bn	18.3	25.9	32.9	41.1	70.0	86.1	76.3	57.5	77.1	55.8	73.1	78.5	70.9	68.3	70.6	63.0	51.7	52.1	48.0
Net debt/share EBS reported	0.3	-0.2	0.2	1.25	-0.9	-1.7	-1.4	-2.1	-2.1	-2.5	-2.7	-2.6	7.9	6.7	1.8	-1.0	-0.3	5 3	-0.4
EPS reported	0.56	1.07	1.26	1.25	0.64	1.43	1.65	1.64	1.77	2.19	2.91	3.86	3.73	4.20	5.2 24	5.6 8	7.3	5.3 -28	5.6
growth (%) EPS adj	0.67	1.07	1.26	1.33	1.86	1.61	1.79	1.87	1.80	2.22	2.91	3.81	4.38	5.1	6.3	6.3	7.3	6.0	6.4
growth (%)	-27	50	18	1.35	40	-13	11	4	-4	2.22	31	31	4.30	17	24	0.5	15	-18	5
BVPS	3.05	3.68	3.76	4.39	5.8	5.4	5.6	6.5	7.8	8.8	8.6	10.0	10.7	11.1	14.2	16.5	17.5	17.0	19.0
DPS - Ordinary	0.57	0.63	0.74	0.81	0.75	0.78	0.78	0.78	0.78	0.94	1.30	1.72	1.87	2.05	2.30	2.55	2.70	2.85	2.81
Value buy-back/share					-			·		-	-		2.67	0.34		1.81	4.42	3.43	3.15
Total cash distr./share	0.53	0.57	0.63	0.74	0.81	0.75	0.77	0.77	0.71	0.73	0.91	1.26	4.09	1.88	2.27	4.24	7.1	6.2	6.0
Valuation (x)									222	0122124			1.1312	22	2-24	1425-0	02/2	0203	0,002
P/E reported	33.6	25.7	27.4	34.3	63.2	35.3	27.3	21.7	26.9	16.6	16.8	13.9	11.6	9.7	9.0	8.1	6.3	8.8	8.4
P/E adjusted	28.1	25.7	27.4	32.2	21.8	31.3	25.2	19.0	26.4	16.4	16.8	14.1	9.9	8.0	7.4	7.2	6.3	7.8	7.4
P/CEPS EV/EBITDA	21.3	19.2 13.6	21.1 15.4	25.5	33.1 13.6	26.3	21.0	16.2	18.9	12.4	13.3 9.4	11.5	8.8	7.3 5.5	6.2 4.3	6.1 4.1	5.0 3.4	6.7 4.0	6.4
EV/EBITDA EV/NOPLAT	32.0	24.8	27.0	18.1 33.5	61.5	33.8	15.2 26.5	10.8	14.6 25.3	15.9	15.9	8.4	12.4	10.6	8.2	4.1	5.5	7.1	3.7
EV/sales	2.4	3.1	3.9	4.5	4.0	5.4	4.6	3.2	4.1	2.6	3.1	3.0	2.4	2.2	2.2	1.9	1.5	1.7	1.6
EBIT margin (%)	13.0	18.4	20.9	19.9	12.8	24.9	25.5	23.9	22.9	22.7	28.3	32.3	29.9	32.0	39.0	36.3	38.1	32.3	33.8
P/sales	2.3	3.1	3.8	4.4	4.1	5.6	4.8	3.5	4.3	2.8	3.3	3.2	2.2	1.9	2.1	2.0	1.9	2.0	2.0
P/BV	6.2	7.5	9.2	9.7	7.0	9.4	8.0	5.5	6.1	4.1	5.7	5.4	4.1	3.7	3.3	2.8	2.6	2.8	2.5
ROE reported (%)	19.2	31.8	34.0	30.6	15.7	25.5	30.1	27.1	24.8	26.6	33.6	41.8	37.2	39.8	41.1	36.7	43.0	30.4	31.4
FCFE yield (%)	1.7	3.8	2.0	1.9	3.1	2.8	2.1	4.1	1.6	5.6	8.0	6.9	12.4	8.3	13.6	13.1	10.9	13.7	15.4
Tot Div yield (%)	3.0	2.3	2.1	1.9	1.9	1.5	1.7	2.2	1.6	2.6	2.7	3.2	4.3	5.0	4.9	5.6	5.8	6.1	6.0
Calendar					gement					npany p									
Apr 26, 2012		Q1	2012		David Br	rennan		-				ijor, glob	ally activ	ve pharn	naceutica	al compa	any. its n	nain focu	s is on
Apr 26, 2012		178	AGM		Simon L									C		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	ding can	
Jul 26, 2012		02	2012		ri Hård	00001				llovascu									1000
						+44 20	7 304 54	184			-								
Oct 25, 2012		Q3	2012	Phone	e number	: +44 20	7 304 50	084	Infla	ammation	1.								

Exhibit 15: Financial overview of AstraZeneca PLC by analyst(s), report from 2012-02-03 (Source: Analyst, HCM)

"Recent late-stage failures have exposed AZN's thin R&D pipeline, leaving few projects able to alter the current downward trajectory... An additional cost-cutting program was announced... in the longer term we see few surprises on the upside. We downgrade... and cut our target price..."

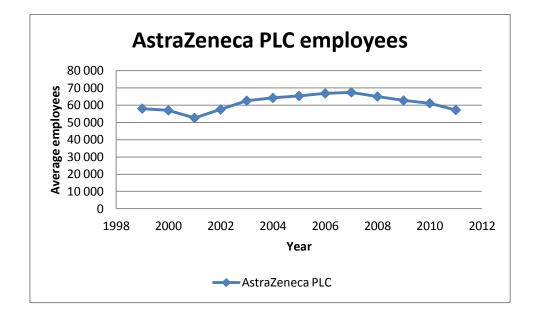
Exhibit 16: Excerpt of commentary on AstraZeneca PLC by analyst(s), report from 2012-02-03 (Source: Analyst, HCM)

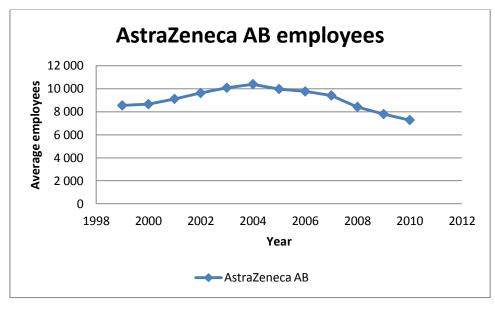
P&L accounts - annual data

USDm	2006	2007	2008	2009	2010	2011	2012e	2013e
Sales	26,475	29,559	31,600	32,804	33,269	33,591	30,230	29,486
Cost of goods sold	-5,559	-6,004	-6,598	-5,775	-6,389	-6,026	-6,046	-5,897
Gross profit	20,916	23,555	25,002	27,029	26,880	27,565	24,184	23,589
Other operating income	415	728	524	553	712	2,260	285	270
S,G&A	-9,322	-10,134	-11,204	-11,630	-10,780	-11,507	-10,006	-9,465
R&D costs	-3,902	-5,089	-5,179	-4,409	-5,318	-5,523	-4,708	-4,423
OPEX	-13,224	-15,223	-16,383	-16,039	-16,098	-17,030	-14,714	-13,888
Other operating expenses	109	-966	1	-	-	-	0	-
EBIT	8,216	8,094	9,144	11,543	11,494	12,795	9,756	9,971
Net interest expenses	327	-111	-463	-736	-517	-428	-400	-400
Net financials	327	-111	-463	-736	-517	-428	-400	-400
EBT	8,543	7,983	8,681	10,807	10,977	12,367	9,356	9,571
Paid tax	-2,701	-2,317	-2,520	-2,381	-2,533	-3,999	-1,779	-1,819
Deferred tax	221	-39	-31	-76	330	912	-560	-573
Tax	-2,480	-2,356	-2,551	-3,263	-2,896	-2,351	-2,339	-2,393
tax rate (%)	29.0	29.5	29.4	30.2	26.4	19.0	25.0	25.0
Minorities	-20	-32	-29	-23	-28	-33	-36	-36
Net income	6,043	5,595	6,101	7,521	8,053	9,983	6,981	7,142
Growth %								
Sales	11	12	7	4	1	1	-10	-2
EBIT	26	-1	13	26	0	11	-24	2
Net income	28	-7	9	23	7	24	-30	2
% of sales								
Gross margin	79.0	79.7	79.1	82.4	80.8	82.1	80.0	80.0
EBIT margin	31.0	27.4	28.9	35.2	34.5	38.1	32.3	33.8
EBT margin	32.3	27.0	27.5	32.9	33.0	36.8	30.9	32.5
Net margin	22.9	19.0	19.4	23.0	24.3	29.8	23.2	24.3
SG&A	35.2	34.3	35.5	35.5	32.4	34.3	33.1	32.1
OPEX	49.9	51.5	51.8	48.9	48.4	50.7	48.7	47.1
Drofitability %								
Profitability % ROE reported	41.8	37.2	39.8	41.1	36.7	43.0	30.4	31.4
ROE adj	41.0	43.6	48.3	50.1	41.6	43.0	34.5	35.5
ROCE	46.5	37.3	34.9	41.3	37.2	42.5	31.3	32.1
Pre-tax ROIC	79.7	43.6	35.5	47.0	50.6	56.7	42.3	43.7
After tax ROIC	56.6	30.8	25.0	35.3	38.7	41.7	42.5	32.7
Sales/capital invested (x)	2.6	1.6	1.2	1.3	1.5	1.5	1.3	1.3
Sales/total assets (x)	1.0	0.8	0.7	0.6	0.6	0.6	0.6	0.6
Sales per employee	396	443	473	491	498	587	556	554
Sales per employee	550	445	4/5	451	450	507	550	554
Adjusted values USDm								
Total adjustments to net inc	77	-963	-1,310	-1,638	-1,069	21	-932	-932
EBIT	8,107	9,411	10,958	13,621	13,083	12,721	11,016	11,231
margin (%)	30.6	31.8	34.7	41.5	39.3	37.9	36.4	38.1
EBT	8,434	9,300	10,495	12,885	12,566	12,293	10,616	10,831
Net income	5,966	6,558	7,411	9,159	9,122	9,962	7,913	8,075
				-1	-,			

Source: Handelsbanken Capital Markets

Exhibit 17: P&L overview of AstraZeneca PLC by analyst(s), report from 2012-02-03 (Source: Analyst, HCM)





AstraZeneca PLC Employees													
Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Employees	58000	57000	52600	57500	62600	64200	65300	66800	67400	65000	62700	61100	57200
AstraZeneca AB Employees													
Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Employees	8547	8653	9113	9618	10076	10394	9968	9757	9407	8419	7795	7277	n/a

Exhibit 18: Average employees per year during 1999-2011 in AstraZeneca PLC and 1999-2010 in AstraZeneca AB, respectively (Source: Company annual reports)

Exhibit 19: Path to a new medicine (Note: Please refer to AstraZeneca 2009 annual report, p. 9)

Selected excerpts from company annual reports:

Exhibit 20: Astra AB and AstraZeneca PLC annual report excerpts regarding objectives, strategies, measures, situation and outlook (Source: Company annual reports)

The 1996 Astra AB annual report describes:^A

Chairman's (Bo Berggren) statement:

During the past 10 year period, Astra has grown very fast. Astra's board has during the period decided on investments of SEK 30 billion to enable this growth. Within the Astra-group, we have over this period created some 13 000 new jobs.

An important condition is to have good products. Equally important is that our marketers around the world succeed in delivering the message of what is good about our products.

The board's decision to in May 1996 list Astra on the New York stock exchange...

The strong internationalization is also an important factor behind the decision in 1996 to adopt a new option program for the senior management team and other key employees... as they receive a clear incentive which aligns with shareholder interests...

CEO's (Håkan Mogren) review:

... we predict, within Astra, to, during the coming years, stick to the growth strategy that we have consistently employed over a long succession of years hitherto. The strategy is based on a strong belief in our ability to discover and develop new, important medicines. We are substantially expanding our explorative research...

A continuous flow of new products also requires increased production capabilities... My overall assessment is that Astra stands very strong in achieving continued successes.

Group overview:

The main goals within R&D are partially to maintain and strengthen research and product development and commercial success in the four prioritized disease areas... Gastrointestinal,

^A Translated to English from Swedish by author.

Cardiovascular, Respiratory and Pain Control... and over the next 10-15 years achieve success in at least two^B new prioritized areas.

Astra's fast growth requires comprehensive expansions of fixed assets... in production and R&D.

The provision of options is linked to the achievement of a goal determined by the board, related to the group's value growth during the year. The value growth is defined as the increase in the group's EVA.

The 1998 Astra AB annual report describes:^C

Chairman's (Bo Berggren) statement:

... the background of the Astra board and senior management's decision to merge with Zeneca... The board seeks in its considerations to pay heed to and weight all aspects – the future for the company, employees and shareholders.

CEO's (Håkan Mogren) review:

... we believe a larger company like AstraZeneca in future will achieve an even faster and more profitable growth than what Astra would have achieved by itself.

Share overview:

By the transition from year 1998 to 1999, Swedish and international institutions owned approximately 87 percent of the capital and 88 percent of the votes respectively.

The 1999 AstraZeneca PLC annual report describes:

Chairman's (Percy Barnevik) statement:

The requirement to undertake global restructuring... has not deflected the executive team from its objective of converting AstraZeneca... into a pure healthcare company. This strategy was seen as the most effective way to realise the intrinsic value of the company... leaving a

^B One of which was neuroscience. Source: Nilsson (2010)

^C Translated to English from Swedish by author.

pharmaceuticals business of impressive size and global reach to pursue its objectives singlemindedly.

CEO' (Sir Thomas McKillop) review:

Our strategy is clear, to grow the value of the company through serving the needs of customers and, in particular, patients...

Group strategy:

The core of AstraZeneca's strategy is the application of science and technology to deliver a continuous flow of effective new products...

AstraZeneca's business priorities are:

- Customer focus
- Fast, effective integration
- Growth through key products
- Winning in the US
- Secure the flow of new products
- Build the talent base

AstraZeneca has set clear targets for its R&D:

- 1. Deliver three or more medically important, commercially successful new products each year.
- 2. Increase candidate drug output to more than 15 per year by 2003.
- 3. Double the project success rate to 20% by 2005.
- 4. Reduce the time from candidate drug to launch to less than six years.
- 5. Register in all major markets in a time window of 12 months.

Director's report:

The Company has frequent discussions with institutional shareholders on a range of issues affecting its performance.

During 2000, the performance measures will move away from being predominantly financial towards a broader range of measures that address the achievement of key business priorities.

The Company is committed to developing a dynamic performance culture in which every employee champions the growth of shareholder value; they will be clear about the Company's objectives, know how their work impacts on them...

The 2000 annual report describes:

Chairman's statement:

In December 2000, AstraZeneca conducted a thorough presentation of its R&D organization to financial analysts. The presentation confirmed the research portfolio's breadth and great opportunities for future development.

Strategy:

AstraZeneca strives to create a sustainable growth in shareholder value through a strategy that aims to perform on par with the best of the world's leading pharmaceutical companies. In November 2000, an important step was taken in enabling AstraZeneca to concentrate its global competency and resources solely on medicines.

The 2001 annual report describes:

Chairman's Statement:

Excellent progress with the development and introduction of a range of important new medicines leaves AstraZeneca well placed to reduce our reliance on two hugely successful but maturing products... The merger is now well behind us and we have delivered the promised synergy benefits. The focus of the management team, ably led by our Chief Executive, Tom McKillop, is now on growth through the new product launches and through increased market penetration.

Chief Executive's Review:

2001 was a significant year for AstraZeneca as we continued to drive the transformation of our business, building the platform for future growth and creation of enduring shareholder value.

Strategy:

We are committed to creating enduring shareholder value by delivering a flow of innovative medicines which meet the needs of patients and healthcare professionals in important areas of medicine.

As a prescription pharmaceutical company focused on the introduction of new medicines, we are transforming our portfolio from successful but mature brands to a range of exciting new products.

This transformation will involve:

- Sustained, focused investment in R&D.
- Realizing the full potential of our established portfolio and high potential pipeline.

• Retaining and building on our leading positions, notably in the key markets of the US, Japan and Europe.

• Effective resource allocation and cost control, supported by our strong performance-led culture.

This strategy requires the fulfillment of six key business priorities:

- 1. First choice for customers.
- 2. Growth through key products.
- 3. Win in the US.
- 4. Secure the flow of new products.
- 5. Build the talent base.
- 6. Fast, effective organisation.

The 2003 annual report describes:

We aspire to be the best in all areas of our business within a culture based on innovation combined with the disciplined and responsible approach required to achieve industry leading productivity. Our strategy for sustainable growth is:

- Expansion of development pipeline through continuously improved in-house discovery processes complemented by external collaborations and partnerships.
- Successful delivery to market of the next wave of products currently in late stage development.
- Realising the full potential of our therapies through investment in projects that will extend their use.
- Further strengthening our commercial skills to drive success in our key markets.
- Enhancing our presence in important new, emerging markets.
- Pursuing value creating investment in significant targeted licensing and acquisition opportunities.
- Continuing to improve productivity in pursuit of operational excellence in all our activities.
- Delivering our core values through a responsible approach to business.

The 2004 annual report describes:

Chairman's (Percy Barnevik) Statement:

My six year engagement with AstraZeneca, from the announcement of the proposed merger in December 1998 to my departure as Chairman at the end of 2004, has been an exciting journey...

New Chairman's (Louis Schweitzer) Statement:

I am grateful to the AstraZeneca Board for the confidence they have shown in me by electing me as their Chairman...

The 2005 annual report describes:

Chief Executive Officer (Sir Thomas McKillop):

In 2005 the Company delivered excellent results, substantially ahead of market expectations at the beginning of the year as strong sales growth was enhanced by productivity gains to yield very strong earnings growth. This was especially gratifying given the challenges and uncertainty we faced following some disappointments in 2004.

Continued success with these five products [Crestor, Nexium, Seroquel, Arimidex and Symbicort] should provide the platform for future growth... The longer term future of a research-based company like AstraZeneca, however, has to be built on the quality of its pipeline of development products...

New Chief Executive Officer (David Brennan):

We are clear where our future lies. AstraZeneca's chosen path is to discover, develop and effectively commercialise differentiated prescription medicines that make a real contribution to human health and that create sustainable value for our stakeholders and society at large.

Strategy:

Our efforts are focused on five main strategic priorities that we have identified as critical drivers for continued success, backed by clear business objectives in each:

- 1. Products
- 2. Pipeline
- 3. People
- 4. Reputation
- 5. Productive use of resources

Measuring performance:

A range of financial and non-financial objectives are set each year, which focus on the following key areas:

- 1. Product performance
 - Sales value growth at constant exchange rates (CER), split between "growth", "patent expiry" and "base" products.
 - Sales growth and US prescription share trends for growth products.
 - Market share percentages for growth products.
- 2. Pipeline
 - New candidate drugs (CDs).
 - Number of development projects by phase.
 - R&D investment in US dollar terms.
 - Progress against clinical trial milestones.
- 3. Productivity and profitability

- Earnings per share (EPS) growth.
- Cost growth rates.
- Gross margin, costs and operating profit margin percentages (progression over time).
- 4. Shareholder returns
 - Dividends and share re-purchases.
 - Free cash.
 - Total shareholder return (TSR).
- 5. Reputation
 - ...
- 6. Governance
 - ...

In the 2006 annual report, the company's core priorities were declared as:

- Strengthening our pipeline of new medicines, from our own research laboratories and by accessing scientific innovation outside AstraZeneca.
- Delivering the full potential of all our marketed medicines, through rigorous life-cycle management, excellent customer support.
- Challenging our cost structure to make room for further investment in R&D and externalization.

The 2007 annual report describes:

CFO:

Restructuring initiatives, first introduced in manufacturing at the beginning of the year, have been extended to all areas and include synergy opportunities arising from the acquisition of MedImmune. These initiatives are anticipated to deliver annual benefits of \$1,400 million from 2010. These steps will allow for further increases in investment in research and development to strengthen and realise the pipeline, selective geographical expansion and focused exploitation of our existing products whilst continuing to generate attractive returns for our shareholders.

In the 2008 annual report, the CEO reviews:

Our strategy is clear. At its simplest... create enduring value for shareholders by delivering medicines... Our vision... be an innovation-driven, research-based pharmaceutical company focused on human health and capable of delivering a consistent flow of... products to markets around the world. To achieve this we will make sustained investment in an industry-leading, externally networked R&D organization. Above all, we will seek to apply an investment discipline to all of our activities that attaches equal weight to delivering patient health and creating shareholder wealth. We will only invest shareholders' funds where we see attractive returns... To help... maintain our focus on execution, our strategy targets four main priorities:

- Strengthen the pipeline. [Measures include: attrition rates; R&D investment levels; number of in-licensing deals, alliances and acquisitions; number of development projects by phase.]
- Grow the business. [Measures include: number of successful launches; sales value growth.]
- Becoming lean and agile. [Measures include: gross and operating margins; R&D unit cost reduction; progress of productivity initiatives.]
- Promote a culture of responsibility and accountability. [Measures include: employee engagement levels; ranking in various sustainability indexes.]

The 2009 annual report describes:

Chief Executive Officer's review:

In strengthening our pipeline we look beyond our own laboratories to access the best science and external sources of innovation.

A further focus in 2009 was the continued reshaping of the business to give us the organisational flexibility we need to take advantage of opportunities. Initiatives include outsourcing some of our R&D activities, other business processes and support services, such as HR... Our drive to improve efficiency and effectiveness across AstraZeneca has resulted in further reductions in our workforce.

Strategy:

We estimate that in the next five years, more than half our current revenue is subject to potential loss through the ordinary course of patent expiries and loss of Regulatory Exclusivity protecting our products.

The executive team, with the endorsement of the Board, believes that the most value-creating strategy for AstraZeneca is to remain a focused, integrated, innovation-driven, global, prescription-based biopharmaceutical business.

Our priorities to 2014:

The initiatives we are pursuing in the coming years are in line with those we reported on last year... These show that we are already on a path of change. Our 2009 review emphasised the need for the pace of that change to accelerate.

Measures:

In relation to our overall goal of creating enduring value for shareholders by being one of the best-performing pharmaceutical companies, we track shareholder value using the following financial performance metrics: sales growth (operating profit and margins); earnings per share growth; net operating cash flow (before debt repayment and shareholder distributions); shareholder distributions through dividends and share re-purchases; and TSR.

The 2010 annual report describes:

Who we are:

Our mission is to make a meaningful difference to patient health through great medicines.

Chairman's Statement:

In the face of sustained pressures on the business, 2010 was a year in which AstraZeneca maintained its strong financial performance.

The focus of our efforts to implement our strategy in 2010 was on making the transformational changes to the business needed to generate sustainable long-term value. At the heart of these changes was the creation of a single R&D organisation which we are

reshaping and in which we are investing to improve productivity and secure targeted levels of return... Also central to our strategy is a firm belief in external collaboration. We have a desire to access the best science, whatever its origins, and to act as a valued and trusted partner.

We have undertaken significant restructuring initiatives in furtherance of our strategy. The first phase of the restructuring programme is now complete, resulting in the realisation of annual benefits of \$2.4 billion achieved to date at a cumulative cost of around \$2.5 billion.

The 2011 annual report describes:

Chairman's (Louis Schweitzer) statement:^D

Our 2011 review highlighted the ongoing need for a substantial improvement in R&D productivity if we are to sustain acceptable returns to shareholders. We are therefore planning to accelerate our R&D strategy. We intend to take a new approach to Neuroscience, closing our existing research centres and creating a new virtual innovative medicines unit for our R&D in this challenging field. We also plan to reshape our other R&D global functions to better support a more focused portfolio and create a simpler organization with greater flexibility in all functional areas.

Mission:

To make the most meaningful difference to health through great medicines that bring benefit for patients and add value for our stakeholders and society.

Strategy:

To be a focused, integrated, innovation-driven, global, prescription-based biopharmaceutical business. Our priorities are to drive:

- World class productivity in R&D.
- Increased external collaboration.
- Our global orientation, reflecting the growth in Emerging Markets.
- Stronger customer orientation, particularly towards payers.

^D Leif Johansson is to succeed Louis Schweitzer, who will step down in summer 2012.

• Operational efficiency with a flexible cost base.

Our strategic priorities to 2014:

Our goal is to create sustainable value for shareholders by being one of the best-performing biopharmaceutical companies. To achieve that goal, the pace of change across AstraZeneca needs to accelerate and we need to deliver on the following medium-term strategic priorities.

- 1. Pipeline: discovery and development of innovative, differentiated and commercially attractive medicines.
- 2. Deliver the business: sales and marketing activities undertaken in the right way and focused on the needs of our customers: patients, physicians, and payers.
- 3. Business shape: a reliable supply and manufacturing operation, and Lean organizational infrastructure that ensure our medicines are where they need to be when they are needed.
- 4. People: a talented and diverse workforce with the right capabilities operating in a high performance culture.
- 5. Responsible business: committed to acting responsibly and to the sustainable development of our business.

[Measures for the 5 strategic priorities include pipeline project progress, growth of key brands and emerging markets sales, gross margin, R&D cost efficiency, core SG&A costs, employee engagement, leadership communications and DJSI World Index ranking.]

Restructuring:

Since 2007, we have undertaken significant efforts to restructure and reshape our business to improve long-term competitiveness. The first phase is complete. It comprised total restructuring costs of \$2.5 billion and delivered \$2.4 billion in annual benefits by the end of 2010, with a gross headcount reduction of 12,600. The second phase, which featured a significant change programme in R&D, began in 2010 and was largely completed during 2011. The cost phase of this programme totalled \$2.1 billion and is expected to deliver total annual benefits of \$1.9 billion by the end of 2014, of which \$1 billion had been achieved by the end of 2011. Gross headcount reductions associated with this second phase will be around 9,000. Both restructuring programmes delivered their targeted benefits to date. We have invested some of the savings to drive future growth and value, such as in our Emerging Markets commercial infrastructure and an expansion of our research capabilities in biologics.

At the same time, we have also improved Core pre-R&D and operating margins over the period. When completed, the next phase of restructuring, announced in February 2012, is expected to deliver a further \$1.6 billion in annual benefits by the end of 2014.

Non-core businesses:

We have actively considered potential shareholder value creation from our non-core businesses and, in November 2010, formally initiated a review of strategic options for Astra Tech, a global leader in dental and healthcare (urological and surgical) products, services and support. Our review concluded with the sale of the Astra Tech business to DENTSPLY International Inc. for approximately \$1.8 billion in cash in a transaction that closed on 31 August 2011. Proceeds from the sale are being returned to shareholders through share repurchases.

Our performance in 2011:

We have developed KPIs by which we measure our success in delivering our strategy.

Financial:

- Revenue: Sustain annual revenues of \$28-34 billion.
- Reinvestment rate: Reinvest 40%-50% of pre-R&D post-tax cash flows in R&D and capital investments.
- Core pre-R&D operating profit/margin: Sustain Core pre-R&D operating margins of 48%-54%.
- Total shareholder distribution: Provide strong cash returns to shareholders via progressive dividends and periodic share repurchases.
- Core EPS: Achieve Core EPS for 2011 in the range \$7.20-\$7.40.

Company	Number of drugs approved	R&D Spending Per Drug (\$Mil)	Total R&D Spending 1997- 2011 (\$Mil)
AstraZeneca	5	11,790.93	58,955
GlaxoSmithKline	10	8,170.81	81,708
Sanofi	8	7,909.26	63,274
Roche Holding AG	11	7,803.77	85,841
Pfizer Inc.	14	7,727.03	108,178
Johnson & Johnson	15	5,885.65	88,285
Eli Lilly & Co.	11	4,577.04	50,347
Abbott Laboratories	8	4,496.21	35,970
Merck & Co Inc	16	4,209.99	67,360
Bristol-Myers Squibb Co.	11	4,152.26	45,675
Novartis AG	21	3,983.13	83,646
Amgen Inc.	9	3,692.14	33,229

Exhibit 21: Pharmaceutical companies' research spending per drug (Source: http://www.forbes.com/sites/matthewherper/2012/02/10/the-truly-staggering-cost-of-inventing-new-drugs/)

1999							
Therapy	Gastrointestinal	Cardiovascular	Oncology	Respiratory	Central	Pain	Infection
area					Nervous	Control and	
					System	Anaesthesia	
World	18	47	15	9	29	2	37
market							
value							
(\$bn)							

Exhibit 22: Therapy area world market values in 1999 (Source: AstraZeneca annual report 1999)

2010						
Therapy	Gastrointestinal	Cardiovascular	Oncology	Respiratory	Neuroscience	Infection
area				and		
				Inflammation		
World	38	170	53	58	137	82
market						
value						
(\$bn)						

Exhibit 23: Therapy area world market values in 2010 (Source: AstraZeneca annual report 2010)

Interview protocol^A

Interview date: _____

Exhibit 24: Interview protocol, AstraZeneca employees

Interviewer information

Interviewer: Tailun Su

Faculty: Stockholm School of Economics, Department of Accounting

Level: Bachelor Thesis

Category: Thesis in Accounting and Financial Management

Research question (presently): *How does shareholder value creation manifest in the decision of an ongoing corporate unit downsizing?*

Semester: Spring 2012

Interviewee information

Interviewee name: _____

Interviewee job title: _____

A) Introduction of interviewer

Do you have any questions before we start?

B) <u>Interview topics^B</u>

- I. <u>The interviewee:</u>
- 1) What is your background in the company?
 - i. How long have you been working at AstraZeneca Södertälje?

^A March version.

^B 1 hour and 30 minutes in duration.

- ii. For how long have you been [insert role]?
- 2) Please briefly describe the daily tasks involved in your work here at AstraZeneca when you first started?
 - i. How have your tasks changed since your first time of employment here? How has your motivation changed over time? Why?
 - II. The company:

3) Please describe Astra and Zeneca before their merger.

- 4) What overall goals did these companies (mainly Astra AB) have around the early and middle of the 1990s? What was the vision for the future?
- 5) What were the communicated strategies by the company management of Astra AB? How would they make sure to achieve these company goals?
- 6) How was the company structure and characteristics of Astra AB before the merger?
- 7) How was the culture in the company before the merger in Astra AB? Please provide some examples from practice.
- 8) How was it like at Södertälje back then? How was work?
- 9) How was the company Astra AB doing? What were good and bad factors which the company was experiencing or facing? What were the challenges ahead? In what way was the company doing well?
- 10) What performance evaluation measures were used? How did the company check people's work? Where was the focus of evaluations? How was the site of Södertälje evaluated? Please provide some examples of such measures from practice.
- 11) How did the reward systems for employees look like?
- 12) At this point in time, what did you hear from shareholders?

13) Please describe what happened when Astra and Zeneca merged.

- i. What were the main reasons behind the horizontal merger between Astra and Zeneca?
- ii. Did the merger come as a surprise?
- 14) Were there noticeable changes in the company's overall goals? How did the merger fit in with the company's goals?
- 15) What happened at the Södertälje site after the merger?
 - i. How did things change and were these changes reflected in everyday work at Södertälje?
 - ii. What catchphrases or rhetorical words were used by management in their communication to employees as to how they would reach these overall goals through various strategies?

- 16) What were the most important performance measures in the Södertälje site at this point in time? In what direction did the focus shift, if it did? Please provide some examples from practice.
- 17) What vision for AstraZeneca was communicated to employees after the merger? How did that differ from before, when it was only Astra?
- 18) Did activities in everyday work change? How?

19) Please describe what happened after the merger to 2005.

- 20) What did the CEO and senior management say during this time? What did they emphasize?
- 21) Did you notice any changes in the overall direction of the company?
- 22) What were the company's overall goals, how did they change and how was this felt or influencing the activities conducted here at the Södertälje site?
- 23) Did you notice any changes in the local measures of performance? Please provide some examples from practice.
- 24) Did the reward systems for employees change during this period? Please provide some examples from practice.
- 25) At this point in time, what did you hear from the shareholders? Did you feel their presence?

26) Please describe what happened after 2005, when David Brennan took over as CEO.

- 27) What was happening in the company at this time? How were things going?
- 28) Would you like to describe the situation sometime around year 2006, when there was a CEO change and David Brennan took charge? After his arrival, did the overall goals of the company change significantly? What were being considered as crucial for the company's future success?
- 29) What strategies were communicated now to employees about how to achieve the declared goals? How did this differ from earlier periods?
- 30) Why was there a need for change, if there was? What were the problems?
- 31) What were some of the effects of the CEO change and the new strategic direction on the site here?
- 32) What were some of the signs of these problems here at the site of Södertälje?
- 33) Did you notice any changes in the local reward systems?
- 34) Did you notice any changes in the local measures of employee performance? For the site?Please provide some examples from practice.

35) Please describe the situation in 2007 and the time after that until 2010.

- 36) When was the first restructuring initiated?
- 37) What did top management say? Why was there a need to restructure the company?

- 38) How did overall company goals change during this period? How did the restructuring fit in with the company's goals?
- 39) What strategies were communicated to employees by top management? How did this differ from before?
- 40) How well had overall company goals been achieved in the preceding several years?
- 41) What was considered success in your work at this point in time? What did the company value?
- 42) How was success in work measured at this time? How did the company make sure employees performed well? What numbers did they look at and emphasize? Why? What was the logic behind that?
- 43) What rewards were used by the company to improve the performance of employees at this time?
 - i. Please provide some practical examples.
 - ii. How were bonuses set at this time? How did it differ from before?
- 44) When you had meetings with (more) senior management, what were usually discussed? What problems were emphasized?
 - i. How did the topics and focus of these discussions or meetings differ from before?
- 45) Would you like to describe if outsourcing was important in the company at this point in time?
- 46) At the Södertälje site, what activities were being or have been externalized or outsourced?And what have remained as internal activities over the years?
- 47) How do decisions regarding outsourcing take place? How does the company arrive at such a decision? Was it part of the new strategy?
- 48) Regarding operative and non-manager levels, what activities were employees working with? Were some activities removed, rescaled or added? What were the reasons behind such decisions?
- 49) What did AstraZeneca consider as its core activities at this time? How did this differ from before? Why?
- 50) Was there a talk about becoming a leaner organization in AstraZeneca? When was this emphasis introduced, and what has this principle meant for the site of Södertälje, the employees and the work here?
 - i. What benefits did management say existed with a leaner organization?
- 51) How was AstraZeneca's Södertälje site doing at that point in time? How was this conclusion drawn against measures? Please provide some examples from practice.

52) **Please describe the time since 2010.**

53) Please describe the restructuring that took place in 2010. What happened and what was the goal with the restructuring?

- i. Was the restructuring considered a success? Why or why not?
- 54) What other sites in AstraZeneca have been restructured or closed since 2010?
- 55) How did the company's overall goals change? How was the restructuring helping to achieve the company's goals?
- 56) How did the strategies communicated by top management change? What did they say?
- 57) How did measures of performance change? For employees? For the site? Please provide some examples from practice.
- 58) When was the scorecard introduced? Why? How did it work?
- 59) How did reward systems change?
- 60) How did activities change locally?

61) Current situation and outlook

- 62) The downsizing decision that has been taken now how was the announcement made?
 - i. What did senior management say? What were their explanations?
- 63) Who made this decision? And when?
- 64) How did employees and external parties see this decision?
- 65) From the company's perspective, what were the reasons behind the closure of the R&D unit here?
- 66) Did the decision to close down the R&D here in Södertälje come as a surprise or was it somewhat expected? Why?
- 67) When did people at your level start to speculate about an eventual closing down of the site here?
- 68) Last year or the year before, were there any signs that made employees here think that such an outcome a closure might occur in near future?
- 69) What role do you think that shareholders and the capital markets might play in this decision?i. How has their reaction to this closure decision been?
- 70) How does this decision to close down the R&D here in Södertälje fit in with the company's overall strategy? What is the idea behind the decision?
 - i. What benefits are expected to arise for the company as a result of this decision? How will the effects of the decision be monitored and evaluated?
 - ii. How will the effects of this decision be measured and evaluated?
- 71) In the past years, what messages, reactions or influence from shareholders have you experienced as an AstraZeneca employee?
- 72) After the downsizing of the R&D, how many people will remain at AstraZeneca's Södertälje site?
- 73) What will happen next? What is the plan for the next phase of the strategy?
- 74) Finally, what is your opinion on all of this?

C) Final (practical) enquiries

Is there anything else you would like add?

Would you like to be anonymous in this study?

Do you wish to review your interview transcript and its accuracy?

If I have some follow-up questions, is it okay if I get back to you for further guidance and clarification?

Thank you very much for today's interview and your interest in and decision to participate in this study.

If have you have questions, please feel free to ask me.

Interview protocol^C

Exhibit 25: Interview protocol, analysts

Introductory question:

What is your background in the company?

Questions:

- 1. When did the capital market find out about AstraZeneca's downsizing in Södertälje?
- 2. What did you get to know? What information was provided? Who provided it?
- 3. What was most important regarding the information given from an analyst point of view?
- 4. How did the share price react immediately after the news? Why?
- 5. What information had the strongest impact on the share price's reaction immediately afterward?
- 6. Did the decision come as a surprise or did you know anything about it in advance?
- 7. What expectations did the markets have about the Q4-event? What numbers were most interesting and why?
- 8. Did AstraZeneca promise anything for the Q4-event?
- 9. What would happen if AstraZeneca could not meet their promised numbers? How do analysts react? How do shareholders react?
- 10. How important is the capital market for AstraZeneca and what the company does? Why?
- 11. What role or weight do you as an analyst think that the capital market had in the firm's decision to downsize the R&D unit in Södertälje?
- 12. How important was the capital market for AstraZeneca and what the company did ten years ago?
- 13. That AstraZeneca is in the pharmaceutical industry what effects might this have on what is said publicly?

^C Translated to English from Swedish by author.

- 14. How is AstraZeneca's share price valued?
- 15. Which components or assumptions changed as a result of the downsizing?
- 16. What effects will these changes have on the share price? How?
- 17. And regarding assumptions, what do analysts think about the future of AstraZeneca? What assumptions are made? What information are these assumptions based upon?
- 18. What did analysts believe two or three years ago? What assumptions were made at that time?
- 19. What did the company's senior managers say at that time? What initiatives and promises did they make?
- 20. How did analysts react to these speeches?
- 21. What assumptions have changed since then?
- 22. If we return to AstraZeneca's downsizing decision, how did the share price react later on the same day? Why?
- 23. How easy or difficult is it for a company like AstraZeneca to influence its share price?
- 24. What will the long-term effects of AstraZeneca's decision to downsize be on the company's share price and future expectations?
- 25. How has AstraZeneca's share price performed since the company's existence? What is the trend and why?
- 26. How does the situation look today for investors? Are they happy with how things are going?
- 27. How have investors reacted to AstraZeneca's share price development over the last few years?
- 28. How have shareholders tried to influence AstraZeneca's top management?
- 29. Has AstraZeneca had problems with investors? Compared to competitors?
- 30. How does the relationship between investors and AstraZeneca look like today? What do analysts think the company ought to do over the next few years?
- 31. If we go back in time to 2006, when there was a CEO change in AstraZeneca, what did the new CEO say, and how did analysts react to that?
- 32. How has the situation for AstraZeneca's payouts looked like?
- 33. How does the future look like for AstraZeneca's payouts?
- 34. How does it look like for the industry as a whole?

35. After the downsizing in Södertälje, what will happen next for AstraZeneca? What is the next phase in the overall strategy?

Conclusion:

Is there anything else you would like to add?

Would you like to be anonymous in this study?

Do you wish to review your interview transcript and certify its accuracy?

Thank you very much for your participation in this study.

Goodbye!