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Market Engineering Research for the Generic Pharmaceutical Market in the Philippines, 1997-2007

Market Overview

Overview

The Philippines pharmaceutical industry is one of the most lucrative businesses in the country. It is an open market with little government control over drug pricing. The industry is especially lucrative for multinational companies with long established patented products. The Philippines regulations protect patented products for a period of 20 years, hence enabling companies to wholly penetrate the market and reap substantial gains. Consequently, drug prices in the Philippines range from 250 percent to 1,600 percent higher than average world prices.

Unfortunately, only about 5 percent of the population can afford such expensive medication. However, the small percentage of population provides the high turnover for large multinational companies. The remaining 95 percent of the population find less expensive alternatives more desirable. Hence, this presents opportunities for generic drug manufacturers. In 2001, the generic pharmaceutical market in the Philippines was estimated at $173.3 million. The market is expected to have robust growth during the forecast period and is expected to present many opportunities for generic manufacturers.

Definition

This chapter provides an analysis of the generic pharmaceutical market in the Philippines from 1997 to 2007. The base year of this study is 2001, unless otherwise stated. All revenues in this study are presented in U.S. dollars.

Figure 5-1 shows the currency conversion rates from the Philippines Peso to $1.

Figure 5-1

Generic Pharmaceutical Market: Conversion Rate of Pesos to $1 (Philippines), 1997-2007

Year	Conversion Rate (Pesos to $1.00)
1997	29.6
1998	39.0
1999	38.5
2000	44.8
2001	53.6
2002–2007	50.1

Source: Frost & Sullivan

The Generic Pharmaceutical Market in the Philippines

Challenges Facing the Market

Figure 5-2 shows the challenges in the Philippines generic pharmaceutical market.

Figure 5-2

Generic Pharmaceutical Market: Impact of Industry Challenges (Philippines), 2002-2007

Challenge	1-2 Years	3-4 Years	5-6 Years
High dependency on imported raw materials increases production cost	High	High	High
Poor infrastructure in remote areas delays product reach	High	High	High
Tough competition hinders expansion of market share	High	High	High
Aggressive market coverage by multinational companies poses challenges for local manufacturers to penetrate the market	High	High	High
Large population base and wide geographical area do not translate into market demand	Medium	Medium	Medium

Source: Frost & Sullivan

High Dependency on Imported Raw Materials Increases Production Costs

As 95 percent of the raw materials for drugs in the country are imported, prices are dependent on currency exchange fluctuations. To manage this problem, manufacturers usually build in these provisions into production cost. This can hamper profitability of generic companies, as they usually compete on pricing.

Poor Infrastructure in Remote Areas Delays Product Reach

Many of Philippine's remote areas have poor infrastructure. Outside the Metro Manila region, the transportation and telecommunication systems are often inadequate. This presents a challenge for manufacturers to achieve consumer product reach. Although local distributors are hired to achieve market penetration in some areas, the cost for distribution is often added to the product cost, which makes them more expensive. In addition, the cost for distribution to very remote areas is often higher than projected profits.

Tough Competition Hinders Expansion of Market Share

The top three players in the Philippines generic pharmaceutical market control approximately 90 percent of the market. The remaining 10 percent is shared by over 60 manufacturers. The top 3 manufacturers have a very strong hold on the market; hence eroding their market shares would require a huge amount of effort by the smaller companies, especially in terms of funding.

Aggressive Market Coverage by Multinational Companies Poses Challenges for Local Companies to Penetrate the Market

Due to their strong financial resources, multinational companies can afford to establish aggressive marketing campaigns for products. Marketing efforts supported by a good and highly trained sales force, extensive distribution network, intensive sampling, sponsorship scientific meetings, and entertainment, all enable large companies to gain support from physicians to advocate their products. Hence, despite the availability of less expensive generic drugs, many physicians opt to prescribe branded drugs.

Large Population Base and Wide Geographical Area Do Not Translate into Market Demand

The large population base in the Philippines does not necessarily translate into market demand for healthcare products. As majority of the population belongs to the low-income group, they cannot afford the high cost of medical treatment even if they use generic products. In addition, even if they can afford the generic version of a drug, most often it is not available at the point-of-sales, especially in rural areas.

Market Engineering Measurement Analysis

Chart 5.1 shows the Market Engineering measurements of the Philippines generic pharmaceutical market.

Chart 5.1

Generic Pharmaceutical Market: Market Engineering Measurements (Philippines), 2001

Measurement Name	Measurement	Trend
Market age	Growth stage	N/a
Revenues (2001)	$173.3 million	Up
Potential revenues (2007)	$510.9 million	---
Current market growth rate (2001)	(9.1%)	Up
Forecast period market growth rate (2001–2007)	19.7%	---
Price sensitivity	High	---
Competitors (active market competitors in 2001)	3	Stable
Companies entering the market	---	---
Companies exiting the market	None	---
Market concentration (percent of 2001 market controlled by top three competitors)	90.0%	Up

Source: Frost & Sullivan

In 2001, the generic pharmaceutical market in the Philippines was considered to be in the growth stage with potential for further expansion. The generics market accounts for approximately 15.5 percent of the total pharmaceutical market in the country. In 2001, the generic market was dominated by 3 manufacturers with a combined share of 90.0 percent. The largest generic manufacturer, United Laboratories, was also the largest player in the total pharmaceutical market with 10 percent of the total pharmaceutical market. In the generic market, competition among the manufacturers is very fierce, especially with over 60 smaller manufacturers fighting for the remaining 10 percent of the generic market.

Market Drivers

Figure 5-3 shows the market drivers of the Philippines generic pharmaceutical market.

Figure 5-3

Generic Pharmaceutical Market: Market Drivers Ranked in Order of Impact (Philippines), 2002-2007

Rank	Driver	1-2 Years	3-4 Years	5-6 Years
1	Limited purchasing power drives demand for less expensive generic drugs	High	High	High
2	Brand familiarity spurs demand for products	High	High	High
3	Proof of quality and efficacy lead to physicians' prescription	High	Medium	Medium
4	Improving economic conditions of the country spur healthcare spending	Medium	Medium	Medium
5	Government plans to limit distribution of branded generics by MNCs are expected to spur demand for local generics products	Low	Low	Low

Source: Frost & Sullivan

Limited Purchasing Power Drives Demand for Less Expensive Generic Drugs

As 95 percent of the population in the Philippines belongs to the low-income group, purchasing power is limited. Medical treatments, despite its importance, are often neglected due to the high costs. Patients that have just enough to afford treatment prefer the less expensive alternatives like generic versions of drugs. This factor is likely to drive demand for good quality generic products in the country.

Brand Familiarity Spurs Demand for Products

Despite the general perception about the inferior quality of local products, some manufacturers have an outstanding brand image. For example, products from United Laboratories, Pascual Laboratories, and Hizon Laboratories are perceived to be of good quality. These products are so popular that they generate word-of-mouth publicity, which in turn propels other patients to purchase the drug. Hence, market familiarity with the generic brand spurs demand for products.

Proof of Quality and Efficacy Lead to Physicians' Prescriptions

Establishing a good rapport with physicians may help in persuading them to try manufacturers' products. Once they are convinced of the quality and efficacy, there is a high chance that the physicians would choose generic products, especially if they see that patients from the lower income group can afford it easily.

Improving Economic Conditions of the Country Spur Healthcare Spending

As Philippine's political scene seems to be stabilizing, its economy is also rebounding. An economic improvement causes a chain-effect whereby people are more willing to spend more on other expenditures such as medical treatment. However, less expensive drugs would still be the preference as people would still be price-conscious. Thus, improving economic conditions are likely to drive demand for generics.

Government's Plans to Limit Distribution of Branded Generics by MNCs are Expected to Spur Demand for Local Generics Products

One of the many attempts of the government to curb healthcare cost includes making local production of generic drugs the only available option in the market. To boost the local pharmaceutical industry, speculations are rife that the Philippines Government is planning to stop marketing branded generic drugs in the country. Branded generic drugs are defined as drugs by multinational pharmaceutical companies whose patents have expired. Hence, these drugs have established brand names. This move is aimed at products that have locally manufactured generic substitutes. If this plan is implemented in the Philippines, it can boost the demand for generic products.

Market Restraints

Figure 5-4 shows restraints of the generic pharmaceutical market in the Philippines.

Figure 5-4

Generic Pharmaceutical Market: Market Restraints Ranked in Order of Impact (Philippines), 2002-2007

Rank	Restraints	1-2 Years	3-4 Years	5-6 Years
1	Perception of generic products as low in quality deters end-user purchases	High	High	High
2	Parallel imports of drugs reduce opportunities of local manufacturers	High	Medium	Medium
3	High marketing and promotional costs lower profit margins for manufacturers	Medium	Medium	Medium

Source: Frost & Sullivan

Perception of Generic Products as Low in Quality Deters End-User Purchases

The perception that generic products are "cheap but poor in quality" is common among physicians and patients. Many physicians perceived that compared to multinational companies, local generic medical representatives are not well trained and groomed; these manufacturers offer no sponsorships and provide less entertainment. These perceptions negatively affect the choice of products by physicians.

Parallel Imports of Drugs Reduce Opportunities of Local Manufacturers

Due to limited budgets in public hospitals and the high cost of drugs in the Philippines, government hospitals source drugs from other suppliers that can provide the lowest cost, even if it is imported. Most of the time they purchase generic products from India, which are less expensive than local manufacturer prices. These represent lost opportunities for local manufacturers. The restraint's impact is anticipated to decrease from high in the immediate future to medium in the subsequent years due to the expected government actions to curb parallel importing of drugs.

High Marketing and Promotional Costs Lower Profit Margins for Manufacturers

Physician's prescriptions are often the gateway to market access. High promotional costs in terms of physicians' incentives are generally incurred when marketing a product. Physicians often demand a high commission because of the important role they play in pushing manufacturers' products. Further, due to tight competition among manufacturers, sales representatives are often forced to outbid each other to gain physicians' favors.

The Philippines Government Regulations

Several regulations are applicable to the generic pharmaceutical market in the Philippines. Some of these regulations are as follows:

- **Generics Act of 1988**–This act requires physicians to note down the generic names of drugs when writing a prescription to enable patients to obtain lesser-priced drugs if desired and if available. However, the implementation of this act was hampered due to the lack of funds to monitor actions/programs. In 1998, approximately 90 percent of the physicians complied. However, according to the Philippine Council for Health and Development, only 40 percent of the physicians complied in 2001.
- **Price Act**–This act is meant to ensure availability of basic necessities including drugs classified as essential by the Department of Health (DOH) at reasonable and affordable prices.
- **National Health Insurance Act of 1995--This** Act was designed to provide health insurance benefits, which would enable reimbursement for drugs and medicines included in the National Formulary for in-patients. However, its low coverage and low benefits did not generate enough influence to lower drug prices.
- **Consumer Act of the Philippines**–This Act provides protection for consumers, including patients against unfair and unconscionable acts or practices. However, this law is not strong enough to prohibit manufacturers' marketing practices, which contribute to the high cost of drugs.

Revenue Forecasts (1997–2007)

Figure 5-5 and Chart 5.2 show the historical and projected revenues of the Philippines generic pharmaceutical market from 1997 to 2007.

Figure 5-5

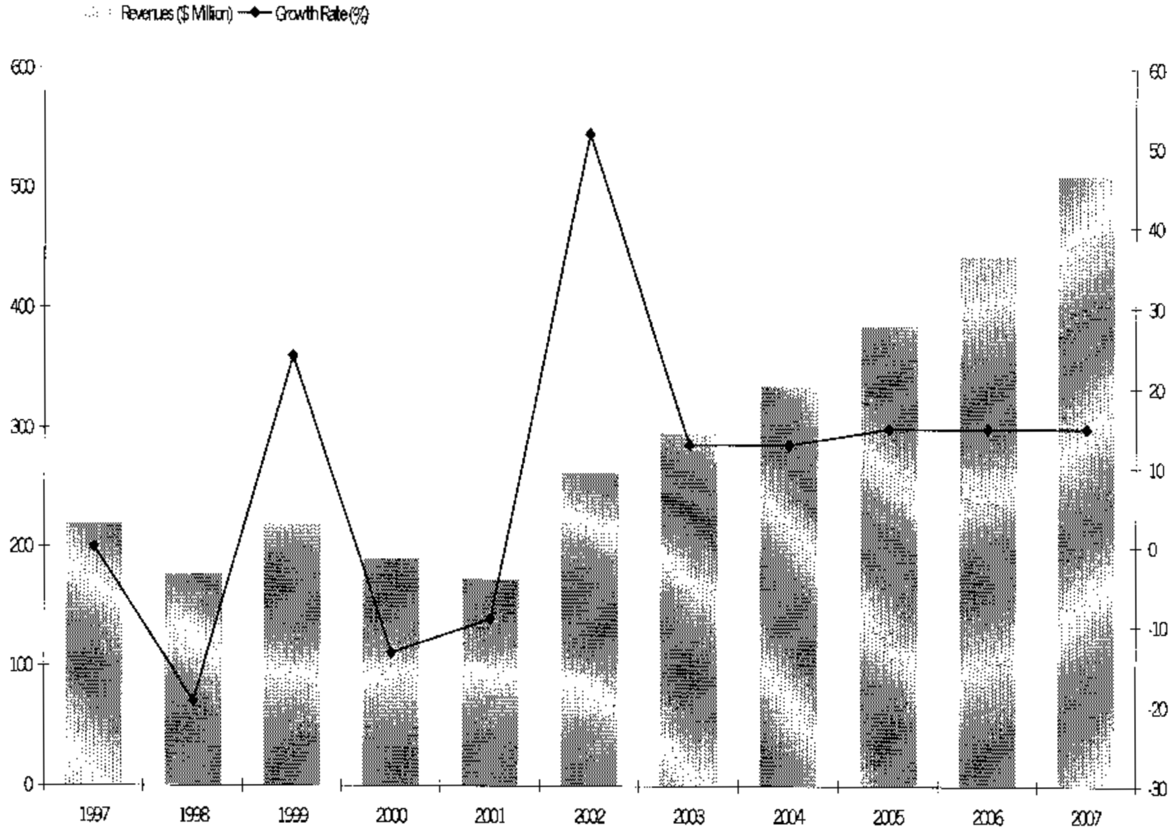
Generic Pharmaceutical Market: Historical and Projected Revenues (Philippines), 1997-2007

Year	Revenues ($ Million)	Revenue Growth Rate (%)
1997	220.0	---
1998	177.4	(19.4)
1999	220.0	24.0
2000	190.8	(13.3)
2001	173.3	(9.1)
2002	263.1	51.8
2003	297.3	13.0
2004	335.9	13.0
2005	386.3	15.0
2006	444.2	15.0
2007	510.9	15.0
Compound Annual Growth Rate (2001-2007): 19.7%		

Note: All figures are rounded; the base year is 2001. Source: Frost & Sullivan

Chart 5.2

Generic Pharmaceutical Market: Historical and Projected Revenues (Philippines), 1997-2007



Source: Frost & Sullivan

In 2001, the Philippines generic pharmaceutical market was valued at $173.3 million with a negative growth of 9.1 percent. The negative growth rates from the beginning of the forecast period (1998) to the base year (2001) are due to the depreciation of the Philippines Peso against the U.S. dollar. In terms of local currency, the market actually grew at the following rates:

- 1998: 6.2 percent
- 1999: 22.4 percent
- 2000: 0.9 percent
- 2001: 8.0 percent

The generic market is expected to experience robust growth in 2002 with improving economic conditions. Evidence of high growth is reflected in the first quarter of 2002 whereby revenues of the market are up by 115.0 percent from the first quarter results in 2001. The market is projected to continue its growth trend during the forecast period by 13.0 percent to 15.0 percent annually. The generics market is expected to generate $510.9 million by 2007 at the CAGR of 19.7 percent during the forecast period.

Distribution Trends

Figure 5-6 shows the distribution trends of the generic pharmaceutical market in the Philippines.

Figure 5-6

Generic Pharmaceutical Market: Distribution Channel Trends of Major Market Participants (Philippines), 2001

Distribution Channel	Percent of Revenues	02/01 Trend
Retail Pharmacies	70.9	Stable
Private Hospitals	17.7	Stable
Clinics/GPs	6.8	Down
Public Hospitals	4.6	Up
TOTAL	100.0	

Note: All figures are rounded; the base year is 2001. Source: Frost & Sullivan

Retail pharmacies are the main distribution channel for generic pharmaceutical products, accounting for approximately 70.9 percent of the revenues. It is expected to continue to be the main distribution channel for generic drugs in 2002. Revenue contribution from the retail pharmacies is high as self-prescription, even for ethical drugs, is very common in the Philippines. During the forecast period, distribution to public hospitals is expected to increase as the government is anticipated to help boost the local pharmaceutical industry.

Pricing Trends

Prices of generic pharmaceutical products have been experiencing a stable trend. Competition based on pricing is relatively difficult to sustain as 90 percent of the generic pharmaceutical market in the country is dominated by top 3 players. Only when AFTA is in affect, prices are expected to drop due to an increasingly open market, which poses more threats from other Asian generic multinational companies. In addition, the Product Harmonization Agreement would intensify the competitive environment as more products enter the market and the need for multiple registration is eliminated. Hence, products registered in one of the signatory countries can enter any market in the region.

Competitive Structure

Figure 5-7 shows the competitive structure of the Philippines generic pharmaceutical market.

Figure 5-7

Generic Pharmaceutical Market: Competitive Structure (Philippines), 2001

Number of Companies in the Market	Approximately 70
Types of Competitors	Asian multinational manufacturers
	Local manufacturers
Distribution Structure	In-house distribution (self-distribution)
	Outsourced distribution (for instance, Zuellig, Diethelm)
Tiers of Competition	3 Tiers:
	Tier 1: United Laboratories–80.0%
	Tier 2: Pascual Laboratories, Hizon Laboratories–10.0%
	Tier 3: First Fil-Bio, Lloyd Laboratories, Kinderpharm, etc.–10.0%
Notable Acquisitions, Mergers	-
Key End-User Groups	Pharmacies (patients–self prescription)
	General Practitioners
Competitive Factors	Price
	Distribution network
	Quality

Source: Frost & Sullivan

There are approximately 70 registered generic manufacturers in the Philippines. The market consists of Asian multinational and local generic manufacturers. In 2001, the market consisted of 3 tiers of competition. United Laboratories is the largest manufacturer and sole occupant of the first tier with 80.0 percent market share. The second tier includes Pascual

Laboratories and Hizon Laboratories with a combined market share of 10.0 percent. The last tier comprises remaining manufacturers such as First Fil-Bio, Lloyd Laboratories, and Kinderpharm with 10.0 percent market share. Competition is the toughest in the third tier as companies fight to gain fraction share increases.

Main prescribers of generic products include general practitioners and patients that self-prescribe medication based on experience or word-of-mouth reference. A key competitive factor in the market is price with end-users looking for less expensive alternatives to expensive, patented drugs. Another factor is the distribution network; one of the reasons for generic brands losing out to patented drugs is the unavailability of product at the point-of-sale. Quality is also an important competitive factor as physicians and patients need to be convinced that the product is as good as its branded counterpart in order to prescribe the product.

Market Share Analysis

Figure 5-8 and Chart 5.3 show market share analysis of the generic pharmaceutical market in the Philippines.

Figure 5-8

Generic Pharmaceutical Market: Market Share Trends of Major Market Participants (Philippines), 2001

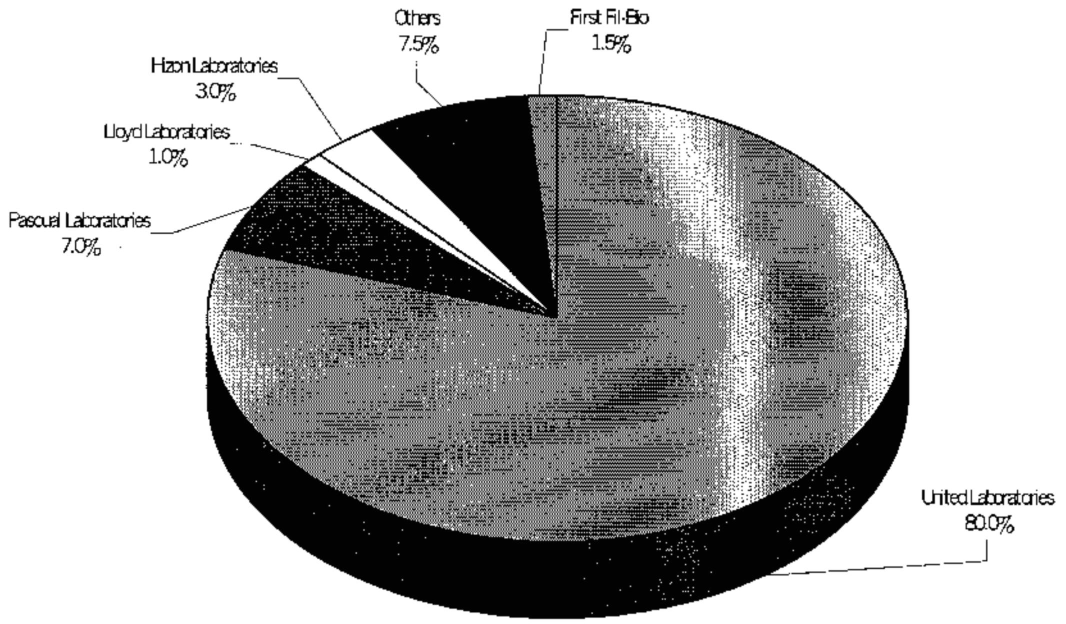
Company	**2001 (%)**	**01/00 Trend**
United Laboratories	80.0	Up
Pascual Laboratories	7.0	Down
Hizon Laboratories	3.0	Stable
First Fil-Bio	1.5	Down
Lloyd Laboratories	1.0	Stable
Others	7.5	Down
TOTAL	100.0	

Key:
Others include Berna, Dankos, Kinderpharm, etc.

Note: All figures are rounded; the base year is 2001. Source: Frost & Sullivan

Chart 5.3

Generic Pharmaceutical Market: Market Share Trends of Major Market Participants (Philippines), 2001



Key: Others include Berna, Dankos, Kinderpharm, etc.

Source: Frost & Sullivan

United Laboratories (UL) led the market with 80.0 percent market share. This company has adopted an interesting marketing strategy, whereby it formed many subsidiaries to market its products. This strategy is most likely meant to conceal the fact that United Laboratories monopolize the generic pharmaceutical market. Some of UL's subsidiaries include:

- Biomedis
- LR Imperial Inc.
- Therapharma
- United American Pharmaceutical
- Pediatrica Lab

- Medichem Pharm

Pascual Laboratories and Hizon Laboratories are the second and third-largest generic manufacturers with 7.0 percent and 3.0 percent market shares, respectively.

Product Analysis

Figure 5-9 shows the top 5 products in the Philippines generic pharmaceutical market.

Figure 5-9

Generic Pharmaceutical Market: Top 5 Products (Philippines), 2001

Product	Therapeutic Class	Revenues ($ Million)	Units
Alaxan	Non-narcotic analgesics	11.1	368,800
Neozep	Cold preparations	7.3	833,800
Biogesic	Non-narcotic analgesics	7.0	866,200
Solmux	Expectorant	5.8	1,569,000
Tuseran	Cold preparations	4.9	254,200

Source: Frost & Sullivan

Strategic Recommendations

Establish Strong Sales Force to Market and Promote Products

It is obvious that physicians are the gatekeepers of the Philippines market. Their prescriptions are likely to not only generate one-time revenues for manufacturers but also generate repeat purchases by the same patient and others referred by patients using the drug. Hence, it is very important for the manufacturers to establish product familiarity among physicians.

As an action plan, a strong sales team must be established. The sales team being front-liners of the company must convey a good corporate image. They must be well trained, have good product knowledge, and should be well groomed, in addition to being very mobile. When a good rapport with physicians is established, there is a chance that physicians will try manufacturers' products.

Establish Good Distribution Network to Ensure Availability of Products

One of the key competitive factors in the Philippines generic pharmaceutical market is a good distribution network. Distribution is crucial to ensure that products promoted and advertised are available at the point-of-sales. If the product is not available, loss of opportunity occurs and more effort would be required to regain product loyalty from the market.

An alternative to ensure product availability is to have one's own distribution arm. However, for new companies entering the market, this option does not seem to be economically justifiable. Hence, it is better to have an exclusive working agreement with a distributor to market a manufacturer's products.

Develop Products in Less Competitive Therapeutic Areas

As competition is high in some of the therapeutic areas such as non-narcotic analgesics or cold preparations, manufacturers may want to consider developing products in less competitive areas. Opportunities would arise in the next 5 years as patents of some blockbuster products will expire. For example, the patent for Schering-Plough's Claritin (for allergies) is about to expire by the end of 2002. Other popular drugs that would expire include GlaxoSmithKline's depression drug, Wellbutrin and Roche Pharmaceutical's obesity drug, Xenical. This presents good opportunities for generic manufacturers to explore the market.

6

Market Engineering Research for the Generic Pharmaceutical Market in Singapore, 1997-2007

Market Overview

Overview

The Singapore generic pharmaceutical market was valued at $27.8 million in 2001. It is estimated to account for 10 percent of the total pharmaceutical market in the country. Competition is very tight as approximately 20 manufacturers and distributors exist in the market. However, despite the intense competition and limited market size due to a small population base, opportunities abound for generic manufacturers with major patents expiring by 2005. Schering-Plough's Claritin and Bayer's Ciprobay are scheduled to go off patent in December 2002 and November 2003, respectively. This is expected to lead to significant expansion of the Singapore generic pharmaceutical market.

Definition

This chapter provides an analysis of the generic pharmaceutical market in Singapore from 1997 to 2007. The base year of this study is 2001, unless otherwise stated. All revenues in this study are presented in U.S. dollars.

Figure 6-1 shows currency conversion rates for Singapore dollar to $1 from 1997 to2007.

Figure 6-1

Generic Pharmaceutical Market: Currency Conversion Rates of S$ to $1 (Singapore), 1997-2007

Year	Conversion Rate (S$ to $1.00)
1997	1.64
1998	1.66
1999	1.67
2000	1.67
2001	1.84
2002–2007	1.79

Source: Frost & Sullivan

Generic Pharmaceutical Market in Singapore

Challenges Facing the Market

Figure 6-2 lists challenges facing the Singapore generic pharmaceutical market from 2002 to 2007.

Figure 6-2

Generic Pharmaceutical Market: Impact of Industry Challenges (Singapore), 2002-2007

Challenge	1-2 Years	3-4 Years	5-6 Years
Competitive market environment leads to pricing rivalry	High	High	High
Expansion of product pipeline necessary to compete in the market	High	High	High
Limited market size restrains revenue growth potential	Medium	High	High
Multiple product handling limits distribution focus	Medium	Medium	Medium

Source: Frost & Sullivan

Competitive Market Environment Leads to Pricing Rivalry

Singapore's favorable open market policy has attracted many participants, resulting in a highly competitive market. One of the most common marketing strategies that most companies adopt to gain market shares is to lower product prices. This poses a challenge for companies when trying to achieve a certain level of profitability. Hence, to sustain business profitability in the long run, manufacturers need to maintain low costs and prices through economies of scale in production.

Expansion of Product Pipeline Necessary to Compete in the Market

In this highly competitive market, manufacturers have to constantly replenish their product pipeline to ensure continuous launch of products. Thus, manufacturers always need to keep a close watch on the movement of the industry and seize opportunities to manufacture generics for products having good potential and high demand. In order to gain first-mover advantages in this market, manufacturers must register generic products before branded products go off patent. This move will help them to attain a higher share of the generic pharmaceutical market in Singapore.

Limited Market Size Restrains Revenue Growth Potential

Despite the healthy growth of the pharmaceutical industry in Singapore, the country's small population is a major restraint to market growth. Therefore, despite the high purchasing power of the population, the demand for products is not as high as in other countries in terms of volume. The impact of this particular challenge is medium in the immediate time frame; however, as the market becomes saturated, it will be a major challenge for generic pharmaceutical companies to expand their market.

Multiple Product Handling Limits Distribution Focus

Manufacturers that rely on distributors to handle the logistics of their businesses may face difficulties like distributors not focusing on certain products. As distributors usually represent a wide range of products from various manufacturers, their distributing efforts are diversified and could be concentrated on products that have higher profit margins or greater demand. Hence, manufacturer loyalty on the distributor's part may be absent.

Market Engineering Measurement Analysis

Chart 6.1 illustrates the Market Engineering measurements for the Singapore generic pharmaceutical market.

Chart 6.1

Generic Pharmaceutical Market: Market Engineering Measurements (Singapore), 2001

Measurement Name	Measurement	Trend
Market age	Growth stage	N/A
Revenues (2001)	$27.8 million	Increasing
Potential revenues (2007)	$50.9 million	---
Current market growth rate (2001)	7.8%	Increasing
Forecast period market growth rate (2001–2007)	10.6%	---
Price sensitivity	Low	---
Competitors (active market competitors in 2001)	20	Stable
Companies entering the market	None	---
Companies exiting the market	None	---
Market concentration (percent of 2001 market controlled by top three competitors)	50.0%	Increasing

Source: Frost & Sullivan

Currently, approximately 20 market participants are active in the market with the top three competitors capturing approximately half the market. Singapore's generic pharmaceutical market is considered to be at the growth stage with a decent market size potential by the end of the forecast period. The generic market is expected to improve during the forecast period with many patents expiring between 2002 and 2005.

Opportunities for growth in the generic market could also arise with the increasing worldwide popularity of bioprospecting (the exploration of wild plants and animals) in search of commercially viable genetic and biochemical resources. Given that over 35 percent of the 37 new active substances launched globally in 2001 were biotech products, the issue of biotechnology patent rights will be an interesting development to keep track of, as it could lead to 'generic' biotech drugs that could increase market growth prospects in the country. In light of these opportunities, a CAGR of 10.6 percent is estimated from 2001 to 2007.

Market Drivers

Figure 6-3 shows the market drivers of the Singapore generic pharmaceutical market from 2002 to 2007.

Figure 6-3

Generic Pharmaceutical Market: Market Drivers Ranked in Order of Impact (Singapore), 2002-2007

Rank	Driver	1-2 Years	3-4 Years	5-6 Years
1	Aging population spurs demand for generic pharmaceutical products	High	High	High
2	Economic slowdown spurs demand for generic products	High	High	High
3	Managed healthcare system encourages physicians to use generic versions	High	High	High

Source: Frost & Sullivan

Aging Population Spurs Demand for Generic Pharmaceutical Products

By 2006, 8 percent of the population in Singapore is expected to be aged above 55 years, retired with no source of income. As the elderly are more prone to various ailments, more medication is required to maintain their health. This will increase healthcare expenses and cheaper drugs having good efficacy will be more in demand. This factor is expected to drive demand for generic pharmaceutical products during the forecast period.

Economic Slowdown Spurs Demand for Generic Products

The current economic slowdown has resulted in high unemployment and retrenchment rates, thereby restricting the spending power of people; consequently, healthcare expenditure is also curtailed. As a result, more people would be opting for cheaper generics. In the future, despite the potential rebound of the economy, Frost & Sullivan predicts that people would still opt for generic products if available. This is mainly due to their familiarity with the products and the managed healthcare system in Singapore that was put in place to curb the healthcare spending.

Managed Healthcare System Encourages Physicians to Use Generic Versions

The managed healthcare system is quite popular in Singapore. Most people opt for a managed healthcare insurance system, which ensures them good access to medical treatment whenever required. The objective of this system is to curtail healthcare spending and at the same time, provide people with reasonable access to medical treatment. As a result of the working agreements with policy providers, physicians are compelled to use least expensive medications. This drives demand for generic pharmaceutical products, which are much cheaper than original products.

Market Restraints

Figure 6-4 shows the market restraints of the Singapore generic pharmaceutical market from 2002 to 2007.

Figure 6-4

Generic Pharmaceutical Market: Market Restraints Ranked in Order of Impact (Singapore), 2002-2007

Rank	Restraint	1-2 Years	3-4 Years	5-7 Years
1	Small population base limits market size of the pharmaceutical industry	High	High	High
2	High business-operating costs shrink potential profit margins	High	High	High
3	Tight competition hinders significant increase in market share	High	High	High

Source: Frost & Sullivan

Small Population Base Limits Market Size of the Pharmaceutical Industry

Singapore's relatively small population base restricts demand for pharmaceutical products. Despite the country's increasing purchasing power and highly affluent lifestyles, demand is limited to a certain volume every year. Hence, it is difficult for manufacturers to experience high growth in the market once a product has reached its saturation point. Thus, they need to introduce new products to create fresh demand.

High Business-Operating Costs Shrink Potential Profit Margins

As a trade-off of the efficient infrastructure in Singapore, business-operating costs are relatively high. Potential profit margins from sales are consumed by operating costs. Hence, companies have to try to keep operating costs as low as possible to generate acceptable profit margins.

Tight Competition Hinders Significant Increase in Market Shares

The Singapore generic pharmaceutical market is highly competitive, with 20 major participants in a market worth $27.8 million. In the market, each competitor needs to make tremendous efforts to obtain even a marginal increase in market share. Price competitions are rife given the highly competitive market environment in Singapore.

Singapore Government Regulations

Under the Medicines Act, all medicinal products sold in Singapore or manufactured locally for export purposes must be licensed by the Center of Pharmaceutical Administration (CPA), Health Sciences Authority. The registration of medicines, continual review of approved medicinal products, and renewal of existing product licenses come under the purview of the Drug Registration branch (DRB) of the Product Evaluation and Regulatory (PER) Division.

The Cosmetic Control Unit and an ISO 9002 certified GMP unit was also set up for enhanced regulatory control. In January 2002, a Memorandum of Understanding on GMP inspection was signed with Japan. Singapore has also been a member of the Pharmaceutical Inspection Co-operation Scheme since January 2000 and even established its own in-house Prosecution team recently. All these have been implemented to ensure that medicines in Singapore are safe, efficacious, and of good quality.

Revenue Forecasts (1997–2007)

In 2001, the generic pharmaceutical market was valued at approximately $27.8million. Due to the economic downturn in 2001, the revenues increased a low rate of 7.8 percent from 2000 revenues of $25.8 million. The slow growth is expected to continue in 2002. However, with the government attempting to boost the economy through various tax-cuts, market growth is anticipated to pick up again in 2003 when the economy improves. Moreover, the upcoming patent expiration of 13 leading molecules, namely, Ome prazole (88), Simvastatin (88), Amlodipine (90), Fluoxetine (86), Loratadine (88), Pravastatin (89), Fluticasone (91), Amox /Clavulanic Acid (81), Sertraline (90), Lisinopril (87), Nifedipine (75), Ciprofloxocaxin (86), and Famotidine (89) by 2005 is expected to further increase the market growth rate of generic products during the forecast period. The CAGR from 2001 to 2007 is estimated at 10.6 percent. By 2007, the generic pharmaceutical market is expected to reach $50.9 million.

Figure 6-5 and Chart 6.2 show revenue forecasts and growth rates for the Singapore generic pharmaceutical market from 1997 to 2007.

Figure 6-5

Generic Pharmaceutical Market: Historical and Projected Revenues (Singapore), 1997-2007

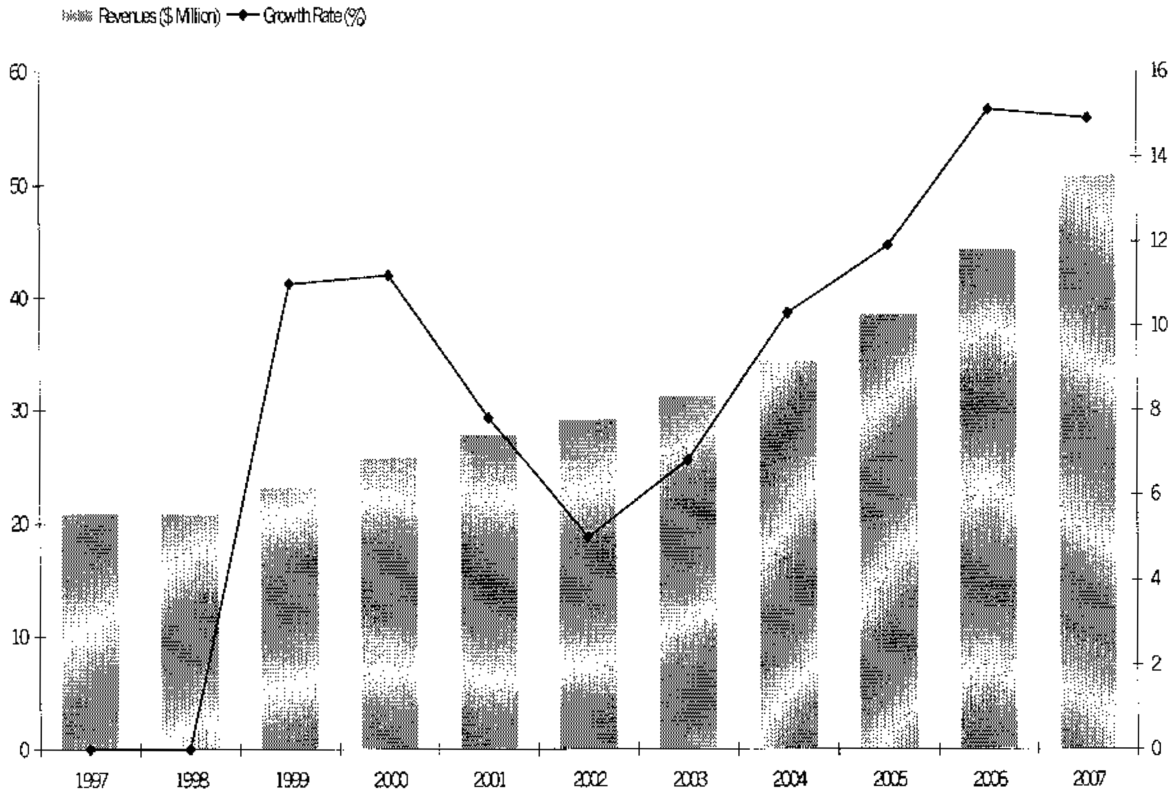
Year	Revenues ($ Million)	Revenue Growth Rate (%)
1997	20.9	-
1998	20.9	0.0
1999	23.2	11.0
2000	25.8	11.2
2001	27.8	7.8
2002	29.2	5.0
2003	31.2	6.8
2004	34.4	10.3
2005	38.5	11.9
2006	44.3	15.1
2007	50.9	14.9

Compound Annual Growth Rate (2001-2007):10.6%

Note: All figures are rounded; the base year is 2001. Source: Frost & Sullivan

Chart 6.2

Generic Pharmaceutical Market: Historical and Projected Revenue (Singapore), 1997-2007



Source: Frost & Sullivan

Distribution Trends

Figure 6-6 shows the distribution trends of the Singapore generic pharmaceutical market in 2001.

Figure 6-6

Generic Pharmaceutical Market: Distribution Channel Trends of Major Market Participants (Singapore), 2001

Distribution Channel	Percent of Revenues	02-01 Trend
Public hospitals	30	Up
General practitioners/Clinics	50	Up
Others	20	Down
TOTAL	100	
Others include retail pharmacies, private hospitals		

Note: All figures are rounded; the base year is 2001. Source: Frost & Sullivan

General practitioners/clinics are the main distribution channels for generic drugs in Singapore accounting for approximately 50 percent of the sales. Public hospitals are the second-largest channel with approximately 30 percent sales. Private hospitals and retail pharmacies together accounted for the remaining 20 percent sales of generic drugs in 2001. An upward trend in the distribution of generic drugs through public hospitals is expected over the next few years due to the shift of patient flow from private to public hospitals caused by tighter economic conditions.

Competitive Structure

Figure 6-7 shows the competitive structure of the Singapore generic pharmaceutical market.

Figure 6-7

Generic Pharmaceutical Market: Competitive Structure (Singapore), 2001

Number of Companies in the Market	Approximately 20
Types of Competitors	Local manufacturers
	Asian multinational manufacturers
Distribution Structure	Self-distribution
Tiers of Competition	Tier 1: DHA, Beacons, Sunward – 50%
	Tier 2: Malaysia Chemist, ICM – 20%
	Tier 3: Ranbaxy, Xepa Soul Pattinson, etc – 30%
Notable Acquisitions, Mergers	-
Key End-User Groups	Clinics/GPs
	Public hospitals
Competitive Factors	Quality generics
	Quality service
	Strong marketing team
	Niche product(s)

Source: Frost & Sullivan

There are approximately 20 generic pharmaceutical companies in Singapore. These include mainly local companies and Asian multinationals. There are 3 tiers of competition in the market. Drug Houses of Australia (DHA), Beacons Chemicals, and Sunward Pharmaceuticals occupy the first tier with a combined market share of 50 percent. The second tier includes Malaysia Chemist and Integrated Contract Manufacturers (ICM) with a total market share of 20 percent. The last tier includes remaining participants such as Ranbaxy, Xepa Soul Pattinson, and others with the remaining 30 percent market share. These companies have less than 10 percent market share each.

Quality is a key factor in selling generic drugs in Singapore. Physicians and hospitals expect good quality products and excellent customer service. Another important competitive factor is good relationships with physicians to influence purchase decisions and identify demand.

Moreover, having products in niche therapeutic areas such as hypertension, antibiotics, and lifestyle ailments can also help boost revenues due to the high demand.

Market Share Analysis

Figure 6-8 and Chart 6.3 show market shares of participants in the generic pharmaceutical market.

Figure 6-8

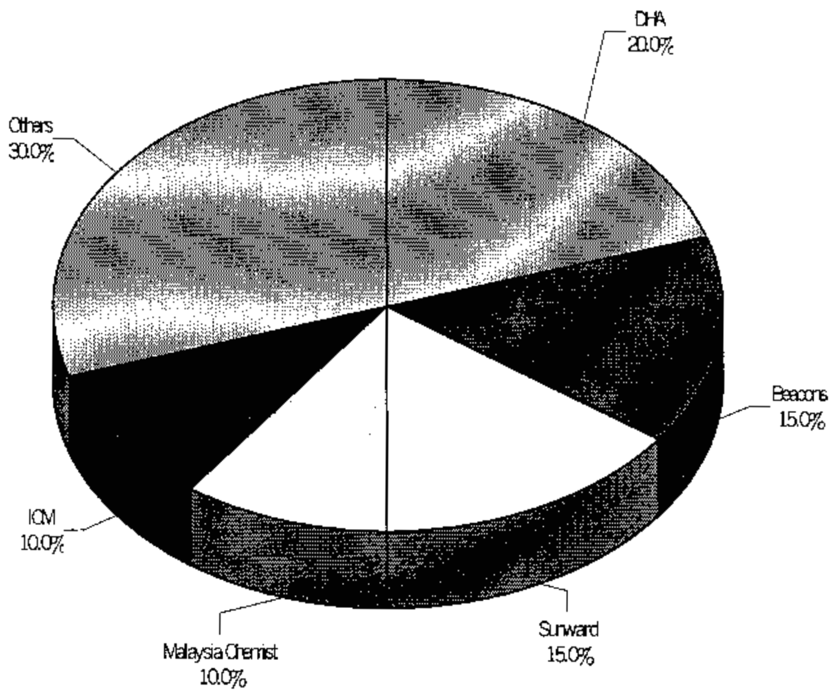
Generic Pharmaceutical Market: Market Share of Major Participants (Singapore), 2001

Company	**2001 (%)**	**01/00 Trend**
Drug Houses of Australia (DHA)	20	Up
Beacons Chemicals	15	Up
Sunward Pharmaceuticals	15	Up
Malaysia Chemist	10	Stable
Integrated Contract Manufacturing (ICM)	10	Stable
Others	30	Stable
TOTAL	100.0	
Others include Ranbaxy, Xepa Soul, etc.		

Note: All figures are rounded; the base year is 2001. Source: Frost & Sullivan

Chart 6.3

Generic Pharmaceutical Market: Market Shares of Major Participants (Singapore), 2001



Others include Ranbaxy, Xepa Soul, etc.

Source: Frost & Sullivan

In 2001, DHA held approximately 20 percent generic market share. Its market position could be attributed to the fact that it is the single-largest supplier of generic drugs to Singapore's general hospitals and clinics. With about 40 percent of its products being exported to nearly 10 countries and contract manufacturing services for internationally renowned products such as Tiger Balm and Kwang Loong Oil, DHA seems to have strategically positioned itself among the top participants.

In the same year, Beacons and Sunward each held around 15 percent market share. Beacons' production and distribution of more than 200 competitively-priced products ranging from prescribed medicine to vitamins to most hospitals and clinics in Singapore places it at an advantage. This company also provides contract manufacturing and other cost-effective services such as repackaging and product development. Sunward's active participation in terms of sales to the government sector, support from Taiwan, and ventures into importation have been the impetus for growth. Malaysia Chemist and ICM each have a market share of about 10 percent. The remaining 30 percent of the market is shared by Ranbaxy, Xepa Soul, and others.

Product Analysis

Figure 6-9 shows the top three generic pharmaceutical classes in Singapore in 2001-2002.

Figure 6-9

Generic Pharmaceutical Market: Top Three Classes (Singapore), 2001-2002

Therapeutic Class	Revenues
Cardiovascular	$4.5 million-$5.6 million
Anti-infectives (for instance, anti-fungal, anti-viral, antibiotics, etc)	$2.2 million
Anti-ulcers	$1.7 million

Source: Frost & Sullivan

Strategic Recommendations

Undertake R&D to Grasp Valuable Market Opportunities

The generic pharmaceutical market in Singapore has the potential to continue to grow significantly given the number and size of products that are going off patent in the next 5 years. Hence, the ability to identify and take advantage of new markets with innovative products in Singapore will fuel generic competition for blockbuster products. Thus, ongoing R&D is essential. With adequate preparation, manufacturers can avail themselves of opportunities in this market and ensure substantial revenue growth.

Engage in Contract Manufacturing for Enhanced Revenue Growth

Contract manufacturing was found to be a common feature among leading market participants. Continuous development in the range of contract manufacturing services such as planning, procurement, product development, packaging, and technical services are likely to spur a company's growth prospects.

Target Products to Cater to Aging Population

The Government has projected that by 2020, Singapore will have a very large aging population with nearly one in every five persons aged 55 years or above. The industry's ability to explore opportunities arising from an aging population is expected to help drive continuous growth.

Have R&D Laboratories Certified by the Australian Theraputic Goods Administration (TGA)

Regional marketing and export could be enhanced by having R&D facilities accredited by the Australian Therapeutic Goods Administration (TGA). It is a worthwhile long-term investment because not only does the certification signify an embodiment of high quality standards, it opens up market opportunities in both Australia as well as New Zealand, thereby enhancing market coverage in the region.

To summarize, companies need to look into product innovation through continuous R&D. This is crucial for the timely release of competitively-priced quality products. Market participants may have to pare costs to stay competitive but it is quality that is expected to drive the next stage of growth. Potential profits that value-added contract manufacturing and exporting could bring are also likely to be catalysts for sustained future growth.

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