Exhibit 4 Decision Matrix for Resource-Allocation Decisions on the European Fire Protection Business

KCI: Fire Protection

Resource Allocation	Regional Director EMEA	GBD Fire Protection	Controller	Special Asst. Manufacturing	Human Resources Manager
1. Recommend allocation of resources to major new product development programs	R	R	IP	R	R
2. Recommend allocation of resources to major process development programs	R	IP	IP	RJ	IP
3. Recommend allocation of resources for major cost reduction programs	R	IP	IP	R	
4. Determine need, location, and timing for adding or reducing manufacturing capacity	D*	IP	IP	R	
5. Decide management of production workforce (expansion, contraction, assignment)	C	IP		D	
6. Decide on inter-region sourcing	R	IP	IP	R	
7. Decide who maintains existing technologies	R	IP		R	

European Fire Protection – Firegard plc

Resource Allocation	Firesafe GM	Division Manager, Fire Protection	Plant Controller	Production Manager	Sales and Marketing Manager	Technical Director
1. Recommend allocation of resources to major new product development programs	BC	R	IP	R	R	IP
2. Recommend allocation of resources to major process development programs	BC	R	IP	R	IP	IP
3. Recommend allocation of resources for major cost reduction programs	BC	R	IP	R	IP	R
4. Determine need, location, and timing for adding or reducing manufacturing capacity	D*	R	IP	R	IP	IP
5. Decide management of production workforce (expansion, contraction, assignment)	D	R		R		
6. Decide on inter-region sourcing	BC	R	IP	IP	IP	
7. Decide who maintains existing technologies	BC	R		R	IP	IP

European Fire Protection – SicherFeuer AG

Resource Allocation	Sicher-Feuer General Manager	Production Manager	Technical Manager	Financial Manager	General Sales Manager
1. Recommend allocation of resources to major new product development programs	BC	R	C		IP
2. Recommend allocation of resources to major process development programs	BC	R	C		
3. Recommend allocation of resources for major cost reduction programs	BC	R	C		
4. Determine need, location, and timing for adding or reducing manufacturing capacity	D*	R	R	IP	IP
5. Decide management of production workforce (expansion, contraction, assignment)	D	R			
6. Decide on inter-region sourcing	R	IP	R	IP	IP
7. Decide who maintains existing technologies	BC	R	R		

KCP Fire Protection Division (Ohio)

Resource Allocation	KCP VP Fire Protection	Business Development Manager	Manufacturing/Engineering Manager	Controller
1. Recommend allocation of resources to major new product development programs	D	R	IP	IP
2. Recommend allocation of resources to major process development programs	D	IP	R	IP
3. Recommend allocation of resources for major cost reduction programs	D	IP	R	IP
4. Determine need, location, and timing for adding or reducing manufacturing capacity	D*	IP	R	IP
5. Decide management of production workforce (expansion, contraction, assignment)	C			
6. Decide on inter-region sourcing	D	IP	IP	R
7. Decide who maintains existing technologies	D	IP	R	IP

Corporate Staffs

Resource Allocation	Treasurer	Controller	Manufacturing	Industrial Relations	Human Resources	Government & Public Relations	Legal
1. Recommend allocation of resources to major new product development programs		TC	R/TC		IP/TC		TC
2. Recommend allocation of resources to major process development programs		TC	R/TC		IP/TC		C
3. Recommend allocation of resources for major cost reduction programs		TC	R/TC		IP/TC		
4. Determine need, location, and timing for adding or reducing manufacturing capacity		TC	R	IP/TC	IP/TC	C**	TC
5. Decide management of production workforce (expansion, contraction, assignment)						C**	TC**
6. Decide on inter-region sourcing	TC	TC	IP			C	C
7. Decide who maintains existing technologies			R/TC				

* Joint decision

** For U.S. decisions only

D = Decides; A = Approves; R = Recommends; BC = Business concurrence; TC = Technical concurrence; C = Concurs; I = Initiates; IP = Inputs.

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CASE 4.2 LUNDBECK KOREA: MANAGING AN INTERNATIONAL GROWTH ENGINE

Michael Roberts wrote this case under the supervision of Professor Paul Beamish solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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Early in 2005, Michael Andersen, vice president of Lundbeck – a leading central nervous system (CNS) pharmaceutical company in Denmark, questioned whether he should rethink Lundbeck's reporting structure in Asia. In particular, the Korean subsidiary was experiencing very strong growth and Andersen wondered whether Lundbeck Korea would achieve its full potential if it remained part of Lundbeck Asia, the regional group, or whether it would be better to have the managers at Lundbeck Korea report directly to him in Copenhagen.

Korea had proven itself to be a rising star among Lundbeck's overseas subsidiaries, and the staff in Korea, led by country manager Jin-Ho Jun (Jun), wanted more independence to chart their own path. The Korean subsidiary's performance had far exceeded what was projected in the original business plan. It had grown from one employee in 2002 to over 50 employees in 2005, and had sales of KRW25 billion (approximately US$22 million). Given the current success, Andersen wondered whether the current reporting structure was still appropriate.

The decision was not to be taken lightly; while the Korean division, under the leadership of Jun, was experiencing enormous growth, it was only barely three years in the making. In addition, while normal and expected in a recently established subsidiary, Lundbeck Korea was still not a profitable business unit. Since most of the other Asian countries were part of the Asia division, Andersen also had to think about how this would affect Lundbeck's regional and worldwide organizational reporting norms; in particular, he was concerned about the Chinese subsidiary. While making adjustments to reporting structures was a normal part of doing business for Lundbeck, Andersen had not anticipated that he would be considering this decision so soon for Korea.

The CNS Landscape

However, these markets were fairly stable and generally experienced low single-digit growth. Exhibit 1 is a list of the top pharmaceutical markets. The major CNS pharmaceutical markets by country were: United States, 59%; Germany, 5%; Japan, 4%; France, 4%; United Kingdom, 4%; Spain, 3%; Italy, 2%; South Korea, 1.5%. The bulk of the remaining 19 per cent of the CNS market came from emerging economies such as Brazil, China, India, and South Korea. While the market for CNS drugs in these emerging

Exhibit 1
Top Pharmaceutical Markets, 2005

Country	Pharmaceutical Market Size (billions USD)	Population (millions USD)	Lundbeck Functions
United States	270.2	307.2	Sales/Research
Japan	76.2	127.1	—
Germany	43.9	82.3	Sales
France	39.1	64.1	Sales
United Kingdom	31.3	61.1	Sales
Italy	24.3	58.1	Sales/Research
China	20.4	1,338.6	Sales
Canada	16.3	33.5	Sales
India	9.3	1,166.1	Sales
South Korea	7.9	48.5	Sales
Russia	7.9	140.0	Sales
Turkey	7.5	76.8	Sales
...	...	...	...
Denmark	2.6	5.5	Sales/Research/Production

Source: Business Monitor International, "Pharmaceutical Market Statistics: Statistics for 2005," London, United Kingdom, 2009.

economies was much smaller, the rate of growth in many of these countries was in excess of 15 per cent per year.[1]

The global industry for CNS pharmaceuticals was about $93 billion in 2005. CNS diseases are serious and life-threatening and affect the quality of life of patients as well as of their relatives. Over the past 50 years, new pharmaceuticals had revolutionized treatment options, but there remained a large unmet need for new and innovative therapeutics.

Overall, the industry was marked by intense competition from both rival branded pharmaceutical firms and generic competitors. In most markets, branded pharmaceuticals were given a number of years of exclusivity – a period in which no generic version of the drug can be sold. However, these periods of exclusivity varied greatly by country. Patent protection could range from no protection to 20 years of exclusivity. In most developed markets, for example the United States, exclusivity began at the time the drug was patented; in other markets, for instance South Korea, it began when the drug was launched. The laws and regulations around granting exclusivity also varied by country, and were often heavily influenced by political concerns. Regardless of the region, when the exclusivity periods run out, the price of a drug drops dramatically. The revenues from Eli Lilly's anti-depressant drug Prozac, for example, fell by over 80 per cent following the loss of its patent protection at the end of the 1990s.[2] While the decrease in revenues from this drug could also be attributed to new branded pharmaceuticals entering the anti-depressant market, the significance of loss of patent protection cannot be overstated.

Almost 60 per cent of the total market sales in the CNS industry came from the nine largest firms (Johnson & Johnson, 11%; Glaxo Smith Kline, or GSK, 9%; Pfizer, 8%; Lilly, 7%; Sanofi-Aventis, 5%; Novartis, 5%; Astra Zeneca, 5%; Wyeth, 5%; Forest Labs, 3%). Lundbeck held 2%. In this industry, sales growth was highly dependent on the successful introduction of a new patented drug, and sales declines were most often a result of a patent expiration. A firm's revenue was often disproportionally dominated by one blockbuster drug – a drug that dominates a class of drugs. For example, Johnson & Johnson generated 41 per cent of its revenue from the blockbuster schizophrenia drug Risperdal.[3]

Depending on the country, buyers of pharmaceuticals could be national health services, private insurance companies, or individuals. However, in general, decisions about prescribing drugs were made by practitioners (i.e. doctors, etc.).[4] Psychiatrists represented the largest group of practitioners in the CNS industry. Since doctors were the ultimate decision makers, the buyer had little direct product choice. However, the type of buyer system greatly affected the potential market size and price that could be charged for the product. The presence of a national health service that covered prescription drugs, for example, could greatly expand the market, but government pressure could potentially lower prices per unit.

Key Products

The largest class of drugs in the CNS market was comprised of anti-depressants, which represented almost 20 per cent of the total market. Depression is a genuine physical condition and affects approximately 10 per cent of the global population.[5] "Bad" mood, loss of energy, feelings of worthlessness, difficulty concentrating, and even thoughts of suicide are just some of the many symptoms.

The market for anti-depressants was $19 billion in 2005 (see Exhibit 2). However, the market segment was due to have very poor growth rates over the next several years because of the large influx of generic drugs in selective serotonin reuptake inhibitors (SSRIs), the largest class of anti-depressant drugs. SSRIs, which made up more than 50 per cent of the anti-depressant market segment, were a class of compounds typically used in the treatment of depression, anxiety disorders, personality disorders, and some cases of insomnia. In particular, sales of Zoloft by Pfizer were expected to decrease by one third in 2006 due to the expiration of its patent in the U.S. market. This left only three products with patent protection: Effexor by Wyeth, Lexapro by Lundbeck, and Yentreve by Lilly.[6] Overall, this class of drugs was only forecasted to growth by 1.5 per cent a year until 2012.

New growth in the CNS market was driven by drugs for Alzheimer's disease (AD). Over the last few years, this class of drugs experienced growth rates upwards of 15 per cent per year.[7] The market for AD medications was $4 billion in 2005, and was expected to see growth of more than 15 per cent in 2006. Exhibit 2 gives an overview of the AD medication market. The future of AD medication was in the NMDA receptor antagonist class of drugs, which was expected to grow by over 30 per cent in 2006. The drugs in this class were all derivates of memantine. There were three memantine-based drugs on the market; however, they were not in direct competition with each other as they were a result of shared development and licensing. Forest Labs marketed Namenda in the United States; Merz sold Axura in Germany; and Lundbeck marketed Ebixa in the rest of Europe. Memantine was an important medication because it was the only pharmaceutical available for moderate and severe forms of AD. Since most AD patients lived long enough to experience all stages of the disease, memantine filled a crucial role in AD therapy. There were no threats of generics to memantine until after 2008. Overall, this class of drugs was forecasted to grow by 13.1 per cent a year until 2012.[8]

[1] B. Nehru, *The CNS Market Outlook to 2012*, Business Insights Ltd, London, United Kingdom, 2007, p. 59.

[2] B. Massingham, *CNS Market Outlook to 2000*, Business Insights Ltd, London, United Kingdom, 2000.

[3] B. Nehru, op.cit., p. 15.

[4] *Datamonitor*, "Global Pharmaceuticals, Biotechnology & Life Sciences: Industry Profile," New York, 2009.

[5] B. Nehru, op.cit., p. 33.

[6] Ibid., p. 53.

[7] Ibid., pp. 58–60.

[8] Ibid., pp. 94–98.

Exhibit 2
Leading Anti-Depressants and Alzheimer's Disease Medications in the Global CNS Market, 2005

Brand	Company	Generic	Class	Sales (millions USD)	Share (%)	Expected Growth (% per yr.) 2006	Expected Growth (% per yr.) 2012	Patent Expiry
Anti-Depressants								
Effexor	Wyeth	venlafaxine	SNRI	3,830	20.1	3.0	-20.4	2007
Lexapro	Lundbeck/ Forest	escitalopram	SSRI	2,455**	12.9	19.0	8.4	2011
Zoloft	Pfizer	sertraline	SSRI	3,641	19.2	-34.0	-32.6	expired
Wellbutrin	GSK	bupropion	Other	1,605	8.4	22.0	-*	-
Yentreve	Lilly	duloxetine	SNRI	684	3.6	95.0	23.9	2013
Seroxat	GSK	paroxetine	SSRI	819	4.3	-13.0	-28.3	expired
Prozac	Lilly	fluoxetine	SSRI	408	2.1	-21.0	-34.7	expired
Remeron	Organon	mirtazapine	Other	351	1.8	-15.0	-	-
Others				5,220	27.5	-3.0	-2.7	
Total				19,013	100.0	3.5	1.5	
Alzheimer's Medications								
Aricept	Pfizer	donepezil	CI	2,215	54.9	13.5	-5.5	2010
Namenda	Forest	memantine	NMDAA	482	11.9	35.7	24.6	2014
Exelon	Novartis	rivastigmine	CI	496	12.3	5.6	-0.9	2012
Reminyl	J&J	galantamine	CI	490	12.1	6.7	-16.7	2008
Ebixa	Lundbeck	memantine	NMDAA	189	4.7	29.7	0.6	2010
Akatinol	Lundbeck	memantine	NMDAA	60	1.5	13.2	-11.5	2008
Axura	Merz	memantine	NMDAA	22	0.5	35.6	7.2	2008
Prometax	Novartis	rivastigmine	CI	25	0.6	5.3	4.0	2012
Other				57	1.4	29.1	98	
Total				4,036	100	15.4	13.1	

* - is used to indicate that no information is available

** of which Lundbeck is 863

Source: Modified from B. Nehru, *The CNS Market Outlook to 2012*, Business Insights Ltd, London, United Kingdom, 2007.

The Asian Market

At $97.4 billion in 2005, the pharmaceutical market in Asia represented approximately 20 per cent of the global pharmaceutical industry. The Asia pharmaceutical market had a growth rate of about 6.4 per cent a year which was forecasted to remain steady for the next several years. However, some markets throughout Asia were vastly different from others. For example, the largest market in Asia was Japan, which accounted for 55 per cent of the entire market but only had a growth rate of 2.4 per cent a year. China, on the other hand, accounted for 17.5 per cent of the pharmaceutical market, with a growth rate in excess of 20 per cent per year. The other major markets in Asia were South Korea and India, representing 8.3 per cent and 8.1 per cent of the market, respectively. Excluding Japan, the other Asian markets grew at an average rate of 11.3 per cent per year. The CNS market represented nine per cent of the total pharmaceutical market in Asia for a total of $8.7 billion.[9]

The payer systems also varied greatly throughout Asia. Japan had a combination of government insurance and private employer-based insurance. Hong Kong and Singapore had a combination of private pay and private insurance programs. South Korea had a fully government-funded national insurance for pharmaceutical prescriptions. China, Thailand, and Malaysia had virtually no group or collective programs and most costs for pharmaceuticals were paid by individuals.

Lundbeck

Lundbeck was an international CNS pharmaceutical company headquartered in Denmark. Founded as a trading company in 1915 by Hans Lundbeck, the company had evolved into a global CNS pharmaceutical firm. In 2005, Lundbeck earned over $240 million in operating profits from over $1.5 billion in sales. Lundbeck conducted research on, developed, manufactured, marketed, sold, and distributed pharmaceuticals for the treatment of neurological disorders, including depression, schizophrenia, Alzheimer's disease, Parkinson's disease and insomnia.

Lundbeck employed 5,500 people worldwide, 2,100 of whom were based in Denmark. It manufactured its products in Denmark and Italy, and had research facilities in Denmark and the United States. Lundbeck's drugs were registered for sale in more than 90 countries, and it had its own independent sales forces in 55 countries. For Lundbeck's financial highlights in 2005 (see Exhibit 3).

Lundbeck was a research-intensive company, structured to be constantly producing the next generation of drugs. The primary mission of the company was to undertake the tasks of improving the quality of life for persons with a psychiatric or neurological disorder, and to work intensely to find and develop new and improved drugs. It employed a total of 1,100 specialists in its R&D units, which consumed more than 20 per cent of annual revenues.

Strategic Drivers

Lundbeck's strategy was driven by four principles: specialization, speed, integration, and results.[10]

Specialization: Unlike many of its competitors, Lundbeck specialized exclusively in the CNS pharmaceutical area. Moreover, the strategy of specialization had been extended to include all aspects of its business. Thus, Lundbeck's goal was to focus and streamline its key products, simplify its processes and business procedures, and focus on long-term growth in the CNS industry. To do this, Lundbeck focused on marketing and distributing its new and innovative products. Lundbeck tried to balance innovative activities while maintaining a competitive cost structure.

Speed: Lundbeck's strategy was to use its small size as an advantage. The goal was to maintain short decision-making processes in order to respond quickly to the demands of a highly competitive market. That being said, Lundbeck set up strong control systems to ensure that the company was able to balance its results-focused mindset with exposure to risk and the need to maintain ethical business practices. Lundbeck used its small size to flexibly respond to risks at all stages in the value chain. Some of the key risks that it identified at the sales and marketing level included generic competition; adherence to ethical sales and marketing practices; and risks associated with product liability. Its intention was to structure its organization to control and respond quickly to any new threat.

Integration: Lundbeck's goal was to continue to become a global pharmaceutical firm. In order

[9] *Datamonitor*, "Pharmaceuticals in Asia-Pacific," New York, New York, 2008, p. 9.

[10] Company documents.

Exhibit 3
Lundbeck Financial Highlights, 2005

	DKK millions	USD millions
Revenue	9,070	1,513
Profit from operations	2,174	363
Finance income, net	17	3
Profit before tax	2,156	360
Net profit	1,457	243
		0
Cash flows from operating activities	2,074	346
		0
Total assets	11,560	1,928
Capital and reserves	7,437	1,240
EBIT margin (%)	24	
Return on equity (%)	19.3	
Earnings per share (EPS)	6.52	1.1
Earnings per share - diluted (DEPS)	6.5	1.1
Cash flow per share	9.2	1.5

Revenue By Product and Region	Product	Region	Product	Region
Europe		4,680		781
Cipralex®/Lexapro®	1,963		327	
Ebixa®	933		156	
Azilect®	6		1	
Other pharmaceuticals	1,777		296	
United States		2,618		437
Income from Cipralex®/Lexapro®	2,552		426	
Other pharmaceuticals	66		11	
International Markets*		1,539		257
Cipralex®/Lexapro®	662		110	
Ebixa®	172		29	
Azilect®	0		0	
Other pharmaceuticals	706		118	
Other revenue		232		39
Total group revenue		9,070		1,513

* Asia, Australia, Africa, Americas, Canada, Middle East

* Estimated on the 2005 annual DKK/USD exchange rate of 5.996475

Source: Company documents.

to achieve that, it sought to continue to develop strong competencies through the entire value chain of the pharmaceuticals market, from knowledge and control of research to the development of new pharmaceuticals, production, marketing and sales. However, it did not believe that it had to do everything in-house or at home in Denmark. As the firm grew in its global competency, it planned to seek new locations and partners for any aspect of the value chain that could offer better value in terms of quality, price, commodities, and labour.

Results: Lundbeck intended to provide continuous short-term and long-term value to its shareholders. In 1999, Lundbeck's shares were listed on the Copenhagen Stock Exchange. The Lundbeck Foundation, which distributed $40 million to $50 million each year in grants to the scientific community for various types of research, owned about 70 per cent of the shares in Lundbeck, while the remaining 30 per cent were traded on the stock exchange. Lundbeck's semi-private ownership by the Lundbeck Foundation was a long-term strength for the company because this ownership structure gave the firm greater flexibility than most of its competitors to re-invest its current profits for long-term growth.[11]

Lundbeck's leading products were Lexapro and Ebixa. Lexapro represented 57.1 per cent of Lundbeck's revenues and Ebixa represented 12.2 per cent. Lexapro was one of the world's most often prescribed SSRIs for the treatment of depression and anxiety disorders. Lexapro was launched in 2002 and was marketed globally by Lundbeck and its partners. Unlike most other SSRIs on the market, which had lost patent protection or would lose protection over the next year or two, Lexapro would have patent protection until 2011. Lexapro could expect growth of more than 20 per cent per year until 2011, when its sales would drop off dramatically. Lexapro was a next-generation drug launched to replace the drug Cipram (citalopram), which had lost its patent protection in major markets. However, Lexapro had proven to be superior to Cipram in controlling many disorders.

Ebixa was Lundbeck's memantine drug for the treatment of AD. This drug was certain to be a major growth engine for Lundbeck. However, due to licensing agreements with Merz and Forest, Lundbeck was prohibited from marketing the drug in Germany or the United States. Lundbeck anticipated that growth in 2006 would be in excess of 25 per cent. Ebixa was forecasted to have strong growth until 2010, when it would lose patent protection.

Lundbeck Asia

Lundbeck products had been available in many Asian countries since the early 1990s. In the past, Lundbeck chose to licence its product for sales and distribution by local pharmaceutical firms. As a result, several of Lundbeck's key products for depression and Alzheimer's had become well known throughout Asia, and had been used as primary psychiatric medications. Seeing the importance of Asia for its long-term growth, Lundbeck decided in the late 1990s to set up wholly owned subsidiaries in each of its markets in Asia and gradually retake its licences. Before this time, Lundbeck had no standalone subsidiaries in Asia. So, controlling its own distribution, sales, and marketing would allow Lundbeck to integrate the Asian markets into the Lundbeck strategy of specialization, speed, integration, and results. By the early 2000s, Lundbeck had established subsidiaries in most Asian markets.

The Asian subsidiaries were joined together as part of a regional group headquartered in Hong Kong, called Lundbeck Asia. In total, Lundbeck Asia consisted of eight country subsidiaries: China, Hong Kong, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, and Thailand. Due to unfavourable market conditions, Lundbeck did not initially establish any successful distribution channels in South Korea.

Lundbeck established a subsidiary in Japan, but had not been able to generate any sales there. The complexity of the regulations surrounding exclusivity rights in Japan made it very difficult

[11] *Datamonitor*, "H. Lundbeck A/S," New York, 2009, p. 16.

for Lundbeck to market its drugs in the Japanese market. One of the biggest hurdles was that Japanese regulators required that the data used in the application documentation for exclusivity be gathered in Japan.

The purpose of Lundbeck Asia was to provide control, support, guidance, and direction for the Lundbeck subsidiaries in the region. The management team consisted of regional vice president Asif Rajar, plus a regional product manager, a regional finance officer, and a regional regulatory affairs officer. The management at Lundbeck Asia was tasked with implementing Lundbeck's strategy in Asia and ensuring that it be executed appropriately in each country. Since Lundbeck was just entering these markets, the regional management was also charged with developing a sense of corporate identity and pride.

The Korean Pharmaceutical Market

In 2005, the South Korean pharmaceutical market was the 11th largest in the world (see Exhibit 1). The past 10 years had been revolutionary for the Korean pharmaceutical market because the prescription drug market in Korea was quite underdeveloped prior to 2001. Without a doctor's prescription, pharmacists were able to dispense any medicine that was legal for sale. Thus, existing medications were available from pharmacists upon request. However, beginning in 2001, Korea divided pharmaceuticals into prescription only and over-the-counter (OTC) medication. This caused a surge in the prescription drug market.

After the Asian financial meltdown in 1997 (known in Korea as the IMF crisis – because the Korean government needed to secure large loan agreements from the International Monetary Fund), the Korean government began a process of opening up markets to foreign multinational enterprises (MNEs). Before 2000, any MNE wishing to enter the Korean pharmaceutical market needed to have a joint venture with a Korean company. In addition, prior to 2000, it would have been very difficult for a pharmaceutical firm to establish a subsidiary in Korea unless it was prepared to establish production facilities. While not an absolute legal requirement, a firm that was trying to sell imported medicine could expect to receive very unfair treatment from regulators, price boards, and practitioners.

CNS Pharmaceuticals in Korea

Even though the market share for treatment of CNS disorders was growing fast, it was still quite small compared to the rest of the Korean pharmaceutical market. This was because mental disorders were not given high legitimacy in Asian societies like Korea; thus, there were limited resources for treating people who suffered from mental illness. Instead, Korean society gave priority and medical resources to physically life-threatening diseases such as cancer and heart disease.

There were stigmas surrounding mental disorders everywhere in the world, but in South Korea these were very pronounced. Only a few years earlier, anyone with depression would have tried to conceal it. However, this had begun to change in 2005 after the son of a well-known businessman committed suicide and it was publicly announced that he had suffered from depression. The situation repeated itself soon after, when a very popular Korean film actress committed suicide. These incidents sent shock waves through society. The Korean people simply could not comprehend how someone with so much success could possibly take their own life. However, these unfortunate situations led to a greater public discourse on, and improved understanding of, mental illness. As such, Korean society had begun to experience greater openness around depression during the last five years.

In 2001, when the Korean pharmaceutical market was divided into prescription only and over-the-counter (OTC) medication, the government insurance policy began to pay for CNS prescription medication. The CNS industry began to see market increases of 30 to 40 per cent per year, making CNS medications a nearly three quarters of a billion dollar industry by 2005.[12] Growth estimations were projected to continue at the same pace for the next several years. In an established market, such as the United States or Western Europe, sales had the potential for growing at one or two per cent per year.

[12] Calculated based on available data.

Lundbeck Korea

While many of the big pharmaceutical companies had entered the Korean market, to Lundbeck, Korea did not seem like a significant market in the 1990s. Moreover, Lundbeck had centralized production, and it was not prepared to allow production outside of Denmark or Italy just to enter a very small market. In fact, in 1996, one of Lundbeck's key drugs, Cipram, was licensed to a Korean firm and registered for sale; however, it was never marketed because of the requirement to have the drug manufactured in Korea.

Lundbeck Korea was established in March 2002, after Lundbeck could justify the establishment of a subsidiary based on developments in the Korean market. The original plan was to establish the Korean and Japanese subsidiaries as one unit separate from the rest of Asia. However, immediately after Lundbeck Korea was established, the executives in Copenhagen chose to have the managers in Lundbeck Korea report to Lundbeck Asia, the regional headquarters. Jin-Ho Jun was hired as the country manager of Korea. Jun reported directly to Rajar in Hong Kong, who reported to Andersen in Copenhagen.

Even though Lundbeck was a small actor in the South Korean market, it quickly established a strong reputation. Lundbeck worked primarily with the hospitals because Koreans generally preferred to seek treatment at hospitals rather than private clinics. They considered the medical staff to be more competent at major hospitals and saw major hospitals as having superior facilities and equipment. With a few exceptions, major hospitals were generally part of large university systems.

Jin-Ho Jun

Jun had the two essential qualities that Lundbeck needed to help establish its subsidiary in this unfamiliar market: he had almost fifteen years of experience in the CNS market in Korea, which made him a local expert; and he had spent most of his career working for multi-national pharmaceutical companies. This gave him the global mindset needed to carry out Lundbeck's strategies and corporate policies. Jun began working for the German multinational pharmaceutical company Bayer in 1990 as a CNS product manager. He was quite successful and was promoted to strategic product manager in 1996. In 1999, he left Bayer to work at an American MNE, Eli Lilly, as its product manager of neuroscience and eventually as its senior product manager. At Bayer and Lilly, Jun developed a deep and rich knowledge of the Korean CNS pharmaceutical market.

Perhaps even more importantly, especially in Korea, Jun developed a very good network of relationships with the top Korean psychiatrists. He devoted considerable time and effort to ensuring high-quality relationships with these important opinion leaders. This was not an easy or painless endeavour. In Korea, good relationships were built up over time, and involved numerous hours eating and socializing during evening social gatherings. To establish the quality of network that Jun had achieved, a person must be willing to sacrifice a great deal of family time. These social meetings were a very important forum for professional discussions and sales pitches.

The State of Local Management

To Jun's mind, choosing how much control and supervision to place on local managers was always tricky in Korea. Sitting in on meetings as a junior manager, he repeatedly heard the Korean managers explain with great frustration to the regional and headquarters managers that the non-Korean managers did not understand the uniqueness of the Korean market. On the other hand, it was difficult for the parent company managers to trust the Korean managers: the educational backgrounds, communication skills, and global knowledge of the Korean managers were usually inferior to those of their foreign counterparts. While their local knowledge was essential, they did not have the necessary management skills. However, because of foreign managers' imperfect knowledge of the Korean market, they were apt to make strategic miscalculations.

In 2005, Jun knew that the Korean pharmaceutical market had become similar to markets in other developed nations. Local knowledge and skills, while still important, were not quite as important as they were 20 years earlier. Meanwhile, Korean managers' communication skills, management skills, and global knowledge needed to succeed in an MNE were much more sophisticated than they were 20 years ago. As a consequence, Jun believed that Korean subsidiaries now required less supervision and control.

Asif Rajar

Being part of Lundbeck Asia had advantages for Lundbeck Korea. Asif Rajar helped establish Lundbeck Korea. Located in Hong Kong, he could easily maintain tight control over the Asian operation. Rajar had extensive experience with Lundbeck throughout Asia, spending many years with Lundbeck in Thailand, Indonesia and other Southeast Asian countries. Though he was a Swiss citizen through marriage, Rajar was originally from Pakistan, giving him a background with both a European and Asian mindset. He was bright and well educated, having achieved his MBA from a top business school in the United States, where he was now often invited to give guest lectures.

Rajar was very active in helping the Asian country managers run their businesses, and was enjoying very good success. He involved himself in all areas of planning and even took the time to interview candidates for important staff positions before the country manager hired them. Rajar requested that all decisions be cleared with him, and involved himself quite heavily in the strategic plans of the subsidiaries under his control. As regional vice president, Rajar was focused on implementing Lundbeck's strategy in Asia. His success was measured on how well he was able to execute that strategy and grow the Asia region.

Rajar's goals were to launch and market Lundbeck's newest and most innovative products; to control costs and preserve resources; to create effective communication channels between the corporate office and Lundbeck's customers (doctors, regulators, and patients) in order to respond quickly to their needs; to reduce risks by ensuring that all ethical standards were being followed; and to have an understanding of the strengths and weaknesses of each of his markets.

Rajar was a very direct communicator and provided very clear guidelines to Jun. His expectations were unambiguous and he was able to illustrate a comprehensible path for Lundbeck Korea that followed the Lundbeck strategy. Before Jun sent any report or proposal to the head office, Rajar took the time to review the reports and provide Jun with feedback and suggestions. Rajar provided active assistance to Jun on how to communicate with the management team in Copenhagen. Because Rajar had extensive experience in management, his guidance was indispensible. He was also adept at paying attention to the details of local business. Rajar also organized extremely helpful meetings and conferences for the Asian country managers. Rajar facilitated meetings where country managers could share their best practices and discuss ways of developing local programs and handling difficult situations. Through these meetings, the Lundbeck Asia managers gained a sense of association and pride in being part of Lundbeck. Overall, Rajar was a good coach and mentor and was a significant player in the creation and execution of the business plan for Lundbeck Korea.

The First Lundbeck Product in Korea: Cipram

Lundbeck began by marketing Cipram, the forerunner of Lexapro, in the newly established Korean subsidiary in 2002. For the purpose of distributing and marketing Cipram, Lundbeck entered into a sales alliance with Whanin, a local Korean firm, by establishing a separate business unit. Each firm agreed to invest an increasing number of resources into the Cipram business unit each year. However, this business unit was only established for the marketing of Cipram. If Lundbeck were to launch a different class of drugs, it would do so on its own or under a separate arrangement.

The launching of Cipram was Lundbeck Korea's first of many successful attempts to debunk local myths. Initially, many industry leaders doubted the success of Cipram, as it would be the fifth SSRI in the market. Since the other four products were well established and better priced, there was little chance for the launch of Cipram to be successful. However, within three years, Lundbeck was able to capture almost 8.3 per cent of the highly competitive and generic-filled market with Cipram, thereby making Lundbeck Korea a major market player. As a comparison, the other major anti-depressant medications in the Korean market in 2005 were Seroxat (12 per cent of market share), Effexor (11 per cent), and Paxil CR (five per cent). The rest of the market was dominated by generics. This initial success allowed Jun to gain an upper hand that gave Lundbeck an advantage in future contract negotiations with the local partner.

The Launch of Ebixa

Ebixa was the only medication available for the treatment of severe stages of Alzheimer's. All other drugs on the market only targeted mild and moderate cases. Since most Alzheimer's patients would enter the severe stage long before they died of the disease, Ebixa was an important medication. In most markets, Lundbeck sold Ebixa as a new product; and in fact, Ebixa had been registered many years ago by a Korean pharmaceutical firm, but unfortunately it was poorly promoted in the Korean market.

Since Ebixa had been registered many years earlier, the price set by the government insurance regulator was very low, in fact well below the current production cost. Jun and his staff combined Lundbeck's competencies with their understanding of the local market. The normal way to convince the insurance regulator to increase the price of a drug was to hire a large law firm and have lawyers present clear and convincing arguments. However, this rarely worked, and so after consultation with an old colleague who was familiar with the politics of medical insurance pricing, Jun chose a different approach. He decided to put Lundbeck's highly specialized knowledge and small size to work by developing personal contacts with members of the regulatory body to win over both their hearts and their minds. Though, of course, Jun and his staff needed to provide persuasive evidence, they decided that they would also try to win the members over with emotional arguments. Jun argued that:

> Since Korean society is still a Confucian society, we have a very high regard for elder members of society. So, we met the key people and told them that this is the only medicine that can help severe Alzheimer patients. We asked them to imagine if their mother, father or close relative had Alzheimer's. Would you want them to be without medication when they entered the severe state? In this way, we convinced them that the product was necessary, and since it was the only available product on the market, it should have a price equal to other Alzheimer medications.

In the end, they were able to successfully argue for a substantially greater price for Ebixa. By opening up this new market, the Ebixa case demonstrated to Jun that local expertise played a significant role in achieving an unprecedented success in the industry.

The Lexapro Launch: A Conflict of Strategy

Lundbeck focused on streamlining its key products, and on long-term growth in the CNS industry. This included marketing the new and most innovative products. As part of bringing Lundbeck Asia into step with the rest of the Lundbeck group, Rajar believed that it was important that all the subsidiaries kept up to date with Lundbeck's product offerings. Jun's position was somewhat different; he believed that Lundbeck Korea should simply pursue the path that maximized revenue in Korea.

These diverging perspectives became apparent when Lundbeck introduced Lexapro to replace Cipram. The corporate strategy was to launch a switch-over campaign, which involved convincing doctors to stop prescribing a particular drug and switch to that drug's "next generation" product. By 2005, Rajar felt that Lundbeck Asia was ready to participate in this switch-over campaign. Since Cipram had been launched and promoted by local firms for several years in most of

the other countries in the Asia region, the brand was well known.

In contrast, Cipram had only just been introduced in Korea. Thus, in the Korean market it was a new drug, which made the Korean situation different in two ways. First, Lundbeck Korea was just beginning to build the brand awareness in Korea; and second, since Cipram had just been launched in Korea, Cipram still had four years in which generic copies could not be introduced into the market. To avoid sending confusing signals to doctors, sales reps and other stakeholders, and to capture the benefits from the exclusivity period, Jun proposed a special Korea strategy. He believed Lundbeck Korea should continue to sell Cipram until the brand was fully established and then introduce Lexapro.

Rajar disagreed. He argued that a generic company might register a generic version of Lexapro. If it did, the generic brand would be the original and Lexapro would become the generic in the Korean market. Jun's team argued that such a possibility would be highly improbable in Korea due to the data that would have to be gathered and presented to the regulatory board. Rajar retorted that while it might be improbable, it was not impossible. As long as any possibility remained, he would not allow it.

Jun, rightly or wrongly, felt that Rajar was using the possibility of a generic brand entering the market as an excuse not to allow Korea to pursue an independent strategy. According to Jun, what Rajar really seemed to be saying was that Korea was part of Lundbeck and the launching of Lexapro was part of the corporate strategy. Lundbeck's strategy of specialization was to promote its newest and most innovative drugs. The tension was clear; Rajar, as regional vice president, was focused on developing a strong Asia market that was integrated into the Lundbeck strategy. Jun, as the country manager of Korea, wanted to build Lundbeck Korea and maximize long-term growth and profits in Korea.

Rajar was the regional boss, and his preference was to put Lexapro on the market as soon as possible. Thus, assuming Lexapro passed all government regulations in a timely manner, it would be launched in Korea in early 2006. The result would be that Jun would face an uphill battle in his switch-over campaign. Since they had only been prescribing it for a few years, many Korean psychiatrists were still very happy with Cipram. The Whanin representatives were upset because they saw Cipram as having good margins and consistent sales. They were not interested in introducing an entirely new product when they were making money on the old one. However, the decision was made final. While this may have been the most visible sign of conflict between Jun and Rajar, there was a growing number of issues that Jun felt Lundbeck Asia was not handling in the best interests of Korea. He felt strongly that Korea was quite different from other countries in the region.

Conflict in the Placement of Marketing Resources

Jun had dedicated an enormous amount of his staff's time and energy on building relationships with the country's top psychiatrists in the CNS industry rather than the more common approach of marketing to a broader base of practitioners. In Jun's opinion, the management of these key opinion leaders was quite important. "Korea is a very hierarchical society. Also, since we only have one culture, we have very strong barriers to becoming influential and powerful; however, once you overcome those barriers you gain extremely high credibility and power in the market." He felt that there was no sense targeting the lower tier of doctors until he had the support of the opinion leaders. A positive endorsement from these doctors would be more effective than any other marketing campaign.

Rajar was keen to make certain that resources were not wasted, costs were controlled and that marketing and business practices were perceived to be beyond reproach. Thus, Rajar believed that this type of selective marketing was risky. A broader marketing approach had worked well in the other Asian markets, and Rajar was not convinced that Korea was much different because other Asian societies were also quite hierarchal. Rajar continued to ask Jun how Lundbeck could justify spending significant amounts of money to target so few individuals. Rajar insisted that Jun should use these resources to fund other programs. He wanted Jun to integrate his approach into the established Lundbeck approach.

In addition, Rajar felt that the client entertainment that occurred in the Korean subsidiary was excessive, and as such a poor business practice. He certainly did not feel that there was a need to spend so much time eating, drinking, and going to karaoke bars with the top doctors. In contrast, Jun felt that Rajar needed to be more open-minded to the Korean situation:

> Rajar didn't understand the importance of our entertainment culture. In Korea, social events generally consist of a main meal in a restaurant, followed by drinking in a bar or pub, and then topped off with a visit to the karaoke bar. Usually when he was in town, he went home after dinner. However, this is our culture and he needed to understand it. When he went home early, it made a poor impression on the people with whom I was trying to build relationships. In Korean culture, togetherness and harmony are very important, but I don't think he understood this.

In terms of cultural understanding, Jun recalled giving a doctor a few small gifts with the Lundbeck logo imprinted on them. The doctor thanked him and told him that the current sales representatives from other foreign companies were so restricted by their global ethical regulations that they could not even bring small gifts. Jun and the doctor agreed that these regulations reflected a poor appreciation for the Korean culture, where it is expected and customary to bring gifts.

Jun's Car and its Effect on Lundbeck's Image

Jun also recalled a story that to him represented the cultural tension that existed with his relationship with Lundbeck Asia and Rajar. For Jun, this was a microcosm of how difficult it was being controlled by the regional office.

> When I first started as Lundbeck Korea country manager, the person who hired me asked me what kind of car I wanted. I thought about it carefully because it is very important in Korea to match your car with your status – too low of a car and you will not be respected, too high of a car and you will look arrogant. Since I was young and the country manager of a newly established subsidiary, I felt that I needed to be quite modest. The original boss allowed me enough budget to get a stylish midsize car with a 2.5 litre engine. However, I thought that was a little too much for me, so I got one with a smaller engine on a three year lease. Then, in 2005, I had to renew the car. So, I proposed to Rajar that I get a car that was not too high end, but something better than I had been driving. I didn't want anything too fancy; however, as an important symbol to show that our company was growing, I believed that I should have a car of above average status. The symbolism is quite important – my customers really notice this type of thing, so it is important for doing business. So, I proposed that I get a full-size sedan. But he thought that was unnecessary and told me that status is not important and that I should break that type of thinking; however, I cannot change the importance that Koreans place on symbolism. He wanted me to provide him every detail on the cars that I was considering and then insisted I buy a car of similar status as the one I had been driving. When I went out to entertain the opinion leaders, they commented on my car. This was not good for our business. It made it harder for me to gain their respect. Everyone might think this is a small thing, but it is not. It really discourages the local manager and is bad for the company's image.

Lundbeck's Strategy Interpreted by Jun for Korea

Jun believed that he had a very clear understanding of Lundbeck's core strategy. Integrating the uniqueness of Korea with the global beliefs of Lundbeck had always been his goal. In every room in the Lundbeck Korea office was a poster from headquarters that highlighted the strategy of Lundbeck. Jun's goal was to find a balance

between integrating local expertise with the overall strategy of Lundbeck.

Jun believed that in order to convince the Korean medical profession and government regulators that Lundbeck's products were substantially more valuable than the products offered by the general pharmaceutical firms and the generic producers, the staff would have to mirror the specialization of the company. So, from the beginning, all key people in Lundbeck Korea were required to have a CNS background. This gave Lundbeck instant credibility and allowed it to quickly establish a foundation in the CNS field. Jun believed that this expertise was the basis for Lundbeck Korea's major achievements.

In respect to speed, he understood that in the Korean market, response times were important. Abandoning the traditional hierarchical organizational structures that were prevalent in Korean firms, Lundbeck Korea established a lean organization with straight reporting lines. Jun believed that this agility in the market was one of Lundbeck's advantages over bigger competitors. It allowed Lundbeck to hear customer demand quickly, discuss options immediately, and implement decisions swiftly.

In respect to integration, Lundbeck's Korean partner Whanin had a very different set of competencies, organizational structure, and business philosophy. As such, it would have been very easy for Lundbeck Korea and Whanin to be constantly butting heads. Do they follow the Lundbeck way or the Whanin way? Using a spirit of integration, Jun chose to avoid this conflict by having each group focus its energies where it had a competitive advantage.

In respect to results, by maintaining focus on the results, Lundbeck Korea easily surpassed the business case set for it. Jun argued that Lundbeck Korea "have been able to constantly add value every year. The key is that we generate better results and add value in everything we do." Lundbeck Korea focused its energies on projects and activities that generated the most income.

The Decision

The question for Andersen, vice president for Lundbeck, was how to move Lundbeck Korea forward. He believed that Rajar had done a very good job implementing Lundbeck's strategy in the Asian markets. In fact, under Rajar's leadership Korea had emerged, in Andersen's opinion, as the market with the most potential. Lundbeck Korea had good protection from generics, a strong government insurance program for reimbursement, decent pricing on its products, a large and growing market, and a highly innovative staff. Rajar had done a very good job at running a tight ship – he focused on control, cost effectiveness, knowledge transfer, and instilling ethical business practices, which are all important roles for a regional manager. However, Andersen wondered if Rajar was putting too little emphasis on developing new and unique opportunities. The question for Andersen was whether Jun would blossom without the controls or whether the lack of guidance would hinder his development. In addition, as the goal was to integrate all aspects of the value chain, Andersen certainly did not want Korea to be off in its own little world.

In addition, there seemed to be a conflict of personalities. In several meetings, Andersen had sensed poor chemistry between Jun and Rajar. He could not exactly put his finger on it, and it was impossible for him to get Jun to open up about this. Andersen believed that an individual's strengths and weaknesses were part of the strategic decision process. Moreover, he wondered whether Lundbeck Korea might blossom under less strict management and at the same time benefit from a direct relationship with the headquarters functions in Copenhagen. Finally, Andersen wanted to find a way to create more focus on Korea in headquarters.

Of course, no decision is made in a vacuum. The Chinese subsidiary, which had been part of the Lundbeck Asia division for many years, was also growing rapidly. Even though China was in a different position than Korea, would the Chinese managers expect the same treatment? And should they receive it? Also, Andersen had to consider his key person in Asia, Asif Rajar. How would he react to having one of his fastest growing units taken away from him?

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Christopher A. Bartlett

CASE 4.3 PHILIPS VERSUS MATSUSHITA: THE COMPETITIVE BATTLE CONTINUES

Professor Christopher A. Bartlett prepared the original version of this case, "Philips versus Matsushita: A Portrait of Two Evolving Companies," HBS No. 392-156. This version was prepared by the same author and is a continuation of a series of earlier cases by Professor Bartlett including "Philips versus Matsushita: Preparing for a New Round," HBS No. 399-102, "Philips and Matsushita: A New Century, A New Round", HBS No. 302-049, and "Matsushita Electric Industrial (MEI) in 1987," HBS No. 388-144. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Throughout their long histories, N.V. Philips (Netherlands) and Matsushita Electric (Japan) had followed very different strategies and emerged with very different organizational capabilities. Philips built its success on a worldwide portfolio of responsive national organizations while Matsushita based its global competitiveness on its centralized, highly efficient operations in Japan.

During the first decade of the 21st century, however, both companies experienced major challenges to their historic competitive positions and organizational models. Implementing yet another round of strategic initiatives and organizational restructurings, the CEOs at both companies were taking their respective organizations in very different directions. At the end of the decade, observers wondered how the changes would affect their long-running competitive battle.

Philips: Background

In 1892, Gerard Philips and his father opened a small light-bulb factory in Eindhoven, Holland. When their venture almost failed, they recruited Gerard's brother, Anton, an excellent salesman and manager. By 1900, Philips was the third largest light-bulb producer in Europe.

Technological Competence and Geographic Expansion

While larger electrical products companies were racing to diversify, Philips made only light-bulbs. This one-product focus and Gerard's technological prowess enabled the company to create significant innovations. Company policy was to scrap old plants and use new machines or factories whenever advances were made in new production technology. Anton wrote down assets rapidly and set aside substantial reserves for replacing outdated equipment. Philips also became a leader in industrial research, creating physics and chemistry labs to address production problems as well as more abstract scientific ones. The labs developed a tungsten metal filament bulb that was a great commercial success and gave Philips the financial strength to compete against its giant rivals.

Holland's small size soon forced Philips to look aboard for enough volume to mass produce. In 1899, Anton hired the company's first export