ABSTRACT

A STRATEGIC, FUNDAMENTAL, AND FINANCIAL EVALUATION OF PACIFIC SUNWEAR OF CALIFORNIA, INC.

This thesis examines Pacific Sunwear of California and its current strategies and placement within the retail apparel industry. The objective of this thesis is to study the valuation of Pacific Sunwear of California by evaluating the strategies and past financial performance to determine the current value of the firm. The thesis begins with an external analysis of the current environment. Then an evaluation of the retail apparel industry based upon Porter's Five Forces theory, followed by discussions of current market position and potential growth opportunities. Based upon these assumptions and understandings several valuation models will be applied to determine the current intrinsic value of Pacific Sunwear of California. The results of the valuation models will be discussed and explained to reach an understanding of the proper value based on the business characteristics of Pacific Sunwear of California and possible future financial results.

Judson Ray Myers
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EVALUATION OF PACIFIC SUNWEAR OF

CALIFORNIA, INC.

by

Judson Ray Myers

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INTRODUCTION

The retail apparel industry is mature and very competitive and is filled with many large players and several small players competing for the U.S. consumers' dollars. The U.S. retail apparel industry reached $211.5 billion in 2004, an increase of 5.2 percent over the year 2003 (Reuters Investors, 2007). The largest firms in the retail apparel industry as ranked by revenue are TJX companies, The Gap, Limited Brands, Nordstrom, and Footlocker. Pacific Sunwear of California (PacSun) is ranked 18th as of January 26, 2007 with annual revenues of $1.4 billion (Reuter Investors, 2007).

The retail apparel industry is very susceptible to fluctuations in society's tastes in fashion. As fashion trends change retailers will attempt to adjust to the current trends. Often firms will miss the mark and lose large sums of money while trying to regain their status as a trendsetter. PacSun has, throughout its existence, maintained its focus on the clothing styles that helped build its organization. While losing marginal customers due to the cycles of fashion, PacSun has been able to hold strong to its core customers. PacSun sells a broad range of jeans and t-shirts that constitute a staple of teen fashion no matter what the trend is (Seeking Alpha, 2007).

PacSun has successfully grown its organization by focusing on the teen lifestyle. Creating strong relationships with cutting edge fashion designers focused on the surf and skate as well as the hip-hop lifestyle has allowed PacSun to experiment on new fashion trends with their own proprietary brands. Accessories and footwear have also become a large part of PacSun and teen

fashion. Attempting to capitalize on the growth of accessories and footwear, PacSun has recently announced its intent to open a third line of retail stores, "One-Thousand Steps" (PacSun Annual Report, 2006).

<div align="center">Purpose of Thesis</div>

Pacific Sunwear of California (PacSun) has built a very competitive organization by continually employing the strategies that have made it successful for more than 25 years. It is worth studying the strategies and methods PacSun has employed to create such a successful organization. Also studying how PacSun has been able to grow and expand in such a competitive environment, while many competitors have failed, is worth understanding. Is it possible for competitors to mimic the PacSun model and be successful?

PacSun, recently, has expanded into new niche markets, which has contributed to its continued success. The retail apparel market is highly competitive and PacSun has been successful in gaining market share and new customers by focusing on niche markets related to the different lifestyles of youth and young adults from ages 16-24. By creating strong relations with suppliers and fashion designers PacSun has been able to maintain its competitive advantage without compromising its core retail strategy of providing the clothes to fit a lifestyle and not just a trend.

This thesis seeks to understand PacSun and the operating strategies that have led to its success. This thesis serves four major purposes:

1. To understand PacSun's current strategies and its current position in the retail apparel market.

2. To understand PacSun's strategies and apply this understanding to estimate PacSun's Value.

3. To implement different valuation models to further understand PacSun's value drivers.

4. To estimate PacSun's intrinsic value and discuss the assumptions used to calculate the value.

Scope and Limitations

Since PacSun's fiscal year ended on January 28, 2007, the valuation models used to calculate intrinsic value utilize company annual reports as well as quarterly reports for the most current fiscal year. These reports are used for building valuation models, evaluating company strategic position, and as a basis for certain assumptions that will affect the results of the evaluation. Preparing this thesis required the use of current company and market conditions. The current time is defined as January 28, 2007. The future is defined as the time period beyond January 28, 2007. Industry and strategic evaluation of the company involved the use of Porter's Five Forces theory (Porter, 1985). Internal analysis of the company involved the use of Porter's Value Chain theories to help gain a better understanding of PacSun's market position. Other factors that may be derived from these two theories will not be discussed in this thesis.

This thesis contains many assumptions that are based upon current expectations for the company and industry, estimations of future market and financial conditions, and certain beliefs regarding future environmental conditions and events. Future operating strategies, business profitability, market conditions with respect to sales, earnings, growth, and other matters contribute to these assumptions. Assumptions are subject to uncertainties; however, this thesis seeks to utilize realistic and objective assumptions.

Industry and company reports filed with the Securities and Exchange Commission provide much data regarding customer and supplier relationships,

market competition and uncertainties, and other factors that will affect the assumptions and results. The forward looking assumptions developed in this thesis are designed to be as objective as possible and are based upon the information available at the time this thesis was prepared.

The future of the retail apparel industry like any other is always uncertain. This uncertainty poses many opportunities and challenges. PacSun's business, and the demand for its products, is influenced by fluctuations in fashion trends and to a lesser extent by electronic commerce. Because of ever-changing fashion trends, and the growth of on-line shopping, forecasting trends remains difficult.

Company Background

Pacific Sunwear of California (PacSun) was started as a small surf shop in Newport Beach, California in 1980. The surf shop was not any different from the multitude of surf shops found along coastal California. The founders, however, believed they had a "better idea" to maintain sales levels throughout the year. The idea was to become the first mall-based surf shop. The idea came from the realization that during the rainy and cold winter months everyone went shopping at the mall.

The first mall store opened in Santa Monica Place in 1981, which was a huge success. By 1987 there were 21 stores up and down the California Coast. In 1989, PacSun expanded outside of California to the East Coast. There were a few snags but the company caught on quickly to the need for long pants and shirts due to the colder weather.

PacSun also began to expand its business lines. Shortly after expanding to the East Coast, the stores began to carry skate apparel and introduced three of its own private brands. These brands (Island Force, Diversion, and Shotts) helped meet the demand for the surf and skate clothing lines.

In 1993, PacSun consisted of 60 stores nationwide, and management decided to take the company public. Since going public, PacSun has enjoyed continued success and expansion. Shortly after going public, it introduced juniors and shoes, and opened its first outlet store (PacSun Investor Relations, 2007).

PacSun Today

PacSun now considers itself one of the leading retailers of casual apparel, footwear, and accessories targeted at teens and young adults. The company now encompasses three distinct concepts and operates four stores, each concept aimed at different segments of the teen apparel market. The concepts include PacSun (which includes the PacSun outlet stores), DEMO, and One Thousand Steps (PacSun Investor Relations, 2007).

PacSun has grown considerably since going public in March 1993. The company has expanded from 60 to 1,201 stores in 50 states and Puerto Rico. It has also steadily increased sales from $46 million in fiscal 1993 to $1.4 billion in fiscal 2005. Profits have grown from $3 million to $126 million in fiscal 2005. PacSun has also increased its market capitalization from $60 million to $1.47 billion. As of January 18, 2007, PacSun stock (psun) was trading at $21.20 per share (Yahoo Finance, 2007). PacSun also announced in May 2006 a $100 million stock repurchase program. At the end of December 2006, $51 million in authorizations remain (PacSun Investor Relations, 2007).

The PacSun concept remains focused on fashions influenced by surfing and skating but has expanded to include snowboarding. The PacSun concept targets consumers between 16 and 24 years old. The company operates 852 PacSun stores and 116 PacSun outlet stores. The PacSun store concept continues to be the core of operations for the company.

In 1998, the company launched its second concept store, DEMO. The DEMO concept is based on the lifestyle and fashion derived from hip-hop music; the target market is teens and young adults between 16 and 24 years old. Since the launch in 1998 with 15 stores, the DEMO concept has grown to 224 stores nationwide.

The company's third concept was One Thousand Steps. These stores launched in April 2006 with the concept of providing casual, fashion-forward footwear and accessories. One Thousand Steps targets a slightly older market focusing on 18 to 30 year olds, and mostly women. There is very little anticipated overlap between the new concept and the other two, and all initial indications appear positive. As of December 30, 2006 the company operated nine stores nationwide (PacSun Investor Relations, 2007).

PacSun has been aggressively seeking to solidify its position specifically in the surf industry. As of March 2006, PacSun became the title sponsor for the USA Surf Team. This includes advertising and promotions, as well as PacSun logos on boards and uniforms (PacSun Investor Relations. 2007).

PacSun remains committed to continued growth for the future. Estimated expansions include an increase in square footage by 4 percent, comprised mainly of 40 new stores and 35 remodeled stores. A new distribution center is scheduled for completion prior to the holiday season of 2007. The new center located in Olathe, Kansas will initially be 400,000 square feet (expandable to 800,000 sq. feet). This expansion is planned to be completely funded by cash from operations.

The 2006 holiday season has been tough for PacSun. The company recently announced holiday comparable sales for existing stores. The company overall suffered a decline in sales for November and December of 3.8 percent and 3.2 percent, respectively. The PacSun concept suffered declines of 2.6 percent in

November and 2.1 percent in December. DEMO was the hardest hit this holiday season with a decline of 10 percent in November and 9.4 percent in December.

Chapter 2

STRATEGIC ANALYSIS

To be successful a company must develop a strategy in response to changes in the general environment, industry environment, and internal environment. Constant analysis of these environments helps a company to recognize opportunities and threats in the general and industry environments. Analysis of these environments also allows a company to constantly be aware of its market position. Analysis of the internal environment helps a company to recognize its strengths and weaknesses, giving rise to the possibilities for improvement of the organization.

External Analysis

External analysis begins with scanning the general environment to determine the nature of the company's environment.

> The environment of an organization in business, like that of any other organic entity, is the pattern of all the external conditions and influences that affect its life and development. The environmental influences relevant to strategic decision operate in a company's industry, the total business community, its city, its country, and the world. They are technological, economic, physical, social, and political in kind. (Mintzberg, 2003)

The general environment is composed of factors that can have dramatic effects on a company's strategy. Typically a company has very little ability to predict trends and events in the general environment, and has even less ability to control them (Dess et al., 2006). The effects caused by changes in the general environment present potential opportunities and threats.

Political Environment

Currently there are many political events that present a concern for PacSun. The "War on Terror" and military engagement in Iraq has been and continues to be a concern. The prolonged military engagement may lead to further instability in the Middle East and can affect oil prices. Rising oil prices will directly affect PacSun through higher shipping costs for imported goods.

Recent political elections have changed the face of Congress. The new Democratic Congress may be less big-business friendly leading to increased corporate taxes. Increased taxes would affect PacSun's revenues and retained earnings used to fund future growth.

Political instability in Asia, principally North Korea, could have widespread consequences for companies doing business, with partners, or manufacturing operations in the region. The majority of clothes imported by PacSun are from Asia. Instability in this geographic region could lead to increased costs, delayed shipments, or loss of product and would have dire consequences for PacSun.

Also, increased port security has complicated business for imports. Delays in customs due to increased port security would cause major complications within PacSun's distribution chain. Impending wage increases by the Senate and immigration reform also threaten PacSun's bottom line (CNN, 2007).

Economic Environment

The economy has an impact on all industries, from suppliers of raw materials to manufacturers to organizations in the service, wholesale, retail, government, and nonprofit sectors (Dess et al., 2006). Current economic data present an unclear picture of the future, which makes creating strategy difficult. The United States GDP has continued to experience strong growth in 2006.

Fourth quarter GDP growth was 3.5 percent annually, suggesting the economy is expanding, despite higher interest rates and inflation worries (Reuters Investors, 2007). Increasing interest rates will have a negligible effect on PacSun as teen consumer spending is generally less affected by interest rates. Overall, consumer spending is growing with an increase in December 2006 of 0.7 percent annually up from a November increase of 0.5 percent (CNN, 2007).

Oil prices have declined from their peaks reached during the summer of 2006. Oil prices affect transportation costs and virtually all industries. Increased oil prices would hurt PacSun's net profits by increasing distribution costs. PacSun currently operates one distribution center located in Southern California and relies heavily upon trucks and planes for distribution of goods.

The U.S. Dollar is weaker leading to increased exports and a decrease in imports. PacSun imports a majority of its merchandise; continued weakness in the U.S. dollar would have a direct effect on the real costs of imports and net profit as profit margins would decline.

The U.S. unemployment rate has been low (4.5 percent - 4.6 percent) for quite some time (CNN, 2007). A tight labor market gives employees greater bargaining power in negotiations for increased wages (Dess et al., 2006). Of course, increased wages have a direct effect on profits. Increasing wages would mostly be a factor for executive level employees. PacSun's retail sales force consists mainly of young adults who earn an hourly wage and are less likely to be affected.

The Federal Reserve has been concerned about inflation, but seems to be tempering its concerns as it has maintained interest rates steady for its last five meetings. Negatively, the housing market has suffered its largest declines in a decade (Reuters Investors, 2007). The strength of the housing market is believed

to have been the driving force behind consumer spending for the past several years. Further dramatic declines in the housing market will affect consumer spending, especially for durable, non-essential industries. Teen consumer spending tends to be less affected by fluctuations in the housing market. Fashionable clothing, for most teens, is seen as a necessity that bodes well for PacSun's ability to maintain or increase revenues through difficult economic environments.

Technological Environment

Innovations and developments in technology can create entirely new industries, but most importantly and most often they alter the boundaries of existing industries (Dess et al., 2006). Technology has been the major driving force behind the economy for the past 20 years, and will continue to drive innovation and growth. Improvements in telecommunications have drastically improved buyer and supplier relationships through better and quicker communication (CNN, 2007). Video-teleconferencing and virtual-brainstorming are trends that allow businesses to better communicate with suppliers, partners, buyers, and consumers. PacSun has leveraged improvements in telecommunications to strengthen its relationships with suppliers, which has allowed the company to more quickly respond to consumer demands and changing fashion trends (PacSun Annual Report, 2006).

Advances in technology are driving down costs for the manufacturing and service industries. The technological trends recently have been geared toward pushing consumers to a digital society with smart phones, digital books, interactive media, and content delivery. Consumers are demanding more content and information be made available to research products and services before committing to a purchase. Mobile shopping has grown dramatically as on-line

shopping continues to grow. The future of technology appears to be mobile for content delivery, advertising, and shopping (CNN, 2007). PacSun has been lagging behind the industry in on-line and mobile shopping. While PacSun operates a website, it has not experienced much success in driving customers to purchase on-line. If current trends continue the lack of a strong on-line presence could dramatically affect PacSun's sales.

Social Environment

Social forces influence the values, beliefs, and lifestyles of a society (Dess et al., 2006). The current social environment is in a state of change. Society is demanding better corporate governance and more transparency. This demand is for government officials as well as Corporate America. After several large corporate scandals, consumers are wary of corporate financial reporting. This has led to political changes such as the Sarbanes/Oxley Act. PacSun's required compliance with new reporting requirements has led to increased costs.

The social environment is also demanding more awareness of our physical environment. This awareness results in trends to protect the environment, such as the move to hybrid automobiles, boycotting companies that use "slave labor" for production, use of recycled materials for production, and recycling waste to preserve our natural resources. PacSun's attempt to operate in a socially responsible environment could increase costs and reduce operating margins dramatically. A perceived lack of concern for the environment could lead to the loss of strategic partners who may possess this environmental awareness.

Industry Analysis

In order for a firm to be profitable it is imperative it understand the structure of its industry. Understanding industry structure can be guided by

Porter's Five Forces theory (Porter, 1985). Porter's Five Forces are industry competitors, potential entrants, buyers, suppliers, and substitutes (Figure 1). "The collective strength of these five competitive forces determines the ability of firms to earn, on average, rates of return on investment in excess of cost of capital" (Porter, 1985, p. 4). The strength of the separate forces can change from industry to industry and over time as industries evolve. Changes in the strength of the five forces affect the long-term profit attractiveness and structure of the industry or market segment (Porter, 1985). A firm possessing a sound understanding of its industry is able to understand its relative position within its industry.

> Positioning determines whether a firm's profitability is above or below the industry average. A firm that can position itself well may earn high rates of return even though industry structure is unfavorable and the average profitability of the industry is therefore modest. (Porter, 1985, p. 11)

The profitability of a company has a strong correlation with the strength of the five forces and the company's ability to react. Porter's Five Forces theory will be used to evaluate and identify PacSun's current and future position in the market.

Industry Competitors

"Rivalry among existing competitors takes the form of jockeying for position. Firms use tactics like price competition, advertising battles, product introductions, and increased customer service or warranties" (Dess et al., 2006, p. 59). The retail apparel, footwear, and accessory industry is highly competitive. Due to the slow growth of the industry the rivalry between the firms is very intense. Companies are constantly fighting for market share; although the approaches to obtain more market share differ, they always result in head-to-head competition.
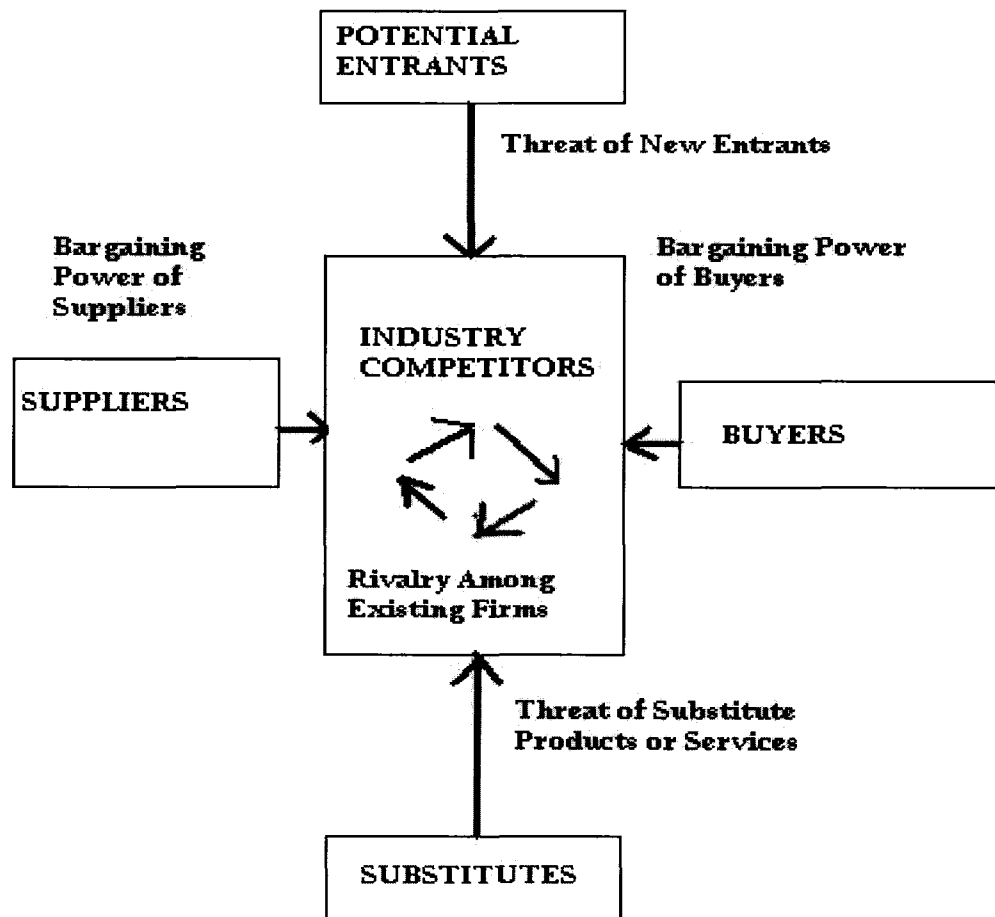
Figure 1. The Five Competitive Forces (Porter, 1985)

The retail apparel industry competes on several main facets. Price competition is very intense; firms are constantly seeking to cut prices in order to attract customers. National and regional retailers are the main users of price competition. Another area of competition is brand identity. Competing for customers on a brand level is especially intense among specialty retailers who seek to identify with their customers' lifestyle through the clothing offered. PacSun faces stiff industry competition as new entrants such as Zumiez and Hollister, among others, have successfully built their businesses and begun to take market share.

New Entrants

The threat of entry for an industry depends greatly upon the barriers present in the industry and the reaction a new entrant could expect from existing competitors (Mintzberg, 2003, p. 96). This threat refers to the possibility that the profits of established firms might be eroded by new competitors to the industry (Dess et al., 2006). Economies of scale, product differentiation, capital requirements, access to distribution channels, switching costs, and government policy can be effective barriers to entry for any industry.

The retail apparel industry has semi-strong barriers to entry. Existing competitors in the retail apparel industry generally possess economies of scale. Economies of scale refers to the ability to spread costs over a greater number of units produced (Dess et al., 2006). This barrier requires new entrants to come in on a large scale and risk a strong reaction from existing firms or to enter on a small scale and accept a cost disadvantage. Both positions are undesirable options for market entry.

The retail apparel industry also relies heavily upon relationships within distribution channels. New entrants may find great difficulty in trying to

effectively integrate themselves into the distribution channels. Capital requirements for this industry are very high. Acquiring store space and inventory can be very costly. Many existing firms have substantial excess cash and unused borrowing power. These available resources allow incumbents to react quickly to new entrants.

In the specialty retail segment many new entrants have been successful. PacSun has encountered difficulty combating these new entrants because they enter distribution channels as a brand name product sold through existing retailers. Once the brand has been established and demand sufficient, the new entrants engage in head-to-head competition.

Suppliers

"Suppliers can exert bargaining power on participants in an industry by raising prices or reducing the quality of purchased goods and services" (Mintzberg, 2003, p. 98). Powerful suppliers can squeeze the profitability of an industry. A supplier may be powerful due to market domination, a unique product, lack of substitutes, or the industry is not an important customer. The retail apparel industry has several main suppliers who supply a majority of the competitors and several small suppliers who generally do not have the capacity to fully meet the quantity of product demanded. The threat of forward integration into retail by suppliers is strong. Because of the diversity of suppliers and the threat of forward integration, supplier bargaining power in the retail apparel industry is somewhat mixed.

PacSun utilizes a few large suppliers, but it prefers to maintain strong relationships with many smaller suppliers. Concentrating on smaller suppliers allows PacSun to reduce the bargaining power of these smaller suppliers by establishing itself as an important customer.

There is also a threat of forward integration by suppliers into the retail market. Forward integration entails a supplier moving forward in the distribution channel, possibly into direct competition with a buyer. Recently several suppliers (Zumiez and Hollister) have entered into direct competition with PacSun by opening retail stores for their products.

Buyers

Buyers can exert power by forcing prices down, demanding higher quality products or services, or playing competitors against each other (Dess et al., 2006). A buyer is powerful when the product it is buying represents a significant portion of the seller's revenue, the product or service purchased is an industry standard or undifferentiated, there are few switching costs, profits earned are low, backward integration is a credible threat, or the product being purchased is not critical to the quality of the buyer's product (Dess et al., 2006). In the retail apparel industry switching costs are relatively few, giving buyers some power. The threat of backward integration, particularly in specialty retail, is virtually non-existent. The greatest power exerted is on price, because of the relatively low switching costs and the availability of substitute products. Similar to supplier power, buyer power in the retail apparel industry is only semi-strong.

PacSun, as mentioned earlier, concentrates on smaller suppliers, making itself an important customer. This allows PacSun to exert buying power on these smaller suppliers and position itself as a significant source of revenue for smaller suppliers; PacSun is able to exert buying power. PacSun relies heavily on this buyer's power to control prices and product quality.

Since PacSun focuses on a particular lifestyle, substitutes are not as prevalent as for other firms in the retail industry. The other forces of buyer power are the mirror image of supplier power.

Substitutes

All firms within every industry compete with industries producing substitute products. Substitutes limit the potential returns of an industry by placing a ceiling on the prices that firms in that industry can profitably charge (Dess et al., 2006). Historically the retail apparel industry has not been concerned with substitution. However, since the advent of the internet and growth of online retailing, substitution has become a major factor. Many retailers are traditional brick and mortar stores and have not fully embraced online retailing.

Technological and logistical improvements have made online retailers a serious substitution threat. With the capability to view, compare, and return items, online retailers are pulling sales away from brick and mortar retailers. The switching cost to online retailers is virtually none. There is an opportunity cost of having to wait and sometimes pay shipping costs, but this cost is perceived to be minimal. Price performance is an important factor when considering the threat of substitutions; online retailers compete very well on price because of their savings on costs such as leases, store employees, utilities, etc. Threat of substitution in the retail apparel industry is strong.

PacSun has acknowledged a considerable weakness in its on-line retailing (PacSun Annual Report, 2006). As consumers grow increasingly fond of on-line and mobile shopping it becomes imperative for PacSun to improve its on-line presence. An on-line presence is a very inexpensive way for new companies to enter the market and take market share. PacSun is very susceptible to this threat.

Summary of Opportunities and Threats

Environmental threats and opportunities are always existent and it is important to be able to react quickly to these changes. Firms must be able to neutralize threats and take advantage of opportunities to maintain growth. The

retail apparel industry is particularly susceptible to the political unrest in Asia. With many suppliers and manufacturers located in Asia, major political turmoil could greatly disrupt the supply of products to retailers. Homeland security is another potentially devastating threat to the retail apparel industry, especially smaller retailers more dependent upon imports. Further terrorist actions could result in restrictions on imports, which could limit the ability of retailers to meet consumer demand. The threat of inflation reducing consumer buying power represents a risk to sales and price. Increasing transportation costs, a result of high fuel prices, cause a threat to profits. Changing fashion trends represent a significant threat, unless firms are able to appropriately anticipate new fashion trends. These are all significant threats to PacSun's business and profitability. Increased transportation costs or difficulty with imports could significantly impact the ability to maintain inventory levels and cut into profit margins. Building a second distribution facility only addresses part of the potential threats PacSun faces and significant planning is needed to establish plans to deal with all of the potential threats of the external environment.

A firm's continued success is very dependent on its ability to recognize opportunities and exploit them. Advancements in technology have created opportunities for retailers to incorporate the internet into their business models. Online retailing allows customers to make purchases without living in the proximity of a physical store. Websites can also be used to entice customers, advertise products, and communicate with consumers regarding promotions. Strong supplier relationships provide an opportunity for retailers to provide vital updates regarding fashion trends and product quality. Technological advances also provide an opportunity for firms to build strong supplier relations by strengthening supply chain management and allowing for supplier integration.

Because of the low switching costs in the retail apparel industry, firms may be able to gain an advantage over competitors by developing proprietary brands offered at lower prices. Offering a variety of products, brands, and styles provides an opportunity for retailers to grow their sales and customer base.

Strengthening its on-line presence would allow PacSun to increase sales without significantly increasing costs. Being able to reach customers who live far from a physical store through the internet represents a great opportunity. Integrating suppliers into the PacSun distribution system would allow stores to maintain a smaller inventory and have more sales space. PacSun should also continue to develop its proprietary brands, which would significantly increase profit margins.

Internal Analysis

An internal analysis is a key element in understanding the strengths and weaknesses of a firm. Internal analysis is also a systematic way of examining all the functions a firm performs and how they interact. It is very necessary for analyzing possible sources of competitive advantage. The three main methods used in performing internal analysis are Porter's Value Chain analysis, ratio analysis, and creating a summary of firm strengths and weaknesses (Porter, 1985).

Value Chain Analysis

"Every firm is a collection of activities that are performed to design, produce, market, deliver, and support its product" (Porter, 1985, p. 36). The value chain analysis involves evaluating the activities a firm performs and identifying where value is being created. Differentiating between activities that do and do not create value is important in identifying a firm's strengths and weaknesses. The value chain can be divided into two types of activities: support and primary

activities. Support activities include firm infrastructure, human resource management, technology, and procurement. Primary activities include inbound logistics, operations, outbound logistics, marketing and sales, and service.

<u>Firm Infrastructure</u>

These are activities generally used to support the entire chain and not individual activities. Firm infrastructure consists of general management, planning, finance, accounting, legal, government affairs, and quality management activities (Porter, 1985). Since PacSun is not a diversified organization there is a single firm infrastructure rather than divisions among the three store concepts.

PacSun does not possess any particular advantage in the area of firm infrastructure. PacSun's firm infrastructure is not any better than other firms in the industry and does not provide a competitive advantage or add value to the end product. This is neither a strength nor weakness in the value chain.

<u>Human Resource Management</u>

Human resource management activities are those that are involved in recruiting, hiring, training, development, and compensation of all types of personnel (Porter, 1985). Human resource activities support both primary and support activities. PacSun engages in fairly standard industry practices regarding recruiting, hiring, and training of store staff. Compensation practices at PacSun are also fairly standard for the industry. PacSun does not have to deal with any employee unions or other organizations that may require employee contract negotiations. PacSun store employees consist of a store manager, assistant store managers (up to two), and a maximum of twelve part-time sales associates. By using part-time employees PacSun is able to save money on benefits. PacSun's

human resource management appears to be neither a strength nor weakness in the value chain.

Technology

Technology is important in an organization as a means for improving products and processes (Porter, 1985). Technology has become an important aspect of every part of an organization from accounting to procurement. PacSun utilizes internal information systems to control inventory and forecast demand of products. The information systems utilized by PacSun may not be sufficient enough to support the projected growth of the firm (Securities and Exchange Commission, 2007). If PacSun is not able to properly maintain its information systems it faces potential losses and business interruptions. PacSun has not placed much emphasis on selling on the internet; it is very cautious with its on-line presence and is very aware of the potential threats to customer and business information. Because of a lack of confidence in its information systems and online retailing ability, PacSun appears to be at a disadvantage in comparison to competitors. While many retail companies are firmly embracing on-line retailing, PacSun is behind the curve in its integration. Currently PacSun hosts a website for each of its three distinct business lines, but the use of the site is geared toward showcasing the clothing and accessories. This is a weakness in the value chain.

Procurement

Procurement is the firm-wide function of purchasing inputs that support all activities across the firm. PacSun has a very strong relationship with its suppliers. While using some large suppliers, PacSun also uses many small suppliers that represent a fairly large portion of the supplier business. Supplier relationships are very important to PacSun because it does not operate with long-term supply

contracts. As related to other firms in the industry, PacSun seems to have better than average supplier relationships. This has come about because of its willingness to share information with suppliers. In terms of other aspects of procurement for office supplies and other minor purchases, it does not appear to be any better than the rest of the industry. PacSun's procurement procedures are strengths in the value chain.

Inbound Logistics

Inbound logistics are activities associated with receiving and storing inputs to the product. These activities include warehousing, inventory control, vehicle scheduling, and return to suppliers (Porter, 1985). PacSun's inbound logistics are fairly standard for the industry. Many of its suppliers are foreign, which can present a problem. Reliance on imports is risky because of potential quotas or tariffs. Although this is risky, most of the major competitors in the retail apparel industry rely heavily on these imports. There is no evidence to indicate PacSun's inventory control system is superior or inferior. Inbound logistics is neither a strength nor weakness in the value chain.

Operations

Operations incorporate the activities involved in transforming the inputs into the final product (Porter, 1985). Since PacSun does not produce a product, its operations are limited to its retail stores. The design and presentation of its retail stores is geared toward attracting its target customers. PacSun focuses on the fashions associated with different lifestyles; it has done an excellent job in updating store designs and layouts to attract customers who appreciate these lifestyles or the associated fashions. PacSun has done an excellent job of creating an environment for the consumer through the use of multiple techniques. Each

store has music playing, which is popular among the target market; the employees generally dress in a manner that embodies the lifestyle of the store. PacSun's store operations are one of the strengths in its value chain.

Outbound Logistics

These are activities involved in distributing the product to the customer. The larger firms in the retail apparel industry have multiple distribution facilities. PacSun utilizes one distribution facility in Anaheim, California with land recently purchased in Olathe, Kansas for the construction of a second distribution facility (Securities and Exchange Commission, 2007). Reliance on a single distribution facility for nationwide operations represents a huge risk for disruptions in business. Disruptions could occur because of natural disasters, accidents, or systems failures. Any disruptions in outbound logistics could result in adverse financial and operational results. This is a definite weakness in the value chain.

Marketing and Sales

Marketing and sales are the activities in the value chain that provide a means for consumers to purchase goods and induce them to make purchases (Porter, 1985). PacSun utilizes several different methods of advertising to induce customers to purchase its products. The main methods used for marketing are using magazines targeted toward their target lifestyle for each concept. PacSun also sponsors events and teams related to the lifestyles they target. For example, PacSun is now the primary sponsor for the U.S. Surf Team. They also sponsor surfing and skating events. The DEMO stores focus on the hip-hop lifestyle and target its marketing to sponsoring events and concerts related to this lifestyle. PacSun also uses its websites more for advertising than for sales. There is not much use of television advertising except to target shows that are, again, geared

toward its target markets. PacSun has identified its target customers and utilizes the most effective means of reaching its customers and avoids broad marketing techniques. This is a strength in the value chain.

Service

These are the activities in the value chain associated with providing a service that can be used to enhance or maintain the value of the product. PacSun seems to have typical service and return policies. New hire training emphasizes a philosophy of offering help but not pressuring customers. This is meant to make the customer feel more at ease during the shopping experience. The return policies are very standard for the retail apparel industry. Service is neither a strength nor weakness in the value chain.

Ratio Analysis

It is important to evaluate the financial strength of the firm in relation to other competitors in the industry. Comparing ratios to the industry average can suggest areas of weakness and strengths. Also important in the evaluation of financial strength is the evaluation of key performance indicators specific to the retail apparel industry.

PacSun currently has no debt on its financial records. Its leverage ratios are better than the industry average. This may not be advantageous because debt generally represents a less expensive cost of capital than the required cost of equity. The liquidity ratios show PacSun is slightly better than industry average on current ratio; however, once inventory is factored out using the quick ratio, PacSun drops quickly below the industry average and below all of the listed competitors. This may be indicative of a problem with PacSun not being able to sell its inventory as quickly as the industry. PacSun is above the industry average

for operating margins; however, it is performing below two of its closest
competitors (Table 1).

Table 1. Ratio Analysis Figures

	PSUN	ANF	AEOS	HOTT	Industry Ave.
Leverage Ratios					
Debt to Assets	0.00	0.00	0.00	0.00	22.20
Long-Term Debt to Equity	0.00	0.00	0.00	0.00	19.30
Times Covered Ratio	0.00	0.00	0.00	0.00	64.60
Liquidity Ratios					
Current Ratio	2.30	1.80	3.10	2.10	2.20
Quick Ratio	0.60	1.00	2.20	0.70	1.10
Source: Reuters Investors (2007)					
Operating Margins	12%	19%	15.30%	9.80%	9.40%
Source: Reuters Investors (2007)					
Jan. '07 Same Store Sales	-7.70%	-6%	17%	-6.60%	
Source: Yahoo Finance (2007)					
Average Net Sales / Sq. Foot	$89	$129	$137	$130	N/A
Source: Securities and Exchange Commission (2007)					

Several of the key performance indicators in the retail industry are same
store sales and average net sales per square foot. Same store sales measures the
sales from stores that have been in operation at least one year. Sales for the same
period one year ago are seen as indicative of trends in sales. While the retail
apparel industry has been suffering in general, PacSun has underperformed the
industry. While two of the competitors also suffered a decrease in same store
sales for January 2007, American Eagle Outfitters was able to dramatically
increase its sales. Another key performance indicator, average net sales per square
foot, involves dividing the net sales by square feet. This number shows PacSun is
struggling with its sales. This could be an indication it is expanding its square
footage (stores) quicker than sales growth may warrant.

Summary of Strengths and Weaknesses

PacSun appears to have several strengths and weaknesses that are worth summarizing and discussing. Procurement is one of the strengths PacSun possesses. This strength is created mostly by its strong supplier relationships, which include the sharing of market and fashion information with suppliers to try to help them be better positioned to meet demand. PacSun also shares its views regarding the trends in the fashion industry with its suppliers. Operations is a strength that helps attract customers to its stores because of the design of the stores, layout of the merchandise, and the ambiance created, which is associated with its target market lifestyle. Marketing and sales are also strengths. PacSun focuses its marketing very well to reach its target customers. Marketing is focused on utilizing the media and sources associated with the target lifestyles.

There are weaknesses that PacSun can improve upon to become a better company. Technology is a weakness the firm openly recognizes and knows must be addressed. PacSun is extremely cautious in terms of its on-line sales of merchandise; this has hurt as other retailers have gained a much stronger presence in the on-line retail business. Also, PacSun recognizes the need for an updated information system as its current system will not be able to handle the required capacity very shortly. The company could also take advantage of new technologies available for video-conferencing, and maintaining supplier and customer relations. Outbound logistics has been a weakness for years and has now been addressed by the company. Having one distribution facility is very risky. Construction of the new facility should be completed soon; this will alleviate some of the potential problems with outbound logistics. Same store sales were down dramatically in January 2007. This is an area that has been a weakness for the retail industry for the past several months. However, some retailers have improved same store sales over the same period. This may be an indication of a

change in fashion trends or operational problems within the company. Average net sales per square foot is very important to the retail industry and PacSun has been lagging its competitors for several years. This indicator also shows a weakness in sales; this may be due to lower mark-ups because of inventory build-up, or missing a new trend.

<div align="center">Competitive Strategy</div>

Competition is at the core of the success or failure of every firm in every industry. Competition determines whether a firm's activities contribute to performance.

> Competitive strategy is the search for a favorable competitive position in an industry, the fundamental arena in which competition occurs. Competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition. (Porter, 1985, p. 1)

There are three generic strategies that a firm may use to overcome the five forces, discussed earlier, and achieve a competitive advantage. Each of the generic strategies has the potential to allow firms to outperform their rivals (Dess et al., 2006). The first, overall cost leadership, is based upon creating a low cost position relative industry peers. This strategy requires a firm to manage the relationships in the value chain and be devoted to lowering costs throughout the entire chain. The second, differentiation, requires a firm to create products or services that are perceived as unique and valued by customers (Dess et al., 2006). The emphasis of differentiation is in creating "non-price" attributes for which a customer would pay a premium. This may include creating a brand image, exceptional technology, customer service, or unique features. The final strategy, focus, is related to directing the firm's attention toward narrow product lines, buyer segments, or targeted geographic markets (Dess et al., 2006). Firms using a

focus strategy must attain advantages either through differentiation or a cost leadership approach.

PacSun is currently pursuing a focus strategy as its market position. According to the PacSun annual report and website, the firm is pursuing a focused market, consisting of consumers between the ages of 16 and 24 years old who are associated with the surf and skate lifestyles. The company also pursues the same focus strategy with its DEMO stores, concentrating on consumers associated with the hip-hop lifestyle.

To create a competitive advantage in this focused segment, PacSun is pursuing a differentiation strategy. While not offering a product inherently different from competitors, PacSun capitalizes on consumers relating to the lifestyle image it portrays. Sponsoring the USA surf team and skating events helps PacSun to build the brand image of its product. Store design and employees help to reinforce the image PacSun is attempting to create. The new store fronts are designed to look similar to a half-pipe ramp; also throughout the store are pictures of models at the beach surfing or at a skate park. The employees also tend to portray this image of the surf and skate lifestyle by the way they dress. This strategy has worked very well for PacSun as it has grown quickly, both its number of stores and revenues.

Chapter 3

FINANCIAL STATUS

PacSun has performed well over the last several years, but has suffered declines in same stores sales for the past few months. A look at the past financial statements and a review of corporate governance and revenue drivers will help to build a foundation for understanding PacSun's future growth potential and ultimate value. The following statistics are from PacSun's 10-K for fiscal 2006 (ending 02/03/07) (Securities and Exchange Commission, 2007):

- Market Cap (03/30/07) $1.45 billion

- Fiscal Year Ends: February 3, 2007

- Maintains no outstanding interest bearing debt

- Total shares of common stock outstanding as of 03/30/07: 69,560,077

- Merchandise as percentage of net sales: Guys Apparel – 38%, Girls Apparel – 30%, Accessories – 19%, Footwear – 13%.

Tables 2 through 6 on the following pages contain the financial statements and common size statements (when applicable) for PacSun. These statements include the Balance Sheet, Income Statement, and Statement of Cash Flow.

Current Financial Status

For the past six years, PacSun has managed to continually increase revenues from $684.8 million (fiscal 2001) to $1,413.9 million (fiscal 2006). PacSun has concentrated on organic growth rather than acquisitions. This growth has been realized by opening new stores and expanding or relocating existing stores.

Table 2. Balance Sheet for PacSun

Pacific Sunwear of California, Inc
Consolidated Statements of Financial Position - Balance Sheet
(in Millions)

	2007	2006	2005	2004	2003	2002
Assets						
Cash	55.5	95.2	64.3	142.8	36.4	23.1
Short-Term Investments	0.0	74.9	79.2	33.0	0.0	0.0
Accts Receivable	0.0	0.0	8.1	5.2	2.9	3.0
Inventory	252.7	215.1	175.1	147.8	123.4	102.5
Other Current Assets	32.1	41.5	26.1	24.7	19.8	16.1
Total Current Assets	340.3	426.7	352.8	353.5	182.6	144.8
Net PP&E	419.4	355.8	304.2	203.6	201.5	195.0
Intangibles	0.0	0.0	6.5	6.5	6.5	6.5
Other Long-Term Assets	16.4	25.0	14.3	11.6	9.1	9.1
Total Assets	776.0	807.6	677.8	575.3	399.7	355.4
Liabilities & Equity						
Accts Payable	77.9	47.6	38.8	38.7	28.5	37.5
Short-Term Debt	0.0	0.0	1.5	1.9	2.4	1.3
Taxes Payable	0.0	0.0	6.0	15.0	8.0	9.4
Accrued Liabilities	0.0	0.0	49.0	55.0	34.5	17.7
Other Short-Term Liab.	67.8	74.9	0.0	0.0	0.0	0.0
Total Current Liabilities	145.7	122.5	95.3	110.5	73.3	65.9
Long-Term Debt	0.0	0.0	0.4	1.5	3.3	25.3
Other Long-Term Liab.	138.8	138.3	124.0	34.5	20.7	16.2
Total Liabilities	284.5	260.5	219.7	146.5	97.4	107.5
Total Equity	491.5	546.8	458.0	428.8	302.4	248.0
Total Liabilities & Equity	776.0	807.6	677.8	575.3	399.7	355.5
Preferred Stock	0.0	0.0	0.0	0.0	0.0	0.0
Common Stock	491.5	546.8	458.0	428.8	302.4	248.0
Reported Shares	89.5	72.8	74.9	78.4	74.2	73.7

Source: Morningstar, 2007

Table 3. Common Size Balance Sheet for PacSun

Pacific Sunwear of California, Inc
Consolidated Statements of Financial Position - Balance Sheet to Common Size
(in Millions)

	2007	2006	2005	2004	2003	2002
Assets						
Cash	7.2%	11.8%	9.5%	24.8%	9.1%	6.5%
Short-Term Investments	0.0%	9.3%	11.7%	5.7%	0.0%	0.0%
Accts Receivable	0.0%	0.0%	1.2%	0.9%	0.7%	0.8%
Inventory	32.6%	26.6%	25.8%	25.7%	30.9%	28.8%
Other Current Assets	4.1%	5.1%	3.9%	4.3%	5.0%	4.5%
Total Current Assets	43.9%	52.8%	52.1%	61.4%	45.7%	40.7%
Net PP&E	54.0%	44.1%	44.9%	35.4%	50.4%	54.9%
Intangibles	0.0%	0.0%	1.0%	1.1%	1.6%	1.8%
Other Long-Term Assets	2.1%	3.1%	2.1%	2.0%	2.3%	2.6%
Total Assets	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Liabilities & Equity						
Accts Payable	10.0%	5.9%	5.7%	6.7%	7.1%	10.5%
Short-Term Debt	0.0%	0.0%	0.2%	0.3%	0.6%	0.4%
Taxes Payable	0.0%	0.0%	0.9%	2.6%	2.0%	2.6%
Accrued Liabilities	0.0%	0.0%	7.2%	9.6%	8.6%	5.0%
Other Short-Term Liab.	8.7%	9.3%	0.0%	0.0%	0.0%	0.0%
Total Current Liabilities	18.8%	15.2%	14.1%	19.2%	18.3%	18.5%
Long-Term Debt	0.0%	0.0%	0.1%	0.3%	0.8%	7.1%
Other Long-Term Liab.	17.9%	17.1%	18.3%	6.0%	5.2%	4.6%
Total Liabilities	36.7%	32.3%	32.4%	25.5%	24.4%	30.2%
Total Equity	63.3%	67.7%	67.6%	74.5%	75.7%	69.8%
Total Liabilities & Equity	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Preferred Stock	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Common Stock	63.3%	67.7%	67.6%	74.5%	75.7%	69.8%
Reported Shares	11.5%	9.0%	11.1%	13.6%	18.6%	20.7%

Source: Morningstar, 2007

Table 4. Income Statement for PacSun

Pacific Sun wear of California, Inc
Consolidated Statements of Income - Income Statements
(in Millions)

	2007	2006	2005	2004	2003	2002
Revenue	1413.9	1391.5	1229.8	1040.3	846.4	684.8
Cost of Goods Sold	958.5	885.0	781.8	677.0	562.7	464.7
Gross Profit	455.4	506.5	447.9	363.3	283.7	220.2
SG&A Expenses	336.0	309.2	277.9	235.1	202.5	175.9
Operating Income	119.4	197.3	170.0	128.3	81.2	44.3
Net Int. Income & Other	5.4	5.7	1.9	0.7	(0.6)	0.5
Earnings Before Tax	124.9	203.0	171.9	129.0	80.6	44.8
Income Tax	47.3	76.7	65.0	48.8	31.0	17.2
Earnings After Tax	77.6	126.2	106.9	80.2	49.7	27.6
Net Income	77.6	126.2	106.9	80.2	49.7	27.6
Reported Shares	69.5	72.8	74.9	78.4	74.2	73.7
Sales Growth	1.6%	13.1%	18.2%	22.9%	23.6%	

Source: Morningstar, 2007

Table 5. Common Size Income Statement for PacSun

Pacific Sun wear of California, Inc
Consolidated Statements of Income - Income Statements
(in Millions)

	2007	2006	2005	2004	2003	2002
Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Goods Sold	67.8%	63.6%	63.6%	65.1%	66.5%	67.9%
Gross Profit	32.2%	36.4%	36.4%	34.9%	33.5%	32.2%
SG&A Expenses	23.8%	22.2%	22.6%	22.6%	23.9%	25.7%
Operating Income	8.4%	14.2%	13.8%	12.3%	9.6%	6.5%
Net Int. Income & Other	0.4%	0.4%	0.2%	0.1%	-0.1%	0.1%
Earnings Before Tax	8.8%	14.6%	14.0%	12.4%	9.5%	6.5%
Income Tax	3.3%	5.5%	5.3%	4.7%	3.7%	2.5%
Earnings After Tax	5.5%	9.1%	8.7%	7.7%	5.9%	4.0%
Net Income	5.5%	9.1%	8.7%	7.7%	5.9%	4.0%

Source: Morningstar, 2007

Table 6. Statement of Cash Flow for PacSun

Pacific Sunwear of California, Inc
Consolidated Statements of Cash Flow

	2007	2006	2005	2004	2003	2002
			(in Millions)			
Operating Activities						
Net Income	77.6	126.2	106.9	80.2	49.7	27.6
Depr. & Amortization	69.0	63.2	51.7	36.3	32.5	27.2
Other	35.0	(5.1)	(15.6)	35.2	(5.5)	0.4
Cash from Operations	181.6	184.3	143.0	151.7	76.6	55.1
Investing Activities						
Capital Expenditures	(138.5)	(109.2)	(82.0)	(40.2)	(40.4)	(89.7)
Other	74.3	4.3	(13.0)	(33.0)	0.0	0.0
Cash from Investing	(64.1)	(104.9)	(95.0)	(73.2)	(40.4)	(89.7)
Financing Activities						
Net Issuance of Stock	(109.0)	(47.0)	(91.3)	30.4	3.4	4.3
Net Issuance of Debt	(0.7)	(1.6)	(2.1)	(1.5)	(0.8)	(0.5)
Dividends	0.0	0.0	0.0	0.0	0.0	0.0
Other	1.0	0.0	0.0	(0.9)	(25.5)	25.0
Cash from Financing	(108.7)	(48.5)	(93.4)	28.0	(22.9)	28.7
Change in Cash	8.8	30.9	(45.3)	106.4	13.3	(5.8)

Source: Morningstar, 2007

This growth and expansion has been funded mainly through internal sources of funding, rather than financial leverage. PacSun has maintained a very low level of interest-bearing debt, decreasing from $25.3 million in fiscal 2001 to $0 in fiscal 2005, (see Table 2 – Balance Sheet). PacSun maintains a credit facility available of $200 million if needed; however, cash flows have been sufficient to sustain the growth of the firm. PacSun has struggled to increase sales of higher profit margin proprietary brands with sales of proprietary brands declining over the past three years from 31 percent to 28 percent of total sales (PacSun Investor Relations, 2007). PacSun has been able to maintain costs as a percentage of revenues but has not been able to reduce costs and effectively take advantage of incremental price increases over the past few years. A portion of this ineffectiveness appears to be the increases in Sales, General, and Administrative expenses that have increased as a percentage of revenues each year over the past six years. The reporting segments for PacSun have also suffered recent declines in same-store sales causing a decline in gross profit of 10 percent for fiscal 2006 from 2005 (see Table 4 – Income Statement).

The retail apparel industry has become much more competitive over the last few years as major retailers have made moves to increase their revenues from this industry. While revenues have increased, sales growth has declined dramatically from 23.6 percent in 2002 to 1.6 percent for 2006. Although PacSun was able to increase revenues by nearly 3 percent from 2005, earnings per share declined from $1.67 per share to $0.56 per share (66.5 percent decline). Cash from operations has been fairly flat for the past two years while cash expenditures and stock repurchases have increased dramatically. These actions have led to the decline of cash generated by the overall activities of the business (see Table 6 – Statement of Cash Flows). Due to declining performance PacSun has recently announced the

planned closure of 74 Demo stores to be effective during the first half of fiscal 2007. Inventory write-off for these locations is expected to total $25 million in non-cash charges (PacSun Investor Relations, 2007). Also, according to the 2006 10K, estimated expenses for early lease terminations could cost PacSun as much as $12 million. Share performance has ranged from a 52-week low of $13.12 to a high of $25.26 (Yahoo Finance, 2007). Most recently the stock has been moving upward as investors have been reacting favorably to the announcement of the store closures and a change in management focus from net new store growth to same store sales growth and increased profit margins.

Even with the financial performance weakness over the past few years, the stock has provided a very competitive return in comparison to the Nasdaq Market index and the Retail Index. Until recently the stock was performing well above both indices, but has dropped considerably since the decline in same-store sales and weakening financials over the past fiscal year. Figure 2 illustrates this comparison of returns.

Corporate Governance Analysis

Corporate governance is defined as "The set of rules and procedures that ensure that managers do indeed employ the principles of value-based management" (Brigham & Ehrhardt, 2005, p. 525). Corporate governance serves one main purpose, which is to assure that manager's objectives are aligned with stakeholder's objectives. A company's stakeholders include stockholders, employees, business partners, and the communities the company serves.

Corporate governance analysis allows investors to obtain a better understanding of firm management. The Board of Directors can tell us how much the company desires to remove itself from the "outside noise" so it can manage

daily operations and investment policies more freely. Also, corporate governance analysis allows investors to determine managerial entrenchment.

Calculated Returns[1]	02/02/02	02/01/03	01/31/04	01/29/05	01/28/06	02/03/07
Pacific Sunwear	100	121	229	240	241	199
Nasdaq Market Index	100	70	109	107	122	131
Retail Index	100	81	119	143	155	168
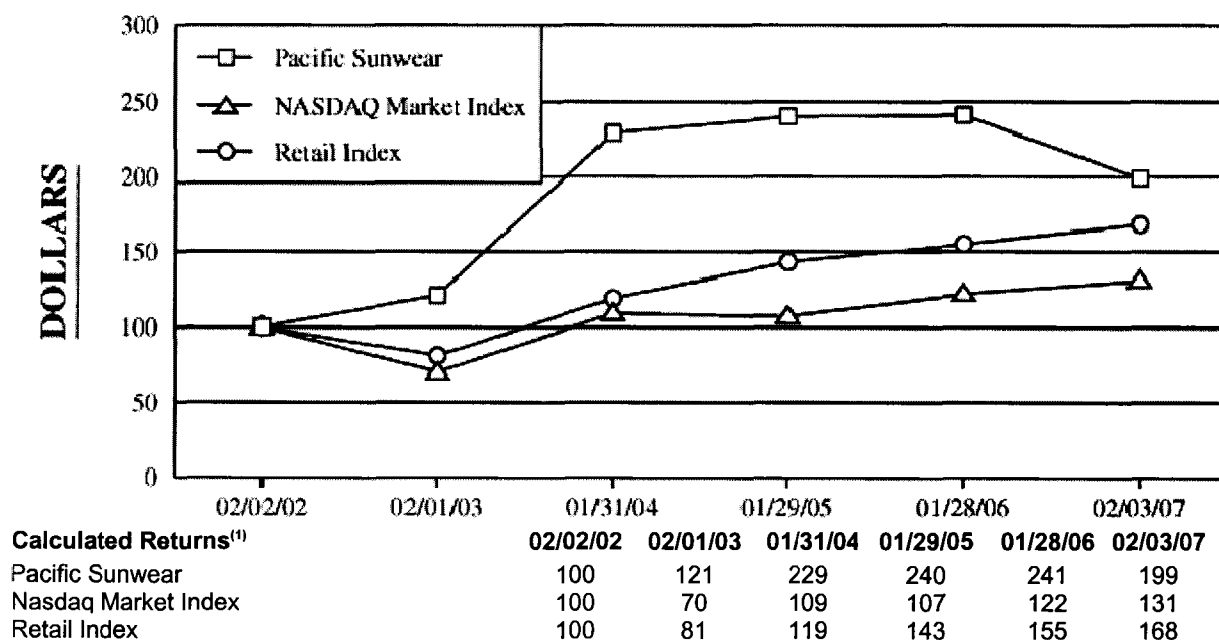
Figure 2. Comparison of Cumulative Total Return

Management and Stockholders

The total shares outstanding as of January 29, 2007 were 69,458,992, the percentage owned by institutional investors was 95 percent, and the percentage held by insiders was 1.09 percent. The institutional shares are broadly spread among 414 shareholders (Barrons, 2007). Based upon the percentage of distribution between insiders and institutional shareholders, PacSun has relatively few insider holdings and greater institutional holdings. Only one member of the Board of Directors, Sally Frame Kasaks the current acting CEO, is an insider. The other six members of the Board of Directors are all independent directors. The Board of Directors is responsible to oversee and supervise the overall affairs of the

company. The Board is divided into three committees: (1) Audit Committee, (2) Compensation Committee, and (3) Nomination & Governance Committee (PacSun Investor Relations, 2007). The balance of power rests with the shareholders as independent directors control the Board and institutional shareholders hold the vast majority of shares outstanding. Because of this balance of power, management is prompted to act in the interest of stakeholders, rather than their personal interests.

Firm and Financial Markets

PacSun maintains public information readily accessible through either the company website, government sites, or in print. PacSun is well-followed by approximately 23 analysts from multiple firms (PacSun Investor Relations, 2007). Because the firm is followed by many analysts, this would lead us to believe there are fewer biases in the information available. Additionally, the large numbers of institutional shareholders monitor the company and its financial statements leading to greater transparency and reliability.

Segment Performance

PacSun has identified four operating segments: PacSun, PacSun Outlet, Demo, One Thousand Steps. For reporting purposes PacSun includes PacSun Outlet performance with the PacSun segments as well as internet sales with each respective segment.

PacSun. This segment continues to generate the bulk of sales with the percentage of net sales for fiscal 2006 declining 1 percent to 86 percent of total net sales. PacSun stores totaled 965 up from 907 in 2005 and representing 80.5 percent of existing stores. Same store sales proved to be more stable declining 4.2 percent for the fiscal year 2006 (PacSun Investor Relations, 2007).

DEMO. This segment struggled during fiscal 2006. Net sales as a percentage of total net sales were 14 percent up slightly from 2005. DEMO stores totaled 225 up from 198 in 2005 and represent 18.8 percent of existing stores. Same store sales for the segment fell 7.9 percent for fiscal 2006. This underperformance has led to the planned closure of 74 Demo stores during the first half of fiscal 2007 (PacSun Investor Relations, 2007).

One Thousand Steps. This newest operating segment was opened in mid-2006 and contributed very minimally to PacSun's overall performance. Currently operating only nine concept stores the segment generated just over $5 million in sales for fiscal 2006 amounting for less than one half percent. One Thousand Steps is expected to maintain a negative contribution margin during fiscal 2007 accounting for the significant start-up costs incurred in opening the nine initial concept stores (PacSun Investor Relations, 2007).

Revenue Drivers

There are several internal and external factors that influence PacSun's revenue creation. Following are the revenue drivers credited with sustaining long-term profitability. These drivers are hopeful to continue into the future and bring increasing revenues and profits.

Improve Brand Offerings

PacSun offers a wide array of popular name brands and supplements with higher margin proprietary brands. Currently there are two brands contributing 11 percent each to net sales, while no other brands contribute more than 7 percent to net sales (PacSun Investor Relations, 2007). Identifying weak brand offerings and removing them will continue to help drive revenues. PacSun is also in collaboration with many vendors to create a stronger proprietary brand offering.

Proprietary brands offer higher margins and greater control of costs. PacSun is also involved in developing several "exclusive" offerings. These "exclusive" offerings not available through other retailers will continue to drive the growth in revenues.

PacSun possesses strong customer knowledge and understanding and maintains focus on a specific target market. Utilization of focus groups, customer and employee feedback, monitoring sell-through trends and small quantity test product introduction allow PacSun to remain at the forefront of fashion trends. This is vital in maintaining product demand and sales as the retail apparel industry is very heavily influenced by fashion trends.

Control of Inventory

Improved control of inventory is a key to driving future revenue growth and improved operating margins. PacSun has invested heavily over the past few years in creating an integrated Information System to assist in inventory control, purchasing and demand forecasting. Effectively exploiting the information available in the information system will drive improvements in forecasting sales mark-ups and mark-downs. Due to previous ineffective management of inventory, PacSun has suffered increasing costs from mark-downs. In 2006, mark-downs cost $203 million, a $60 million increase over 2005 (PacSun Investor Relations, 2007). Forecasting demand has improved through the use of the information systems. The retail apparel industry is very cyclical and PacSun is no exception. The back-to-school and Christmas seasons account for 30 percent of net sales annually. Improved offerings and inventory to match demand during these critical retail seasons will help to drive revenue improvements in the future.

Reinvestment in Existing Stores

PacSun's pursuit of store growth versus sales growth has caused a decline in same-store sales for fiscal 2006. This decline has led to the announced closure of 74 stores whose performance is sub-standard. Fiscal 2007 has brought a new focus by management on improving sales in existing stores. This strategy should prove successful as management has already taken steps to improve store offerings and inventory based upon sales volumes and contribution to net sales. Guys' apparel has been the largest contributor to net sales with 38 percent, 36 percent, and 37 percent in 2006, 2005, and 2004, respectively (PacSun Investor Relations, 2007). Footwear has been the laggard contributing a mere 13 percent, 14 percent, and 14 percent for 2006, 2005, and 2004, respectively (PacSun Investor Relations, 2007). These figures have prompted management to decrease floor space and inventory space for footwear and increase space for guys' apparel.

Merchandise and Inventory Acquisition
Costs

Declining prices in manufacturing of textiles and increased competition have led to decreased costs for merchandise and inventory. The proliferation of trade from Asia has led to decreased costs associated with the manufacture of clothing and textiles, generally improving operating margins. Increased competition has forced domestic manufacturers and suppliers to cut prices to remain competitive. PacSun operates without contracts with its suppliers, which has allowed it to benefit from the decline in costs. Strong vendor relations have also contributed to PacSun's ability to obtain favorable pricing from long-time suppliers. Maintaining strong vendor relations will continue to be a key.

Maintain Store Image

The retail apparel industry is very competitive; carving a niche market as PacSun has successfully done is very difficult. Continual growth of revenue will require maintaining and increasing the association of PacSun and Demo Stores to their target markets and lifestyles. Targeted marketing has increased through the capture of customer e-mail addresses, as well as print advertising in magazines associated with the target customers continues to drive recognition of PacSun and Demo as being synonymous with the target lifestyles.

Chapter 4

HISTORIC FINANCIAL ANALYSIS

PacSun's performance has been declining over the past few years and in order to determine an appropriate view for the future it is necessary to analyze the past financial performance through ratio analysis and other techniques, which will help to determine the financial health of the company.

Ratio Analysis

Ratio Analysis involves creating ratios from the various financial statements in order to create a picture of the financial health of the company. Ratio analysis is also critical when comparing performance against competitors or their industry. These analyses can be used to identify strengths and weaknesses within the company. Ratio analysis is also often used by analysts to identify trends for financial statement forecasting.

Table 7. Liquidity Ratios

I. Liquidity Ratios	3-Feb-07	28-Jan-06	29-Jan-05	31-Jan-04	1-Feb-03	2-Feb-02
Current Assets	335,235,000	426,721,000	352,818,000	353,537,000	182,633,000	144,830,374
Current Liabilities	140,533,000	122,471,000	95,310,000	110,539,000	73,328,000	65,930,665
Inventory	205,213,000	215,140,000	175,081,000	147,751,000	123,433,000	102,512,329
Current ratio = CA/CL	2.39	3.48	3.70	3.20	2.49	2.20
Quick ratio = (CA-Inv)/CL	0.93	1.73	1.86	1.86	0.81	0.64

The liquidity ratios show the ability the company has to cover its short-term or current liabilities. The larger the ratio the better coverage the firm has of current liabilities. PacSun increased its liquidity ratios from 2002 to 2005 showing increasing strength; however, since 2005 the ratios have declined,

demonstrating weakness in its ability to manage current liabilities and assets over the past few years. The quick ratio, which is a better measure of liquidity, declined by 50 percent since 2005, indicating possibly a build-up of inventory, decline in current assets or an increase in current liabilities. This is not a healthy trend for the company; it is preferable that the liquidity ratios stay fairly consistent or continually improve.

Table 8. Asset Management Ratios

II. Asset Management Ratios	3-Feb-07	28-Jan-06	29-Jan-05	31-Jan-04	1-Feb-03	2-Feb-02
Sales	1,447,204,000	1,391,473,000	1,229,762,000	1,041,456,000	847,150,000	684,840,266
Total Assets	773,243,000	807,561,000	677,778,000	644,487,000	399,743,000	355,440,524
Accounts receivable	11,216,000	12,679,000	8,129,000	5,194,000	2,916,000	3,043,916
Total Assets Turnover = S/TA	1.87	1.72	1.81	1.62	2.12	1.93
Receivable Turnover = S/Ave. AR	121.13	133.74	184.61	256.83	284.28	449.97
Ave. Collection Period =360/Rec. Turnover	2.97	2.69	1.95	1.40	1.27	0.80
Cost of good sold	1,001,807,000	884,982,000	781,828,000	668,807,000	554,829,000	464,660,657
Inventory Turnover = COGS / Ave. Inv	4.77	4.54	4.84	4.93	4.91	9.07
Current Assets Turnover = S/CA	4.32	3.26	3.49	2.95	4.64	4.73
Fixed Assets	708,774,000	602,962,000	503,745,000	429,643,000	298,644,000	266,411,682
Fixed Assets Turnover = S/ FA	2.04	2.31	2.44	2.42	2.84	2.57

Asset management ratios demonstrate how efficiently the company utilizes its assets to generate revenues. Based upon the total asset turnover and the current asset turnover ratios, PacSun has been fairly consistent at generating revenues with a given level of assets. PacSun's receivable turnover ratio has decreased dramatically and combined with the average collection period, it is evident it is either having difficulty collecting on its accounts receivable or it is extending much larger amounts of credit. Inventory turnover has decreased nearly 50 percent which means merchandise is staying on the shelf longer; this could be an indication of slowing sales, poor purchasing estimates, or a possible misread of

fashion trends. The constant decline in the fixed asset turnover could be an indication the firm is increasing the number of stores quicker than its sales growth would warrant; increasing turnover would be desirable as an indication of better use of current fixed assets.

Table 9. Leverage Ratios

III. Leverage Ratios	3-Feb-07	28-Jan-06	29-Jan-05	31-Jan-04	1-Feb-03	2-Feb-02
Long term debt	0	0	403,000	1,455,000	3,338,000	25,328,976
Debt Ratio = (CL+LTD)/ TA	0.18	0.15	0.14	0.17	0.19	0.26
Equity	503,353,000	546,790,000	458,034,000	428,732,000	302,391,000	247,955,145
Equity Multiplier = TA/Equity	1.54	1.48	1.48	1.50	1.32	1.43

The leverage ratios are a measure of how much debt or equity the company utilizes in comparison to its total assets. PacSun has maintained a very low debt ratio, and eliminated all long-term debt reported on its financial statements as of 2006. It has been able to grow the company through its use of cash and equity. The equity multiplier has remained fairly constant, which would indicate that PacSun has not had to seek much additional capital through the issuance of equities.

Table 10. Profitability Ratios

IV. Profitability Ratios	3-Feb-07	28-Jan-06	29-Jan-05	31-Jan-04	1-Feb-03	2-Feb-02
Gross Profit Margin = (S-COGS)/S	30.78%	36.40%	36.42%	35.78%	34.51%	32.15%
EBIT	59,595,000	197,273,000	170,013,000	128,227,000	81,220,000	44,281,981
Operating Profit Margin = EBIT/Sales	4.12%	14.18%	13.82%	12.31%	9.59%	6.47%
Net Profit	39,621,000	126,212,000	106,904,000	80,200,000	49,666,000	27,565,621
Net Profit Margin = NI /S	2.74%	9.07%	8.69%	7.70%	5.86%	4.03%
ROA = NI/TA	5.12%	15.63%	15.77%	12.44%	12.42%	7.76%
ROE = NI /Equity	7.87%	23.08%	23.34%	18.71%	16.42%	11.12%

Profitability ratios measure how well the firm is performing and controlling its costs. The gross profit margin is an indication of the percentage of each dollar of sales remaining after subtracting the cost of producing the sale. PacSun had increasing profit margins until 2007. This would indicate an increase in the cost of producing the goods sold. Operating profit margin is a measure of the profitability when administrative and sales expenses have been deducted. PacSun was experiencing increasing operating profit margins until 2007, in which the margin dropped by more than 75 percent. Such a decline is a definite signal and warrants a deeper look to determine if the cause of the decline is permanent or temporary. Net profit margins are an indication of how much is left after all expenses, including interest and taxes have been deducted from sales. PacSun had increasing net profit margins through 2006 and similar to operating profit margins suffered a precipitous decline. The return on assets and return on equity are measures of how efficiently the firm can generate income with the given level of assets and equity. As would be expected with declining profit margins, the returns on assets and equity have decreased dramatically. PacSun suffered declining existing same store sales, which put pressure on the margins and returns.

Analysis of Financial Statements

Historic financial statements must be analyzed in order to determine key factors that will be used to forecast financial statements and future growth. The historic analysis of the financial statements will help to identify trends and changes in the operations and financial structure of the company. Also the analysis will help to determine whether the firm is generating an economic profit and positive cash flows for investors.

The first component analyzed is NOPLAT (net operating profit less adjusted taxes). PacSun's NOPLAT increased from $27,276,337 in 2002 to

$155,891,008 in 2006; however in 2007 NOPLAT dropped by more than 50 percent to $65,418,651 (see Appendix A). The increase in NOPLAT accompanied by increases in sales is a positive trend. The dramatic decrease in NOPLAT in 2007, although sales increased from $1,391,473,000 in 2006 to $1,447,204,000 in 2007, raises definite concerns about future growth trends for PacSun (see Appendix A).

Next, invested capital is analyzed to attempt to identify any trends that may help to forecast PacSun's future growth. Historic invested capital (excluding goodwill) appears to be growing at a steady pace from $1,017,598,380 in 2003 to $1,723,328,506 in 2007 (see Appendix A). Invested capital for fiscal year ending in February 2002 is excluded from the trend because of a lack of information needed to calculate capitalized operating leases. Including 2002 figures would have skewed the trend. The invested capital trend appears to be consistent with a company seeking growth.

Analysis of historic cash flows provides a basis for understanding whether the company is generating cash or using cash to grow. Cash flows have been improving for PacSun from 2003 to 2007, but still remained negative. In the fiscal year ending February 2003 free cash flow was a negative $664,212,115, improving to negative $45,865,514 at fiscal year end February 2007 (see Appendix A). Although the cash flows are negative, consistent with a growing company, the trend is positive because of the improvements.

Economic profit analysis of historic financial statements helps to determine whether the company is creating value. Economic profit measures the ability of the company to earn returns above the rate required by equity investors and debt holders, also known as the weighted average cost of capital (calculation discussed in chapter 5). PacSun achieved steady economic profits with $59,727,156 in 2003

rising to $63,237,318 in 2006 (see Appendix A). In the fiscal year ended February 2007 economic profit dropped dramatically to a negative $42,364,126.

Analysis of PacSun's financial statements helps gain insight into possible future outcomes for the company. Based upon the trends observed in our analysis PacSun appears to be having some difficulty in generating economic profits and positive cash flows. This may very well be due to increased costs and expenses that are needed to fuel the growth of the company. As estimates are formulated to generate the financial statement forecast in depth, research must be done to determine if the results of the fiscal year ended February 2007 are the start of a new trend or merely short-term growing pains.

Chapter 5

VALUATION TECHNIQUES

When attempting to determine the intrinsic value of companies, there are several categories of valuation techniques: relative valuation models and discounted cash flow models. Relative valuation techniques utilize multiples such as price to earnings and price to book, among others, to arrive at an intrinsic value. Discounted cash flow models utilize projections of future earnings, discounted at an appropriate rate to arrive at the intrinsic value of the company. The most commonly used financial models employed are:

1. Relative Valuation Models

    a. P/E Ratio

    b. P/BV Ratio

    c. P/CF Ratio

    d. P/S Ratio

2. Discounted Cash Flow Models

    a. Enterprise Discounted Cash Flow (EDCF)

    b. Adjusted Present Value (APV)

    c. Economic Profit (EP)

    d. Free Cash Flow to Equity (FCFE)

Relative Valuation Models

P/E Ratio

According to Aswath Damodaran (Damodaran Online, 2007), "P/E ratio is a statistic that relates the price paid to current earnings" and it can also be used as "a proxy for a number of characteristics of the firm, including risk and growth." Company value can be estimated by multiplying the expected EPS (Earnings Per Share) by the P/E ratio. This calculation derives the expected value of the company. The method for calculating intrinsic value involves first, estimating the price per share two years from now. This is done by multiplying the estimated earnings per share two years from now by the historical average price earnings ratio.

$$P_2 = EPS_2 \times P/E \qquad \text{(eq.1)}$$

where,

P_2 = price at year 2

EPS_2 = estimated earnings per share in year two

P/E = historical average price earnings ratio

Then the price estimate for year two must be discounted back two years in order to obtain the intrinsic value. To discount use the following formula:

$$P_0 = \frac{P_2}{(1 + k_e)^2} \qquad \text{(eq.2)}$$

where,

P_0 = current price

P_2 = price estimate for year two

k_e = rate of return required on equity

The EPS estimate for two years from now can usually be obtained by using an analyst's estimate. The P/E ratio can be calculated using either the historical average or by applying the Gordon Growth Model (Brigham & Ehrhardt, 2005):

$$P = \frac{D_0(1+g)}{k_e - g} \qquad \text{(eq.3)}$$

where,

P = Price

D_0 = dividend for last year

g = growth rate

k_e = required rate of return on equity

The Gordon Growth Model requires the required rate of return always be greater than the growth rate. If the growth rate exceeds the required rate of return, then the firm would inherently have an infinite price (Brigham & Ehrhardt, 2005). Since no firm can have an infinite price, this model is commonly referred to as the constant growth model, requiring the growth of the firm to be an assumed constant rate and must be less than the required rate of return. Given the assumption that the dividend grows at a constant rate forever, this model solves for the present value of the infinite series of all future dividends. Therefore, we can use the Gordon Growth Model to calculate the price equal to the dividend divided by the total return minus growth. If both sides of the equation are divided by EPS and are given a constant growth rate, the P/E ratio can be calculated in the following manner (Brigham & Ehrhardt, 2005):

$$P/E = \frac{PayoutRatio \times (1+g)}{k_e - g} \qquad \text{(eq.4)}$$

where,

g = growth rate of the dividend

k_e = required rate of return on equity

Payout Ratio = ratio of earnings paid as dividends to shareholders

Making appropriate estimations is a very important aspect of valuing a firm. Analysts rely on current company information, market conditions, and future economic prospects for both the company and the economy as a whole. Analysts consider information such as technological advancement, increasing competition, operating margins going forward, and the company's ability to penetrate new markets or gain additional market share. Since PacSun currently pays no dividends, the Gordon Growth model cannot be used for finding the intrinsic price. However, using either the ten-year or five-year average P/E ratio as a multiplier, an intrinsic price can be calculated.

P/BV Ratio

The price to book value ratio is a comparison of the current price per share of common stock divided by the estimated end of year book value per share. Book value is the net worth of the company as reported on its balance sheet (Bodie et al., 2005, p. 606).

$$P/BV = \frac{P_t}{BV_{t+1}} \qquad \text{(eq.5)}$$

where,

P$_t$ = current price of common stock

BV$_{t+1}$ = book of value of the firm's common stock in one year

Many analysts view the P/BV ratio as an indicator of how aggressively the market values the firm. Book value per share can be calculated by dividing shareholder's equity by the shares of common stock outstanding. Analysts sometimes consider a firm with a low P/BV ratio as being "safer" than firms with high ratios. This comes from the idea that the book value acts as a "floor" for supporting the market price of the stock (Bodie et al., 2005, p. 668). This theory is questionable because often firms sell for less than their book value per share. For use in equity valuation, a high P/BV ratio often indicates that investors think a firm has an opportunity to earn a rate of return in excess of the market capitalization rate (Bodie et al., 2005, p. 668).

Calculating the price per share of the firm involves multiplying the estimated book value per share at the end of year two and the historical P/BV ratio.

$$P_2 = BV_2 \times \frac{P}{BV} \qquad \text{(eq.6)}$$

where,

P$_2$ = price at year two

BV$_2$ = estimated BV at end of year two

P/BV = historical P/BV ratio for the firm

Just like with the P/E ratio, the calculated price per share at year two (P$_2$) must be discounted two years using the same formula and method. Applying

equation (2) allows an investor to estimate the current price per share and by comparing with the market price per share a determination of under valuation or over valuation can be made very quickly.

P/CF Ratio

The price to cash flow ratio is a comparison of the current price per share divided by the estimated per share cash flow for year two. This ratio has grown in popularity over the years as analysts have become concerned over the propensity of some firms to manipulate earnings per share. Generally, cash flows are less prone to manipulation and are less affected by accounting decisions (Bodie et al., 2005, p. 632).

$$P/CF = \frac{P_t}{CF_{t+1}}$$ (eq.7)

where,

P_t = current price of common stock

CF_{t+1} = firm's cash flow in one year

There are two, generally accepted, forms of cash flow used in the P/CF ratio. The first is operating cash flow, which is generally calculated by adding back all non-cash expenses to net income. The second is "free cash flow" which is the operating cash flow net of new investments. Operating cash flow is generally the preferred form of cash flow as it is usually less volatile and "free cash flow" has a tendency to be negative for high growth firms.

Calculating the intrinsic value involves estimating the price per share at the end of year two and discounting back to the present. The price per share for year two can be calculated by multiplying the estimated cash flow per share at the end of year two by the historical average P/CF ratio.

$$P_2 = CF_2 \times \frac{P}{CF} \qquad \text{(eq.8)}$$

where,

P_2 = estimated price at year two

CF_2 = estimated cash flow for year two

P/CF = historical average price to cash flow ratio

Again, similar to P/E and P/BV ratios in order to arrive at the intrinsic value, P_2 must be discounted two years by using the equation (2). The intrinsic value per share can be compared to the current market price to attempt to make a determination as to whether or not the firm is under valued or over valued.

P/S ratio

The price to sales ratio is a comparison of the current price per share of the firm divided by the estimated next year net sales. Net sales are calculated by subtracting returns and discounts from the total sales figure.

$$P/S = \frac{P_t}{S_{t+1}} \qquad \text{(eq.9)}$$

where,

P_t = current price of common stock

S_{t+1} = next year estimated net sales

The price to sales ratio has gained increased use given that many small start-up firms have no earnings and the cash flows are unpredictable, rendering most other methods of valuation unreliable (Bodie et al., 2005, p. 633). This ratio is also appropriate when valuing mature and cyclical companies. The drawbacks include the potential for distortion caused by manipulation of revenue recognition.

Price to sales also does not take into consideration a company's expenses. This can cause a company to have a low P/S ratio while not generating any or very little profit and in order to create value as a going concern a firm must at some point generate earnings and cash (Bodie et al., 2005, p. 633).

Calculating a firm's intrinsic value using the P/S ratio involves multiplying the estimated net sales for year two and the historic P/S ratio. This will produce a price at year two, which must then be discounted to the present.

$$P_2 = S_2 \times \frac{P}{S}$$ (eq.10)

where,

P$_2$ = estimated price at year two

S$_2$ = estimated net sales for year two

P/S = historical average price to sales ratio

Once the price for year two has been determined, it must be discounted to the present in order to evaluate. Discounting is done by using equation (2) described in the P/E ratio section. Once the price per share has been discounted you may then evaluate whether the stock is over valued or under valued by comparing it with the market price.

Discounted Cash Flow Models (DCF)

DCF valuation is analogous to the net present value (NPV) calculation of a firm in capital budgeting. When performing the calculations, the gross return from an investment is netted against the capital invested to obtain free cash flows. These free cash flows are then discounted with the required cost of capital. The following four discount models are frequently used in determining a firm's value: the Free Cash Flow to Equity (FCFE) model, the Enterprise Discounted Cash

Flow (EDCF) model, the Adjusted Present Value (APV) model, and Economic Profit (EP) model.

Just like with the relative valuation models the assumptions and estimates made to derive the required inputs for the model are very important. If the model inputs are erroneous or unrealistic the results will not be valid or correct.

Enterprise Discounted Cash Flow
   (EDCF)

Enterprise valuation models value the company's operating cash flows rather than cash flows to equity holders. Enterprise valuation models are based upon the concept proposed by Franco Modigliani and Merton Miller in the 1950s that the value of a company's economic assets must equal the value of the claims against those assets (Koller et al., 2005, p. 104). In other words, to value the equity of a company, first value the company's operations and then subtract all non-equity financial claims (i.e., debt). This model is especially valuable when extended to a multi-business company where the value of each individual operating unit can be summed to arrive at the enterprise value. Also, the enterprise model allows for the valuation of projects, business units, and the entire company utilizing one consistent methodology.

Since the enterprise discounted cash flow model uses operating cash flows to value operations, the appropriate discount rate is the weighted average cost of capital or WACC. The EDCF model requires a forecast of the financial statements and cash flows and the calculation of a terminal value all discounted to the present. Once the cash flows have been discounted and summed, the value of excess cash and non-operating assets are added to derive the enterprise value. Once the enterprise value has been calculated, the value of all non-equity financial claims (debt and capitalized operating leases) are subtracted to arrive at the equity

value. The equity value is then divided by the number of shares outstanding to determine the value per share of common stock for comparison to the current price per share.

Calculating the free cash flows for use in the EDCF model uses the following basic formula:

Table 11. Free Cash Flow Calculation

(1)	NOPLAT (Net Operating Profit Less Adjusted Taxes)
(2)	Depreciation
(3)	Gross Cash Flow = (1 + 2)
(4)	(Increase)/decrease in operating working capital
(5)	(Capital expenditures)
(6)	(Investments in goodwill)
(7)	(Investments in intangibles)
(8)	Increase (decrease) in accumulated comprehensive income
(9)	Gross Investment = (4) + (5) + (6) + (7) + (8)
(10)	Free Cash Flow = (3) + (9)

Source: Koller et al., 2005, p. 180

The discount factor used for determining the present value of the future cash flows is the WACC. WACC represents the expected return on a firm's total assets, including the cost of debt and cost of equity by different weights according to the firm's capital structure. WACC is often referred to as the "hurdle rate" for capital investment. The WACC is therefore a sum of the cost of debt multiplied by the capital structure weight given to debt and the cost of equity multiplied by the weight given to equity. The formula is the following:

$$WACC = k_d(1-T)(\frac{D}{D+E}) + k_e(\frac{E}{D+E}) \qquad (eq.11)$$

where,

k_d = cost of debt

k_e = cost of equity

T = tax rate

D = market value of debt

E = market value of equity

Calculating the cost of equity can be done by using the capital asset pricing model (CAPM), which postulates that a securities expected rate of return (synonymous with cost of equity) equals the risk-free rate plus the security's beta times the market risk premium (Koller et al., 2005, p. 300).

$$k_e = r_f + \beta[E(R_m) - r_f]$$ (eq.12)

where,

k_e = cost of equity

r_f = risk-free rate

β = stock's sensitivity to the market

$E(R_m)$ = expected return of the market

In the CAPM model, the risk-free rate and market risk premium (defined as the expected return of the market minus the risk-free rate) are common for all companies. The only factor that is company specific is the beta (β). Beta is a measure of a stock's incremental risk to a diversified investor. Risk is defined by how much the stock co-varies with the aggregate stock market (Koller et al., 2005, p. 300).

To implement the CAPM and determine the cost of equity, the risk-free rate, market risk premium, and beta must be determined first. To estimate the risk-free rate, I use government default-free bonds. Ideally, using a government bond with a similar maturity to the cash flows generated is recommended. The

most common proxy for U.S.-based companies is the 10-year zero coupon
Treasury bond. Zero coupon bonds or STRIPS are preferred because they make
no interim interest payments that would effectively shorten their stated maturity
(Koller et al., 2005, p. 302).

The next component of the CAPM is the market risk premium, which is the
difference between the expected return on the aggregate market and the risk-free
rate. Unlike the risk-free rate, the expected return on the market is unobservable,
making an estimation of the market risk premium difficult. However, based upon
historical averages and forward-looking estimates, the appropriate market risk
premium is generally between 4.5 and 5.5 percent (Koller et al., 2005, p. 302).

According to the CAPM, what drives the stock's expected return is the
beta, as generally the other model inputs are the same for all securities. Beta is the
measure of risk defined by how much a stock co-varies with the aggregate market.
Beta of the aggregate market is accepted as being 1; thus a firm with a beta greater
than 1 would be considered riskier than the aggregate market and a firm with beta
less than 1 considered less risky. The most common method for calculating beta is
by using a regression to find the raw beta and then improving the estimate by
using industry comparables or smoothing techniques (Koller et al., 2005, p. 312).
The most common regression model used to measure raw beta is the market
model:

$$R = \alpha + \beta R_m + \varepsilon$$
<div align="right">(eq.13)</div>

where,

  R = return of the common stock

  α = firm's alpha

  β = firm's Beta

R_m = return of the market

ϵ = estimation error

In this model, the stock's return is regressed (not price) against the market's return. The model requires at least 60 data points, which are generally five years of monthly returns. To improve upon the beta estimate two techniques may be used: calculating an industry average beta and smoothing.

Since companies in the same industry generally face similar operating risks, their betas should be similar. Calculating an industry average beta requires computing the raw beta for a sample of securities across the industry. After calculating the individual betas for each company in the sample, determine the mean and median beta for the sample. Comparing the industry mean and median to the company raw beta will produce a superior estimate of beta (Koller et al., 2005, p. 318).

If few comparable firms exist an alternative for improving the estimate of beta is smoothing. Smoothing is based upon the observation that betas revert to the mean (Koller et al., 2005, p. 320).

The formula for smoothing beta is:

$$Adjusted\beta = (.33) + (.67)\beta \qquad (eq.14)$$

Smoothing implies that over time a firm's risk will move toward the mean or risk of the aggregate market.

Once all the inputs have been calculated they may now be plugged into the CAPM formula to arrive at the cost of equity. The tax rate used in equation (11) is the marginal tax rate of the firm; reducing the cost of debt by the marginal tax rate

incorporates the value of the tax shield because interest is tax deductible (Koller et al., 2005, p. 113).

Cost of debt in equation (11) is the required rate of return demanded by debt creditors. To estimate the cost of debt, I use the yield to maturity of the company's long-term option free bonds (Koller et al., 2005, p. 324). Yield to maturity should be calculated with long-term bonds because the duration better matches the company's cash flows for the EDCF model. If a company has only short-term bonds or rarely traded bonds, an indirect method may be used to calculate cost of debt. First, determine the company's credit rating on unsecured long-term debt. Standard and Poor's and Moody's will rate a company's debt. Next, examine the average yield to maturity on a portfolio of long-term bonds with the same credit rating. Use this average yield as a proxy for the company's yield on its long-term bonds.

Market values of debt and equity determine the capital structure of the firm for calculating the WACC. If the company's debt and equity are publicly traded, then simply multiply the quantity of each security by its most recent price to derive market value. Generally, if the company's debt is traded infrequently or not publicly traded then using the book value of debt will reasonably estimate the market value. Market value of equity should be determined by multiplying the market price by the number of shares outstanding. Do not use shares issued because this may include shares repurchased by the company.

The EDCF model requires the calculation of cash flows for an explicit time period, generally ten years. The most common method for estimating cash flows requires a forecast of financial statements into the future. Generally, this forecast is made for 5-10 years or until the analyst determines the cash flow will grow at a constant rate in the future. After forecasting financial statements, a constant

growth rate must be determined in order to calculate the terminal value. The terminal value is defined as the value of all future operating profits discounted at the constant growth rate. This value is calculated by using the following formula:

$$TV_n = \frac{NOPLAT_{n+1}(1 - g/RONIC)}{WACC - g}$$ (eq.15)

where,

TV$_n$ = terminal value of all future NOPLAT discounted to period n

NOPLAT$_{n+1}$ = Normalized net operating profit after adjusted taxes in the first year after the explicit forecast period (generally ten years)

WACC = weighted average cost of capital

g = expected growth rate in NOPLAT in perpetuity

RONIC = expected rate of return on net new invested capital

NOPLAT is the net operating profits from the company's core operations less the adjusted taxes related to the core operations (Koller et al., 2005, p. 61). Adjusted taxes for the core operations are determined by subtracting taxes on interest income (interest income x tax rate) from the reported taxes on the income statement. Then add the interest tax shield (interest expense x tax rate) of both debt and capitalized operating leases to arrive at operating taxes on income before interest and taxes. Next, add (subtract) an increase (decrease) in deferred taxes to determine operating cash taxes. Operating cash taxes are subtracted from EBITA (earnings before interest, tax, and amortization) to arrive at NOPLAT.

Once all the cash flows have been determined and terminal value calculated, each must be discounted to arrive at the value of operations. Discounting uses the following formula:

$$VO = \left(\sum_{t=1}^{n} \frac{FCF_t}{(1 + WACC)^t} + \frac{TV_n}{(1 + WACC)^n} \right) \times (1 + WACC)^{0.5}$$ (eq.16)

where,

  VO = value of operations

  FCF_t = free cash flow to the firm for period t

  WACC = weighted average cost of capital

  TV_n = terminal value of all future cash flows in year n

Since operations happen throughout the year and not just at the end of each year it is necessary to adjust the value of operations. The adjusting factor is $(1+WACC)^{0.5}$, which assumes that all components such as Free Cash Flow are occurring evenly during the year. By including the mid-year adjustment factor in equation (16) the value of operations will be adjusted and give a more reasonable result.

Next, the value of excess cash and other non-operating assets must be added with the value of operations to determine the enterprise value. The value of debt and other non-equity financial claims (i.e., capitalized operating leases) must be subtracted from the enterprise value to determine the equity value. The equity value is then divided by the number of shares of common stock outstanding to determine the price per share. This calculated price per share can be compared to the market price to determine whether the company may be over or under-priced.

Adjusted Present Value (APV)

The adjusted present value (APV) model separates the value of operations into two components: the value of operations as if the company was financed completely by equity and the value of tax shields that arises from debt financing.

$$VO = V_U + V_{ITS} \qquad (eq.17)$$

where,

  VO = value of operations

V_u = value of firm as if it was all equity financed

V_{ITS} = value of interest tax shields

The APV model follows the teachings of Modigliani and Miller, who proposed that in a market with no taxes, a company's choice of financial structure would not affect the value of its economic assets (Koller et al., 2005, p. 122). In reality, taxes play a part in decision making. Since interest is tax deductible profitable companies can lower taxes and increase cash flows by raising debt. But if the company relies too heavily on debt the risk of bankruptcy increases. The increase in risk raises the costs of debt and equity for the company. The APV model values the company as if it were all equity financed and adjusts for the value of the interest tax shield. The free cash flows are discounted by the unlevered cost of equity (cost of equity if the company had no debt). Then add any value created by the use of debt.

The free cash flows used in the APV model are the same as the EDCF model (see Table 11, p. 59). The cash flows, however, are discounted using the unlevered cost of equity, which can be calculated using the following formula:

$$k_u = \left(\frac{D}{V}\right)k_d + \left(\frac{E}{V}\right)k_e \qquad \text{(eq.18)}$$

where,

k_u = unlevered cost of equity

k_e = cost of equity

k_d = cost of debt

D = market value of debt

E = market value of equity

V = market value of capital (D+E)

The value of a levered firm is the present value of the firm's free cash flows plus the value of the interest tax shields (by discounting them at the unlevered cost of equity). Equation (17) can then be modified and becomes:

$$VO = \left(\sum_{t=1}^{n} \frac{FCF_t + ITS_t}{(1+k_u)^t} + \frac{TV_n}{(1+k_u)^n} \right) \times (1 + WACC)^{0.5} \qquad \text{(eq.19)}$$

where,

VO = value of operations

k_u = unlevered cost of equity

FCF_t = free cash flow to the firm for period t

TV_n = terminal value at period n discounted by k_u

ITS_t = interest tax shield for period t

WACC = weighted average cost of capital

The APV model like the EDCF model and all discounted cash flow models should be adjusted using the mid-year adjustment factor $(1+WACC)^{0.5}$, to arrive at a more reasonable value of operations.

Similar to the EDCF model the APV model requires the forecasting of cash flows for an explicit period, generally ten years. After the forecast period both the growth rate and capital structure are assumed to be stable. As mentioned earlier the free cash flow calculation is the same as the EDCF model. The value of the interest tax shield must be determined to add to the value of free cash flows. To obtain the value of the interest tax shields, the expected interest payments must be multiplied by the tax rate.

$$ITS_t = (D_{t-1} \times k_d) \times T \qquad \text{(eq.20)}$$

where,

ITS$_t$ = value of interest tax shield for period t

D$_{t-1}$ = market value of debt one period prior to period t

k$_d$ = cost of equity

T = tax rate

Finally, the terminal value, which is the value of the firm's cash flows and interest tax shields beyond the explicit forecast period (period n), can be calculated using the perpetuity formula. It is assumed that growth rates and capital structure will remain constant after the end of the forecast period in the APV model. Calculating the terminal value for the APV model differs from the EDCF model. APV requires the calculation of adding the terminal value of free cash flows and the terminal value the interest tax shields.

$$TV_n = \left(\frac{FCF_n(1+g)}{(k_u - g)} + \frac{ITS_n(1+g)}{(k_u - g)} \right)$$

(eq.21)

where,

TV$_n$ = terminal value of cash flows and interest tax shields

FCF$_n$ = free cash flow for period n

ITS$_n$ = interest tax shield for period n

g = expected growth rate in perpetuity

k$_u$ = cost of equity unlevered

The value of operations should now be determined by using equation (19). Next, add the value of excess cash and non-operating assets to arrive at the enterprise value and then subtract the value of debt and all non-equity financial claims. This equals the value of equity that can be divided by the number of

shares of common stock outstanding. If done correctly both the EDCF and the APV models should provide similar results.

Economic Profit (EP)

The discounted cash flow models explained above rely on cash flows in and out of the company, but this provides no insight into the company's performance. The economic profit model highlights how and when the company creates value, but the results of the Economic Profit valuation model are identical to our other models (Koller et al., 2005, p. 118). Economic profit is a measure of how much value is created by a company in a single period and is calculated as follows:

$$EP = IC \times (ROIC - WACC) \qquad (eq.22)$$

or

$$EP = NOPLAT - (IC \times WACC) \qquad (eq.23)$$

where,

    EP = economic profit

    IC = invested capital

    ROIC = return on invested capital

    WACC = weighted average cost of capital

    NOPLAT = net operating profits less adjusted taxes

Invested capital for the company represents the cumulative amount the company has invested in its core operations – mainly property, plant, and equipment and working capital. WACC for the Economic Profit (EP) model is calculated using equation (11). Return on invested capital (ROIC) must be calculated for the company as follows:

$$ROIC = NOPLAT / IC \qquad \text{(eq.24)}$$

where,

ROIC = return on invested capital

NOPLAT = net operating profits less adjusted taxes

IC = invested capital

NOPLAT is the net operating profits from the company's core operations less the adjusted taxes related to the core operations (Koller et al., 2005, p. 61). Adjusted taxes for the core operations are determined by subtracting taxes on interest income (interest income x tax rate) from the reported taxes on the income statement. Then add the interest tax shield (interest expense x tax rate) of both debt and capitalized operating leases to arrive at operating taxes on income before interest and taxes. Next, add (subtract) an increase (decrease) in deferred taxes to determine operating cash taxes. Operating cash taxes are subtracted from EBITA (earnings before interest, tax, and amortization) to arrive at NOPLAT.

The EP model requires forecasting financial statements and then calculating economic profit for each year. The terminal value must also be calculated and discounted to the present similar to the other DCF models. Terminal value for the EP model is calculated with the following formula:

$$TV_n = \frac{EP_{n+1}}{WACC} + \frac{NOPLAT_{n+1} \times (g/RONIC) \times (RONIC - WACC)}{WACC \times (WACC - g)} \qquad \text{(eq.25)}$$

where,

EP_{n+1} = economic profit for period n + 1

TV_n = terminal value at period n

WACC = weighted average cost of capital

$NOPLAT_{n+1}$ = NOPLAT at period n +1

g = expected growth rate of NOPLAT in perpetuity

RONIC = expected return on net new invested capital

The calculation of the growth rate for the company is the same as discussed previously. EP for the terminal value formula represents the economic profit in the last forecast year. Once the terminal value has been calculated it must be discounted, along with all the forecast years of economic profit.

$$VO = (IC_0 + \sum_{t=1}^{n} \frac{EP_t}{(1+WACC)^t} + \frac{TV_n}{(1+WACC)^n}) \times (1+WACC)^{0.5} \quad (eq.26)$$

where,

VO = value of operations

IC_0 = invested capital at time zero

EP_t = economic profit at period t

TV_n = terminal value at period n

WACC = weighted average cost of capital

Similar to the other discounted cash flow models the value of operations is adjusted by using the mid-year adjustment factor $(1+WACC)^{0.5}$; this provides a more reasonable result for the value of operations.

To arrive at the value of equity add the value of excess cash and non-operating assets then subtract the value of debt and all non-equity financial claims. The calculated equity value can then be divided by the number of common stock shares outstanding to determine the estimated price per share. Comparing the estimated price per share with the current market price allows the analyst to determine whether the company appears to be over valued or under valued.

Many analysts prefer the EP model over other DCF models because of the ability to see when and how much value the company is creating. However, if the models are performed correctly and based upon the same assumptions, all of the DCF models will yield the same end result (Koller et al., 2005, p. 120).

Free Cash Flow to Equity (FCFE)

The FCFE model values equity directly by discounting cash flows to equity by the cost of equity rather than at the firm's weighted average cost of capital (Koller et al., 2005, p. 128). The FCFE model is difficult to implement since capital structure is embedded in the cash flows. The FCFE model works best for companies whose debt to equity ratio remains at a constant level. When leverage rises the cost of equity has to be adjusted to reflect the increased risk of bankruptcy imposed upon equity holders. Like all DCF models, cash flows and discount rates must be calculated before the model can be applied. Calculating free cash flow to equity traditionally uses the following formula:

Table 12. Free Cash Flow to Equity Calculation

(1)	Net Income
(2)	Depreciation
(3)	Amortization
(4)	Increase (decrease) in deferred taxes
(5)	Gross Cash Flow = (1) + (2) + (3) +(4)
(6)	Investment in operating working capital
(7)	Investment in net long-term assets
(8)	Decrease (increase) in excess cash
(9)	Investment in other non-operating assets
(10)	Increase (decrease) in short-term debt
(11)	Increase (decrease) in long-term debt
(12)	Cash Flow to Equity = (5) + (6) + (7) + (8) + (9) + (10) + (11)

Source: Koller et al., 2005, p. 129

Alternatively, free cash flow to equity can be calculated as dividends plus share repurchases minus new equity issues (Koller et al., 2005, p. 129). Both methods should generate identical results; however, if a firm is not paying dividends the traditional formula must be used.

The FCFE model utilizes cash flows available to equity holders, which means that discounting the cash flows must be done at the firm's cost of equity. Calculating the cost of equity can be done by using the capital asset pricing model (CAPM) as described in equation (12).

The next required step is to estimate the cash flow to equity that will be discounted to arrive at the intrinsic value. The most common method for estimating cash flows requires a forecast of the financial statements into the future. Generally, this forecast is made for 5-10 years or until the analyst determines the cash flow will grow at a constant rate in the future. After forecasting financial statements a constant growth rate must be determined in order to calculate the terminal value. The terminal value is defined as the value of all future cash flows at the constant growth rate. This value is calculated by using the following formula:

$$TV_n = \frac{FCFE_n(1+g)}{k_e - g}$$

(eq.27)

where,

TV_n = terminal value of all future cash flows in year n

$FCFE_n$ = FCFE for the terminal year n

g = constant growth rate of free cash flow into the future

k_e = required rate of return on equity

In order to derive the terminal value the constant growth rate of the firm is required. There are generally two methods for estimating the constant growth rate. The first is an estimation based upon historic average growth rates. This method requires the calculation of the year to year growth rate of FCFE for at least 10 years and then calculating the mean and median to arrive at an appropriate estimate. Growth can also be estimated by multiplying the ROE by the retention rate. The ROE is the FCFE for the year divided by the total shareholder's equity at the beginning of the year and the retention rate is the percentage of earnings, which are retained and reinvested into the firm rather than paid out in dividends. It is believed the growth rate will be very close to the specific industry long-term expected consumer consumption growth rate (Koller et al., 2005, p. 322).

Once the terminal value has been calculated it must be discounted, along with all other forecast cash flows to determine the intrinsic value. Discounting is done with the following method:

$$VE = (\sum_{t=1}^{n} \frac{FCFE_t}{(1+k_e)^t} + \frac{TV_n}{(1+k_e)^n}) \times (1+k_e)^{0.5} \qquad \text{(eq.28)}$$

where,

VE = value of equity

$FCFE_t$ = free cash flow to equity in year t

k_e = cost of equity

g = growth rate in perpetuity

TV_n = terminal value of all future cash flows in year n

The intrinsic value or value of equity, according to our formula, is the sum of all the forecast cash flows and the terminal value all discounted by the cost of equity. The value of equity should also be adjusted by a mid-year adjustment

factor $(1+k_e)^{0.5}$ to compensate for the fact that the cash flows to equity happen throughout the year and not just at the end of the year. The mid-year adjustment factor for the FCFE model differs slightly from the other discounted cash flow models by using the cost of equity.

The calculated value of equity is then divided by the number of shares of common stock outstanding to arrive at an estimated price per share. Comparing the current price and estimated price allows an analyst to determine whether the firm is either over valued or undervalued.

Chapter 6

PACSUN VALUATION

Valuing PacSun requires the application of the models and formulas discussed in chapter 5. This valuation will use four of the eight models discussed. The four models to be used are P/E Ratio, Enterprise Discounted Cash Flow, Economic Profit, and Adjusted Present Value. The assumptions and calculations needed to apply these models are also discussed.

Required Inputs and Assumptions

Weighted Average Cost of Capital

As discussed in chapter 5, the weighted average cost of capital (WACC) is the required return of the company's total assets. Calculation of the WACC requires the calculation of both the costs of debt and equity, as well as a determination of the capital structure. The cost of debt for PacSun was determined to be 5.80 percent. This figure was extracted from the footnotes to the SEC filing 10K. Since PacSun has no outstanding long-term debt, the estimation of the cost of debt comes from a disclosure regarding rates for their credit facility through a financial institution.

The next component needed is PacSun's cost of equity (k_e). To determine k_e I use the capital asset pricing model (CAPM) as discussed in chapter 5, equation (12). The CAPM requires several inputs, which are beta (β), risk free rate (r_f), and the market risk premium. The risk free rate of return used in CAPM is 5.00 percent. This rate was determined by using the yield to maturity of the 10-year treasury with a maturity of May 2017 (Bloomberg.com, 2007). The market risk

premium, defined as the expected return of the market minus the risk free rate $(E(r_m)-r_f)$, used for the CAPM equation is also 5.00 percent based upon historic averages (Brigham & Ehrhardt, 2005, p. 315). Beta (β) for PacSun was calculated by running regressions as discussed in chapter 5. The regressions for the calculation were run against the returns of the S&P 500 for 60 monthly return periods from February 2002 to February 2007. The betas for several competitors (Abercrombie and Fitch, American Eagle, and Hot Topic) were also calculated for comparison (Table 13).

Table 13. Summary of Beta Calculations

betas		Market debt-to-equity ratio	Unlevered beta	Industry ave. beta_u	Target debt-to-equity ratio	Relevered beta
PacSun	0.74075	81.81%	0.40743		81.81%	1.98838
Abercrombie	1.15276	1.90%	1.13127	1.093678035	.	.
Amer. Eagle	1.70295	0.00%	1.70295		.	.
Hot Topic	1.13306	0.00%	1.13306		.	.
			$\beta\mu = \beta e/[1+(D/E)]$			$\beta_e = \beta_u [1+(D/E)]$

PacSun's beta (β) calculated from the regression is 0.74075. The calculated beta is then smoothed as discussed in chapter 5 equation (14). The result is an adjusted beta of 0.82630 (Figure 3).

Calculations of β_i

beta	0.74075
Unlevered beta	0.40743
Ind. ave. unlev. beta	1.09368
Relevered beta	1.98838

Alternative beta "smoothing"

Adjusted beta = (.33) + (.67) *beta	
Adjusted beta =	**0.82630**

Figure 3. Beta Calculations

The adjusted beta (β) is then applied with the other inputs into CAPM to determine PacSun's cost of equity. The result of CAPM for PacSun is a cost of equity (k_e) of 9.13 percent (Figure 4).

CAPM	
$K_e = r_f + \beta_i \, [E(R_m)-r_f]$	
$r_f =$	5.00%
$\beta_i =$	0.82630
$E(R_m)-r_f =$	5.00%
$K_e =$	9.13%

Figure 4. Capital Asset Pricing Model

The final inputs for the calculation of WACC are PacSun's market value of equity and the market value of debt. The market value of equity was calculated by multiplying the number of common stock shares outstanding by the market price per share. Shares outstanding were 69,560,080 (PacSun Investor Relations, 2007) and the market price as of February 1, 2007 was $20.02 (Yahoo Finance, 2007). The market value of equity for PacSun as of February 1, 2007 was $1,392,592,802 (Figure 5).

Debt (book value)	0
Operating leases	1,139,240,506
Excess cash	0
Total Net Debt	1,139,240,506
Equity	$ 1,392,592,802
Shares outstanding	69,560,080
Unit price (2/1/2007)	20.02

Figure 5. PacSun's Capital Structure

The market value of debt was calculated by capitalizing PacSun's operating leases. PacSun has no long-term debt on its balance sheets; however, it does have large amounts of operating leases. These operating leases represent on average a ten-year obligation (PacSun Investor Relations, 2007). This would be considered a long-term debt obligation for PacSun, which would affect its capital structure. Future rental expenses are included in the footnotes of PacSun's 10k and must be converted from rental expenses to capitalized operating leases. Converting to capitalized operating leases is done by using the following formula:

$$AV_{t-1} = \frac{RE_t}{k_d + \frac{1}{AL}}$$ (eq.29)

where,

AV_{t-1} = asset value one period prior to period t

RE_t = rental expense in period t

k_d = cost of debt

AL = asset life

Rental expenses of $180,000,000 and the ten-year asset life input in equation (29) for the calculation of capitalized operating leases were provided in the footnotes of the 10k financial statements (PacSun Investor Relations, 2007). The debt obligation calculated using equation (29) was $1,139,240,506. This figure is then used as the debt book value for determining the capital structure and calculating WACC.

PacSun's WACC is now calculated by using equation (11) from chapter 5. The result is an estimated WACC of 6.72 percent (Table 14).

Table 14. Weighted Average Cost of Capital

WACC					
Source of Capital	Proportion of Total Capital	Cost of Capital	Statutory Tax Rate	After-tax Opportunity Cost	Contribution to Weighted Average
Debt	45.00%	5.80%	35.00%	3.77%	1.70%
Equity	55.00%	9.13%	-	9.13%	5.02%
	100.00%			WACC	6.72%

Unlevered Cost of Equity

The unlevered cost of equity (k_u) must be determined for use in the Adjusted Present Value model (APV). Unlevered cost of equity is calculated using equation (18) from chapter 5. PacSun's unlevered cost of equity is estimated to be 7.63 percent (Figure 6).

$K_u = (D/V)K_d + (E/V)K_e$	
E/V =	55.00%
D/V =	45.00%
K_d=	5.80%
K_e=	9.13%
k_u =	7.63%

Figure 6. Unlevered Cost of Equity

Financial Forecast Assumptions

To apply the discounted cash flow models to PacSun, a forecast of PacSun's financial statements must be made for ten years into the future. Forecasting necessitates making certain assumptions that affect the estimated value. Assumptions must be made regarding growth, expenses, capital structure, and financing.

Forecasting sales is one of the key components to forecasting financial statements. Sales forecasting required an estimation of the growth of new stores and an estimation of sales revenue growth per store. The fiscal 2008 estimate of store growth is negative. PacSun is estimating to open approximately 20 new PacSun retail stores, while closing 74 of its underperforming DEMO stores, resulting in a net decline of 54 stores (PacSun Investor Relations, 2007). Beyond fiscal 2008 PacSun is concentrating on organic rather than geographic expansion to fuel growth. PacSun estimates in its latest 10k that store growth should continue at approximately 20-30 stores per year (PacSun Investor Relations, 2007). This is roughly a rate of 2 percent per year, which is used as the estimation.

Sale revenue growth is forecast to remain fairly steady between 4.5 percent - 5.5 percent annually before leveling off to 4 percent. PacSun is in a highly competitive industry with difficult to track fashion trends. This fact as well as the entrance of several new competitors who have been highly successful (Zumiez and Hollister) makes strong future growth difficult. The growth rate used for calculating terminal value (TV) for the discounted cash flow models is 4 percent based upon the industry long-term consumer spending estimations (Reuters Investors, 2007).

Forecasting expenses and other balance sheet items was done using two methods. First, each category was calculated as a percentage of either sales or costs of good sold. Then a historical average based upon the percentages for the last five years financial statements was calculated. Fiscal 2008 expenses and other balance sheet items were assumed to be either the same or very close to the previous year's level of percentage of sales. Subsequent years were adjusted closer to the calculated historical averages for each category. The financial

assumptions are used to generate the pro forma financial statements for the next ten-years after which time it is assumed PacSun has reached maturity and its growth has become constant (Table 15).

Table 15. Financial Forecast Assumptions

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Store Growth											
# of Stores	1199	1,145	1,168	1,191	1,215	1,239	1,264	1,289	1,315	1,342	1,368
Growth rate		-4.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Net new stores		(54)	23	23	24	24	25	25	26	26	27
Sales Revenue	1,447,204,000										
growth rate		4.50%	5.00%	5.50%	5.50%	5.00%	4.50%	4.50%	4.50%	4.50%	4.00%
Forecast revenue		1,512,328,180	1,587,944,589	1,675,281,541	1,767,422,026	1,855,793,127	1,939,303,818	2,026,572,490	2,117,768,252	2,213,067,823	2,301,590,536
Op. Exp Ratios											
COGS/Revenue	69.22%	68.00%	67.50%	67.25%	67.00%	66.75%	66.50%	66.50%	66.50%	66.50%	66.50%
SG&A (ex. Depr)/Reve	21.65%	21.00%	20.50%	20.50%	20.50%	20.50%	20.50%	20.50%	20.50%	20.50%	20.50%
Depreciation/Revenue	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%	5.01%
Non-op Income											
Non-op interest income	6.17%	6.07%	6.00%	5.93%	5.85%	5.85%	5.85%	5.85%	5.85%	5.85%	5.85%
Taxes											
Statutory tax rate	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Op. Current Assets											
Working Cash	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%	3.61%
Receivables, net	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%	0.78%
Inventories (COGS)	20.48%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%	21.00%
Pre-paid expenses	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%	1.92%
Other current assets	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Op. Current Liab											
Accounts payable (cog	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%	6.65%
Accrued expenses	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%	2.99%
Income taxes payable	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
Other current liabilities	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%	1.51%
Net property and equip	29.08%	29.08%	29.08%	29.08%	29.08%	29.08%	29.08%	29.08%	29.08%	29.08%	29.08%
Goodwill	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Other long-term assets	0.77%	0.77%	0.77%	0.77%	0.77%	0.77%	0.77%	0.77%	0.77%	0.77%	0.77%
Total Deferred Income	1.88%	1.88%	1.88%	1.88%	1.88%	1.88%	1.88%	1.88%	1.88%	1.88%	1.88%
Other Long Term Liabi	12.87%	12.87%	12.50%	12.25%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Rental expenses/Sales	12.44%	12.22%	12.00%	11.80%	11.60%	11.60%	11.60%	11.60%	11.60%	11.60%	11.60%
Projected rental expenses		184,806,504	190,553,351	197,683,222	205,020,955	215,272,003	224,959,243	235,082,409	245,661,117	256,715,868	266,984,502
Capitalized Operating	1,139,240,506	1,169,661,415	1,206,033,865	1,251,159,632	1,297,600,981	1,362,481,030	1,423,792,677	1,487,863,347	1,554,817,198	1,624,783,972	1,689,775,330

Pro-Forma Financial Statements

Pro-forma financial statements are the forward-looking estimated financial statements created from the financial assumptions. The pro-forma financial statements are analyzed and broken-down to derive the necessary inputs for the valuation models (Tables 16-20).

Table 16. Pro-Forma Financial Statements

Forecast Income Statement

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Revenues	1,447,204,000	1,512,328,180	1,587,944,589	1,675,281,541	1,767,422,026	1,855,793,127	1,939,303,818	2,026,572,490	2,117,768,252	2,213,067,823	2,301,590,536
COGS	1,001,807,000	1,028,383,162	1,071,862,598	1,126,626,837	1,184,172,758	1,238,741,913	1,289,637,039	1,347,670,706	1,408,315,888	1,471,690,103	1,530,557,707
Gross Profit	445,397,000	483,945,018	516,081,991	548,654,705	583,249,269	617,051,215	649,666,779	678,901,784	709,452,364	741,377,721	771,032,830
SG&A	313,273,000	317,588,918	325,528,641	343,432,716	362,321,515	380,437,591	397,557,283	415,447,360	434,142,492	453,678,904	471,826,060
Depreciation	72,529,000	75,767,642	79,556,024	83,931,605	88,547,844	92,975,236	97,159,121	101,531,282	106,100,189	110,874,698	115,309,686
Op. Income	59,595,000	90,588,458	110,997,327	121,290,384	132,379,910	143,638,388	154,950,375	161,923,142	169,209,683	176,824,119	183,897,084
Non-op interest income (expe	4,620,000	1,912,050	3,934,568	6,638,964	9,582,411	13,040,896	17,297,712	22,241,646	27,558,111	33,277,974	39,425,638
Income before Tax	64,215,000	92,500,508	114,931,895	127,929,347	141,962,321	156,679,285	172,248,087	184,164,788	196,767,794	210,102,094	223,322,722
Total Income Tax	24,594,000	32,375,178	40,226,163	44,775,272	49,686,812	54,837,750	60,286,830	64,457,676	68,868,728	73,535,733	78,162,953
Net Income	39,621,000	60,125,330	74,705,732	83,154,076	92,275,508	101,841,535	111,961,257	119,707,112	127,899,066	136,566,361	145,159,769
Dividends	0	0	0	0	0	0	0	0	0	0	0
Retained Earnings Added	39,621,000	60,125,330	74,705,732	83,154,076	92,275,508	101,841,535	111,961,257	119,707,112	127,899,066	136,566,361	145,159,769
Retained Earnings	496,874,000	556,999,330	631,705,062	714,859,138	807,134,646	908,976,181	1,020,937,438	1,140,644,550	1,268,543,616	1,405,109,977	1,550,269,746
EPS	0.57	0.86	1.07	1.20	1.33	1.46	1.61	1.72	1.84	1.96	2.09

Forecast Balance Sheet

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Cash & equivalents	52,267,000	54,595,047	57,324,800	60,477,664	63,803,935	66,994,132	70,008,868	73,159,267	76,451,434	79,891,748	83,087,418
Short-term Investments	31,500,000	65,576,139	111,955,544	163,801,895	222,921,307	295,687,385	380,199,075	471,078,815	568,854,264	673,942,526	789,888,130
Total Receivables, Net	11,216,000	11,796,160	12,385,968	13,067,196	13,785,892	14,475,186	15,126,570	15,807,265	16,518,592	17,261,929	17,952,406
Total Inventory	205,213,000	215,960,464	225,091,145	236,591,636	248,676,279	260,135,802	270,823,778	283,010,848	295,746,336	309,054,922	321,417,118
Prepaid Expenses	27,748,000	29,036,701	30,488,536	32,165,406	33,934,503	35,631,228	37,234,633	38,910,192	40,661,150	42,490,902	44,190,538
Other Current Assets, Total	7,291,000	7,561,641	7,939,723	8,376,408	8,837,110	9,278,966	9,696,519	10,132,862	10,588,841	11,065,339	11,507,953
Total Current Assets	335,235,000	384,526,152	445,185,716	514,480,204	591,959,026	682,202,699	783,089,443	892,099,250	1,008,820,618	1,133,707,366	1,268,023,564
Property/Plant/Equipment, Ne	420,886,000	439,785,035	461,774,286	487,171,872	513,966,325	539,664,641	563,949,550	589,327,280	615,847,008	643,560,123	669,302,528
Goodwill, Net	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Deferred Income Tax - Long	0	0	0	0	0	0	0	0	0	0	0
Other Long Term Assets	11,122,000	11,644,927	12,227,173	12,899,668	13,609,150	14,289,607	14,932,639	15,604,608	16,306,816	17,040,622	17,722,247
Total Assets	773,243,000	841,956,114	925,187,176	1,020,551,744	1,125,534,501	1,242,156,947	1,367,971,633	1,503,031,138	1,646,974,442	1,800,308,112	1,961,048,339
Accounts Payable	66,581,000	68,387,480	71,278,863	74,920,685	78,747,488	82,376,337	85,760,863	89,620,102	93,653,007	97,867,392	101,782,087
Accrued Expenses	43,338,000	45,218,613	47,479,543	50,090,918	52,845,919	55,488,215	57,985,184	60,594,517	63,321,271	66,170,728	68,817,557
Notes Payable/Short Term D	0	0	0	0	0	0	0	0	0	0	0
Income Taxes Payable	8,706,000	9,073,969	9,527,668	10,051,689	10,604,532	11,134,759	11,635,823	12,159,435	12,706,610	13,278,407	13,809,543
Other Current Liabilities	21,908,000	22,836,156	23,977,963	25,296,751	26,688,073	28,022,476	29,283,488	30,601,245	31,978,301	33,417,324	34,754,017
Total Current Liabilities	140,533,000	145,516,217	152,264,037	160,360,043	168,886,012	177,021,787	184,665,358	192,975,299	201,659,187	210,733,851	219,163,205
Long-Term Debt	0	0	0	0	0	0	0	0	0	0	0
Total Deferred Income Tax	463,000	608,653	756,252	841,775	934,112	1,030,950	1,133,392	1,211,804	1,294,732	1,382,472	1,469,464
Other Long Term Liabilities	128,894,000	132,352,913	133,982,825	138,011,787	142,100,731	148,649,030	154,756,445	161,720,485	168,997,907	176,602,812	183,666,925
Total Liabilities	269,890,000	278,477,784	287,003,113	299,213,606	311,920,855	326,701,766	340,555,195	355,907,588	371,951,826	388,719,135	404,299,593
Common Stock	696,000	696,000	696,000	696,000	696,000	696,000	696,000	696,000	696,000	696,000	696,000
Additional Paid-In Capital	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000	5,783,000
Retained Earnings	496,874,000	556,999,330	631,705,062	714,859,138	807,134,646	908,976,181	1,020,937,438	1,140,644,550	1,268,543,616	1,405,109,977	1,550,269,746
Total Stockholders' Equity	503,353,000	563,478,330	638,184,062	721,338,138	813,613,646	915,456,181	1,027,416,438	1,147,123,550	1,275,022,616	1,411,588,977	1,556,748,746
Total Liab. & Shareholders	773,243,000	841,956,114	925,187,175	1,020,551,744	1,125,534,501	1,242,156,947	1,367,971,633	1,503,031,138	1,646,974,442	1,800,308,112	1,961,048,339

Table 17. Projected NOPLAT

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Net Sales	1,447,204,000	1,512,328,180	1,587,944,589	1,675,281,541	1,767,422,026	1,855,793,127	1,939,303,818	2,026,572,490	2,117,768,252	2,213,067,823	2,301,590,536
Cost of Revenues	(1,001,807,000)	(1,028,383,162)	(1,071,862,596)	(1,126,626,837)	(1,184,172,758)	(1,238,741,913)	(1,289,637,039)	(1,347,670,706)	(1,408,315,888)	(1,471,690,103)	(1,530,557,707)
SG&A Expenses	(313,273,000)	(317,588,918)	(325,528,641)	(343,432,716)	(362,321,515)	(380,437,591)	(397,557,283)	(415,447,360)	(434,142,492)	(453,678,904)	(471,826,060)
Depreciation	(72,529,000)	(75,767,642)	(79,556,024)	(83,931,605)	(88,547,844)	(92,975,236)	(97,159,121)	(101,531,282)	(106,100,189)	(110,874,698)	(115,309,686)
Operating Lease Interest	66,075,949	67,840,362	69,949,964	72,567,259	75,260,857	79,023,900	82,579,975	86,296,074	90,179,397	94,237,470	98,006,969
Adjusted EBITA	**125,670,949**	**158,428,820**	**180,947,291**	**193,857,642**	**207,640,767**	**222,662,288**	**237,530,350**	**248,219,216**	**259,389,081**	**271,061,589**	**281,904,053**
Operating Cash Taxes	60,252,298	55,304,434	63,183,953	67,764,652	72,581,931	77,834,963	83,033,180	86,798,314	90,703,251	94,783,817	98,579,427
NOPLAT	**65,418,651**	**103,124,386**	**117,763,338**	**126,092,991**	**135,058,835**	**144,827,325**	**154,497,170**	**161,420,902**	**168,685,830**	**176,277,773**	**183,324,626**
Operating Taxes											
Reported Taxes	24,594,000	32,375,178	40,226,163	44,775,272	49,686,812	54,837,750	60,286,830	64,457,676	68,868,726	73,535,733	78,162,953
Taxes on interest income	(1,769,435)	(669,216)	(1,377,099)	(2,323,637)	(3,353,844)	(4,564,314)	(6,054,199)	(7,784,576)	(9,645,339)	(11,647,291)	(13,798,973)
Tax Shield on interest Expense	0	0	0	0	0	0	0	0	0	0	0
Tax Shield on lease interest	25,306,734	23,744,127	24,482,467	25,398,541	26,341,300	27,658,365	28,902,991	30,203,626	31,562,789	32,983,115	34,302,439
Operating taxes on EBITA	48,131,298	55,450,087	63,331,552	67,850,175	72,674,268	77,931,801	83,135,623	86,876,726	90,786,178	94,871,556	98,666,419
Dec (inc) in deferred taxes	12,121,000	(145,653)	(147,599)	(85,523)	(92,337)	(96,838)	(102,443)	(78,412)	(82,926)	(87,740)	(86,992)
Operating cash taxes	60,252,298	55,304,434	63,183,953	67,764,652	72,581,931	77,834,963	83,033,180	86,798,314	90,703,251	94,783,817	98,579,427
Reconciliation w/net income											
Net Earnings	39,621,000	60,125,330	74,705,732	83,154,076	92,275,508	101,841,535	111,961,257	119,707,112	127,889,066	136,566,361	145,159,769
Increase in deferred taxes	(12,121,000)	145,653	147,599	85,523	92,337	96,838	102,443	78,412	82,926	87,740	86,992
Goodwill Amortization	0	0	0	0	0	0	0	0	0	0	0
Adjusted Net Income	27,500,000	60,270,984	74,853,330	83,239,599	92,367,845	101,938,373	112,063,699	119,785,524	127,981,994	136,654,100	145,246,761
After-tax interest expense	0	0	0	0	0	0	0	0	0	0	0
After-tax lease interest expense	40,769,216	44,096,235	45,467,477	47,168,718	48,919,557	51,365,535	53,676,984	56,092,448	58,616,608	61,254,356	63,704,530
Total income available to investors	68,269,216	104,367,219	120,320,807	130,408,317	141,287,402	153,303,907	165,740,683	175,877,972	186,598,602	197,908,456	208,951,291
After-tax interest income	(2,850,565)	(1,242,833)	(2,557,469)	(4,315,326)	(6,228,567)	(8,476,583)	(11,243,513)	(14,457,070)	(17,912,772)	(21,630,683)	(25,626,665)
NOPLAT	**65,418,651**	**103,124,386**	**117,763,338**	**126,092,991**	**135,058,835**	**144,827,325**	**154,497,170**	**161,420,902**	**168,685,830**	**176,277,773**	**183,324,626**

Table 18. Projected Invested Capital

Projected Invested Capital - Investing Perspective

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Working Cash	52,267,000	54,595,047	57,324,800	60,477,664	63,803,935	66,994,132	70,008,868	73,159,267	76,451,434	79,891,748	83,087,418
Receivables, net	11,216,000	11,796,160	12,385,968	13,067,196	13,765,892	14,475,186	15,126,570	15,807,265	16,518,592	17,261,929	17,952,406
Inventories	205,213,000	215,960,464	225,091,145	236,591,636	248,676,279	260,135,802	270,823,778	283,010,848	295,746,336	309,054,922	321,417,118
Pre-paid expenses	27,748,000	29,036,701	30,488,536	32,165,406	33,934,503	35,631,228	37,234,633	38,910,192	40,661,150	42,490,902	44,190,538
Other current assets	7,291,000	7,561,641	7,939,723	8,376,408	8,837,110	9,278,966	9,696,519	10,132,862	10,588,641	11,085,339	11,507,953
Operating current assets	**303,735,000**	**318,950,013**	**333,230,172**	**350,678,309**	**369,037,719**	**386,515,314**	**402,890,368**	**421,020,435**	**439,966,354**	**459,764,840**	**478,155,434**
Accounts payable	66,581,000	68,387,480	71,278,863	74,920,685	78,747,488	82,376,337	85,760,863	89,620,102	93,653,007	97,867,392	101,782,087
Accrued expenses	43,338,000	45,218,613	47,479,543	50,090,918	52,845,919	55,488,215	57,985,184	60,594,517	63,321,271	66,170,728	68,817,557
Notes Payable/Short-term debt	0	0	0	0	0	0	0	0	0	0	0
Income taxes payable	8,706,000	9,073,969	9,527,668	10,051,689	10,604,532	11,134,759	11,635,823	12,159,435	12,706,610	13,278,407	13,809,543
Other current liabilities	21,908,000	22,836,156	23,977,963	25,296,751	26,688,073	28,022,476	29,283,488	30,601,245	31,978,301	33,417,324	34,754,017
Operating current liabilities	**140,533,000**	**145,516,217**	**152,264,037**	**160,360,043**	**168,886,012**	**177,021,787**	**184,665,358**	**192,975,299**	**201,659,187**	**210,733,851**	**219,163,205**
Operating working capital	163,202,000	173,433,796	180,966,135	190,318,265	200,151,707	209,493,527	218,225,010	228,045,136	238,307,167	249,030,990	258,992,229
Net property and equipment	420,886,000	439,785,035	461,774,286	487,171,872	513,966,325	539,664,641	563,949,550	589,327,280	615,847,006	643,560,123	669,302,528
Capitalized operating leases	1,139,240,506	1,169,661,415	1,206,033,865	1,251,159,632	1,297,600,981	1,362,481,030	1,423,792,677	1,487,863,347	1,554,817,198	1,624,783,972	1,689,775,330
Invested Capital (ex. Goodwill)	**1,723,328,506**	**1,782,880,246**	**1,848,774,287**	**1,928,649,770**	**2,011,719,014**	**2,111,639,199**	**2,205,967,237**	**2,305,235,763**	**2,408,971,372**	**2,517,375,084**	**2,618,070,088**
Goodwill	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Invested Capital w/ Goodwill	**1,729,328,506**	**1,788,880,246**	**1,854,774,287**	**1,934,649,770**	**2,017,719,014**	**2,117,639,199**	**2,211,967,237**	**2,311,235,763**	**2,414,971,372**	**2,523,375,084**	**2,624,070,088**
Excess Cash	0	0	0	0	0	0	0	0	0	0	0
Investments	31,500,000	65,576,139	111,955,544	163,801,895	222,921,307	295,687,385	380,199,075	471,078,815	568,854,264	673,942,526	789,868,130
Net other non-current assets/liabilities	(117,772,000)	(120,707,986)	(121,755,651)	(125,112,120)	(128,491,581)	(134,359,422)	(139,823,805)	(146,115,877)	(152,691,091)	(159,562,190)	(165,944,678)
Total funds invested	**1,643,056,506**	**1,733,748,399**	**1,844,974,179**	**1,973,339,545**	**2,112,148,740**	**2,278,967,161**	**2,452,342,507**	**2,636,198,702**	**2,831,134,545**	**3,037,755,420**	**3,247,993,540**

Projected Invested Capital - Financing Perspective

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Short-term debt	0	0	0	0	0	0	0	0	0	0	0
Long-term debt	0	0	0	0	0	0	0	0	0	0	0
Capitalized operating leases	1,139,240,506	1,169,661,415	1,206,033,865	1,251,159,632	1,297,600,981	1,362,481,030	1,423,792,677	1,487,863,347	1,554,817,198	1,624,783,972	1,689,775,330
Debt and equivalents	1,139,240,506	1,169,661,415	1,206,033,865	1,251,159,632	1,297,600,981	1,362,481,030	1,423,792,677	1,487,863,347	1,554,817,198	1,624,783,972	1,689,775,330
Deferred income taxes	463,000	608,653	756,252	841,775	934,112	1,030,950	1,133,392	1,211,804	1,294,732	1,382,472	1,469,464
Net common stock and paid in capital	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000	6,479,000
Retained Earnings	496,874,000	556,999,330	631,705,062	714,859,138	807,134,646	908,976,181	1,020,937,438	1,140,644,550	1,268,543,616	1,405,109,977	1,550,269,746
Equity and equity equivalents	503,816,000	564,086,984	638,940,314	722,179,913	814,547,758	916,486,131	1,028,549,830	1,148,335,354	1,276,317,348	1,412,971,449	1,558,218,209
Total funds invested	**1,643,056,506**	**1,733,748,399**	**1,844,974,179**	**1,973,339,545**	**2,112,148,740**	**2,278,967,161**	**2,452,342,507**	**2,636,198,701**	**2,831,134,546**	**3,037,755,420**	**3,247,993,540**

Table 19. Projected Cash Flows

Projected Cash Flows - Operating Cash Flows

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
NOPLAT	65,418,651	103,124,386	117,763,338	126,092,991	135,058,835	144,827,325	154,497,170	161,420,902	168,685,830	176,277,773	183,324,626
Depreciation	72,529,000	75,767,642	79,556,024	83,931,605	88,547,844	92,975,236	97,159,121	101,531,282	106,100,189	110,874,696	115,309,686
Employee Stock option Expense	0	0	0	0	0	0	0	0	0	0	0
Gross Cash Flow	137,947,651	178,892,028	197,319,362	210,024,596	223,606,679	237,802,560	251,656,292	262,952,184	274,786,020	287,152,471	298,634,312
Investment in Op. Working Capital	66,137,000	(10,231,796)	(7,532,340)	(9,352,130)	(9,833,442)	(9,341,820)	(8,731,483)	(9,820,125)	(10,262,031)	(10,723,823)	(9,961,240)
Net Capital Expenditures	(137,593,000)	(94,666,677)	(101,545,276)	(109,329,191)	(115,342,296)	(118,673,552)	(121,444,030)	(126,909,012)	(132,619,917)	(138,587,813)	(141,052,091)
Investment in Cap. Operating leases	(120,253,165)	(30,420,909)	(36,372,450)	(45,125,767)	(46,441,349)	(64,880,049)	(61,311,646)	(64,070,670)	(66,953,851)	(69,966,774)	(64,991,359)
Investment in Goodwill	500,000	0	0	0	0	0	0	0	0	0	0
Inc (dec) in other operating assets	7,396,000	(522,927)	(582,246)	(672,495)	(709,482)	(680,457)	(643,032)	(671,969)	(702,207)	(733,807)	(681,625)
Gross Investment	(183,813,165)	(135,842,308)	(146,032,311)	(164,479,583)	(172,326,569)	(193,575,878)	(192,130,192)	(201,471,776)	(210,538,006)	(220,012,216)	(216,686,314)
Free cash flow	(45,865,514)	43,049,720	51,287,050	45,545,013	51,280,110	44,226,682	59,526,099	61,480,408	64,248,014	67,140,254	81,947,998
After-tax interest income	2,850,565	1,242,833	2,557,469	4,315,326	6,228,567	8,476,583	11,243,513	14,457,070	17,912,772	21,630,683	25,626,665
Dec (inc) in marketable securities	43,411,000	(34,076,139)	(46,379,405)	(51,846,351)	(59,119,412)	(72,766,078)	(84,511,690)	(90,879,740)	(97,775,449)	(105,088,262)	(115,925,604)
Cash flow to investors	396,051	10,216,414	7,465,115	(1,986,011)	(1,610,735)	(20,062,813)	(13,742,078)	(14,942,262)	(15,614,663)	(16,317,324)	(8,350,942)

Projected Cash Flows - Financing Cash Flows

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
After-tax interest expense	0	0	0	0	0	0	0	0	0	0	0
After-tax lease interest expense	40,769,216	44,096,235	45,467,477	47,168,718	48,919,557	51,365,535	53,676,984	56,092,448	58,616,608	61,254,356	63,704,530
Decrease (increase) in debt	(120,253,165)	(30,420,909)	(36,372,450)	(45,125,767)	(46,441,349)	(64,880,049)	(61,311,646)	(64,070,670)	(66,953,851)	(69,966,774)	(64,991,359)
Dec (inc) other long-term liabilities	(3,178,000)	(3,458,913)	(1,629,912)	(4,028,963)	(4,088,943)	(6,546,299)	(6,107,415)	(6,964,040)	(7,277,422)	(7,604,906)	(7,064,112)
Flows to debt holders	(82,661,949)	10,216,414	7,465,115	(1,986,012)	(1,610,735)	(20,062,813)	(13,742,078)	(14,942,262)	(15,614,664)	(16,317,324)	(8,350,941)
Dividends	64,934,000	0	0	0	0	0	0	0	0	0	0
Net shares repurchased (issued)	18,124,000	0	0	0	0	0	0	0	0	0	0
Flows to equity holders	83,058,000	0	0	0	0	0	0	0	0	0	0
Cash flow to investors	396,051	10,216,414	7,465,115	(1,986,012)	(1,610,735)	(20,062,813)	(13,742,078)	(14,942,262)	(15,614,664)	(16,317,324)	(8,350,941)

Table 20. Projected Economic Profit

After Goodwill	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Invested Capital (beginning of year)	1,610,648,342	1,729,328,506	1,788,880,246	1,854,774,267	1,934,649,770	2,017,719,014	2,117,639,199	2,211,967,237	2,311,235,763	2,414,971,372	2,523,375,084
WACC	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%
Capital Charge	108,219,512	116,193,636	120,194,919	124,622,342	129,989,178	135,570,603	142,284,243	148,622,147	155,292,003	162,262,001	169,545,650
NOPLAT	65,418,651	103,124,386	117,763,338	126,092,991	135,058,835	144,827,325	154,497,170	161,420,902	168,685,830	176,277,773	183,324,626
Capital Charge	(108,219,512)	(116,193,636)	(120,194,919)	(124,622,342)	(129,989,178)	(135,570,603)	(142,284,243)	(148,622,147)	(155,292,003)	(162,262,001)	(169,545,650)
Economic Profit	(42,800,861)	(13,069,250)	(2,431,582)	1,470,649	5,069,657	9,256,722	12,212,927	12,798,755	13,393,828	14,015,771	13,778,976
Before Goodwill											
Invested Capital (beginning of year)	1,604,148,342	1,723,328,506	1,782,880,246	1,848,774,267	1,928,649,770	2,011,719,014	2,111,639,199	2,205,967,237	2,305,235,763	2,408,971,372	2,517,375,084
WACC	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%	6.72%
Capital Charge	107,782,777	115,790,496	119,791,779	124,219,202	129,586,038	135,167,463	141,881,103	148,219,007	154,888,862	161,858,861	169,142,510
NOPLAT	65,418,651	103,124,386	117,763,338	126,092,991	135,058,835	144,827,325	154,497,170	161,420,902	168,685,830	176,277,773	183,324,626
Capital Charge	(107,782,777)	(115,790,496)	(119,791,779)	(124,219,202)	(129,586,038)	(135,167,463)	(141,881,103)	(148,219,007)	(154,888,862)	(161,858,861)	(169,142,510)
Economic Profit	(42,364,126)	(12,666,109)	(2,028,441)	1,873,789	5,472,797	9,659,862	12,616,067	13,201,895	13,796,968	14,418,912	14,182,116

	2007	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E
Noplat	65,418,651	103,124,386	117,763,338	126,092,991	135,058,835	144,827,325	154,497,170	161,420,902	168,685,830	176,277,773	183,324,626
Net Investment	119,180,165	59,551,739	65,894,041	79,875,483	83,069,244	99,920,185	94,328,039	99,268,526	103,735,609	108,403,712	130,695,003
Free Cash Flows	(53,761,514)	43,572,647	51,869,296	46,217,508	51,989,591	44,907,140	60,169,132	62,152,377	64,950,221	67,874,061	82,629,623
Growth Rate of Noplat		57.64%	14.20%	7.07%	7.11%	7.23%	6.68%	4.48%	4.50%	4.50%	4.00%

Now with the pro-forma financial statements, broken down into the necessary components, it is possible to start the valuation models. The valuation models will be used to determine whether the company stock is overvalued or undervalued.

P/E Ratio Model

Applying this model requires the calculation and gathering of required information. First, the average historic P/E ratio needs to be determined. Ten years of P/E ratios is obtained from the Morningstar website (March 2007) and then averaged. The average P/E ratio for PacSun is 27.67. Next, I determine the earnings per share (EPS) for fiscal year 2009. PacSun's EPS estimate for fiscal year 2009 is $0.81 per share (Schwab Equity Rating Reports, 2007). Now the estimated EPS and the average P/E can be multiplied to obtain the intrinsic share price in fiscal year 2009. The intrinsic share price at the end of fiscal year 2007 is computed by discounting the 2009 intrinsic share price by the cost of equity (k_e). The result is an estimation of the current intrinsic share price of $18.82 (Table 21).

Table 21. P/E Ratio Valuation Model

	PacSun Price to Earnings Valuation									
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Historic P/E Ratios	49.8	20.5	43.9	23.3	16.8	32	32	21.8	18.1	18.5
Average P/E Ratio	27.67									
Estimated EPS (2009) $	0.81									
Cost of Equity (k_e)	9.13%									
Estimated Price (2009 EPS) $	22.41									
Estimated current price $	18.82	(estimated Intrinsic Value at the end of 2007								

Because the P/E ratio model relies strictly upon the historic average of P/E ratios and an estimation of only a single periods earnings the reliability is somewhat questionable. Therefore, this model alone would not be ideal for drawing conclusions regarding PacSun's intrinsic value.

Enterprise Discounted Cash Flow Model

The EDCF model as discussed in chapter 5 is based upon discounting future cash flows and a terminal value to the present and then adjusting to reach an estimated intrinsic value per share. The cash flows are calculated as a part of the pro-forma financial statement analysis shown in Table 19 (p. 86).

PacSun's terminal value is computed according to equation (15), and the result is shown in Figure 7.

$$TV = \frac{NOPLAT_{2017} \times (1-g/RONIC)}{WACC - g}$$

$$NOPLAT_{(2018)} = 190{,}653{,}184$$
$$g = 4.00\%$$
$$RONIC = 8.00\%$$
$$WACC = 6.72\%$$

$$TV_{(2017)} = 3{,}504{,}942{,}600$$

Figure 7. Enterprise DCF Model: Terminal Value Calculation

After the terminal value has been calculated, all inputs have been prepared to be used in equation (16) to obtain the value of operations. The next step is to sum the value of excess cash and other non-operating assets with the value of operations to derive the enterprise value. The values of debt and capitalized operating leases are then subtracted from the enterprise value to calculate the equity value of the company. Finally, PacSun's intrinsic share price of $16.86 is

obtained by dividing the equity value by the number of shares of common stock outstanding at the 2007 fiscal year end. The detailed calculations are shown in Table 22.

Table 22. Enterprise DCF Valuation

Period	Year	FCF	Discount Factor	PV of FCF
1	2008	43,049,720	0.937040237	40,339,320
2	2009	51,287,050	0.878044406	45,032,307
3	2010	45,545,013	0.822762939	37,472,749
4	2011	51,280,110	0.77096198	39,535,015
5	2012	44,226,682	0.722422397	31,950,346
6	2013	59,526,099	0.676938854	40,295,530
7	2014	61,480,408	0.634318944	38,998,187
8	2015	64,248,014	0.594382374	38,187,887
9	2016	67,140,254	0.556960201	37,394,450
10	2017	81,947,998	0.521894119	42,768,178
10	Terminal Value	3,504,942,600	0.521894119	1,829,208,930
			Present Value of Cash Flow:	2,221,182,899

Mid-Year Adjustment Factor	1.033048901
Value of Operations	**2,294,590,552**
Value of Excess Cash	0
Value of Other Non-Operating Assets	17,122,000
Enterprise Value	**2,311,712,552**
Value of Debt	0
Value of Capitalized Operating Leases	(1,139,240,506)
Equity Value	**1,172,472,045**
Number of Shares at Fiscal 2007 year-end	69,560,080
Estimated Share Value (intrinsic)	**$ 16.86**

At the end of fiscal year 2007, PacSun's market price was $20.02, while the intrinsic value obtained is $16.86. This means PacSun's shares were overpriced by $3.16 (15.78 percent) at that time.

Economic Profit Model

Economic profits are obtained by using either equation (22) or equation (23) as described in chapter 5. PacSun's economic profits for the explicit forecast period were calculated using equation (22) and the terminal value was calculated using equation (25). The calculation of the terminal value is shown in Table 23.

Table 23. EP Model Terminal Value Calculation

$$TV = \frac{Economic\ Profit_{(n+1)}}{WACC} + \frac{NOPLAT(n+1)\ (g/RONIC)\ (RONIC - WACC)}{WACC\ (WACC - g)}$$

Economic Profit $_{2018}$ =	14,329,802
NOPLAT $_{2018}$ =	190,653,184
g =	4.00%
RONIC=	8.00%
WACC=	6.72%
TV $_{2017}$=	880,693,458

The calculated terminal value, economic profits for the explicit forecast period (Table 20, p. 87), and the beginning invested capital (2008) are used to determine the present value of operations using equation (26). The present value of operations is adjusted using the mid-year adjustment factor. Then the same procedures as described in the EP model in chapter 5 are applied to determine enterprise value, equity value, and intrinsic per share value. The detailed calculation is shown in Table 24. The EP model found the intrinsic share price to

be $16.92. Comparing to the market price of $20.02 shows PacSun to be

overvalued by $3.10 (15.47 percent) at the end of fiscal 2007.

Table 24. Economic Profit Valuation

Period	Year	Invested Capital (Beg)	Economic Spread (ROIC-WACC)	Economic Profit	Discount Factor	PV of Economic Factor
1	2008	1,729,328,506	-0.76%	(13,069,250)	0.9370402	(12,246,413)
2	2009	1,788,880,246	-0.14%	(2,431,582)	0.8780444	(2,135,037)
3	2010	1,854,774,287	0.08%	1,470,649	0.8227629	1,209,995
4	2011	1,934,649,770	0.26%	5,069,657	0.770962	3,908,513
5	2012	2,017,719,014	0.46%	9,256,722	0.7224224	6,687,263
6	2013	2,117,639,199	0.58%	12,212,927	0.6769389	8,267,405
7	2014	2,211,967,237	0.58%	12,798,755	0.6343189	8,118,493
8	2015	2,311,235,763	0.58%	13,393,828	0.5943824	7,961,055
9	2016	2,414,971,372	0.58%	14,015,771	0.5569602	7,806,227
10	2017	2,523,375,084	0.55%	13,778,976	0.5218941	7,191,167
10	2017	Terminal Value		880,693,458	0.5218941	459,628,737

Present Value of Economic Profit	496,397,405
Invested Capital (beg. Of 2008)	1,729,328,506
Present Value plus Invested Capital	2,225,725,911
Mid-year adjustment factor	1.033048901
Value of Operations	**2,299,283,705**
Value of Excess Cash	0
Value of Other Non-Operating Assets	17,122,000
Enterprise Value	**2,316,405,705**
Value of Debt	0
Value of Capitalized Operating Leases	(1,139,240,506)
Equity Value	**1,177,165,199**
Number of Shares at Fiscal 2007 year-end	69,560,080
Estimated Share Value (intrinsic)	**16.92**

Adjusted Present Value Model

The APV model, as discussed in chapter 5, values a company as if it were all equity financed. In this model, the value of operations is split into two components: the value of operations as if the company were all equity financed and the present value of the interest tax shields. PacSun's interest tax shields are computed by multiplying the prior year debt by the projected interest rate and then multiplying by the tax rate (35 percent). Table 25 shows the calculated interest tax shields for the explicit forecast period.

Table 25. Interest Tax Shields

Year	Prior year debt	Expected interest rate	Tax rate	Interest tax shield
2008	1,139,240,506	5.80%	35%	23,126,582
2009	1,169,661,415	5.80%	35%	23,744,127
2010	1,206,033,865	5.80%	35%	24,482,487
2011	1,251,159,632	5.80%	35%	25,398,541
2012	1,297,600,981	5.80%	35%	26,341,300
2013	1,362,481,030	5.80%	35%	27,658,365
2014	1,423,792,677	5.80%	35%	28,902,991
2015	1,487,863,347	5.80%	35%	30,203,626
2016	1,554,817,198	5.80%	35%	31,562,789
2017	1,624,783,972	5.80%	35%	32,983,115

The terminal value for the APV model is the sum of the terminal value of cash flows plus the terminal value of the interest tax shields using equation (21) from chapter 5. The detailed calculation of the terminal values for cash flow and interest tax shield is shown in Table 26.

Next, the projected free cash flows, projected interest tax shields, and the terminal values are discounted using the unlevered cost of equity. The present values are all summed and adjusted using the mid-year adjustment factor to derive the value of operations (equation 19). Then like all the other DCF valuation

Table 26. APV Model Terminal Value Calculation

Terminal Value for APV - FCF		Terminal Value for APV - ITS	
$TV_{2017} = $	$\dfrac{FCF_{2017}\,(1+g)}{k_u - g}$	$TV_{ITS2017} = $	$\dfrac{ITS_{2017}\,(1+g)}{k_u - g}$
$FCF_{2018} = $	85,225,918	$ITS_{2018} = $	32,983,115
$k_u = $	7.63%	$k_u = $	7.63%
$g = $	4.00%	$g = $	4.00%
$TV_{2017} = $	**2,440,097,226**	$TV_{ITS2017} = $	**944,337,222**

models the values of excess cash and other non-operating assets are added to find the enterprise value. The values of debt and capitalized operating leases are then subtracted to arrive at the equity value. The equity value is divided by the shares of common stock outstanding for the intrinsic share price. The detailed calculations are in Table 27. The intrinsic price found, by using the APV model, was $16.23 where the market price was $20.02. This means that according to the model PacSun's share price was over-valued by $3.79 (18.94 percent) at the end of fiscal 2007.

Valuation Model Summary

A summary of the results of the four valuation models is given in Table 28. It can be seen that each method gives a slightly different result.

All the models provide very close results with the exception of the P/E ratio model. The DCF based models suggest that PacSun was highly over-valued at the time of comparison. The relative valuation model (P/E) suggests PacSun was only slightly over-valued at the time. The results, however, do not deviate drastically under the DCF based models with differences of approximately 0.30 percent to 3.45 percent. Since each model relies on slightly different assumptions, no single model can be considered as the most appropriate. However, the APV model is

Table 27. APV Valuation

Period	Year	FCF	Interest tax shield	Discount factor	PV of FCF	Present value of ITS
1	2008	43,049,720	23,126,582	0.929088	39,996,977	21,486,629
2	2009	51,287,050	23,744,127	0.8632044	44,271,209	20,496,036
3	2010	45,545,013	24,482,487	0.8019929	36,526,775	19,634,780
4	2011	51,280,110	25,398,541	0.7451219	38,209,933	18,925,009
5	2012	44,226,682	26,341,300	0.6922838	30,617,415	18,235,655
6	2013	59,526,099	27,658,365	0.6431925	38,286,743	17,789,654
7	2014	61,480,408	28,902,991	0.5975824	36,739,612	17,271,920
8	2015	64,248,014	30,203,626	0.5552067	35,670,925	16,769,254
9	2016	67,140,254	31,562,789	0.5158358	34,633,348	16,281,217
10	2017	81,947,998	32,983,115	0.4792569	39,274,139	15,807,384
10	Terminal Value	2,440,097,226	944,337,222	0.4792569	1,169,433,312	452,580,083
			Present Value		1,543,660,390	635,277,621

Present value of FCF (unlevered cost of equity)	1,543,660,390
Present Value of Interest Tax Shields (ITS)	635,277,621
Present Value of FCF and ITS	2,178,938,011
Mid-year adjustment factor	1.033048901
Value of Operations	**2,250,949,516**
Value of Excess Cash	0
Value of Other Nonperating Assets	17,122,000
Enterprise Value	**2,268,071,516**
Value of Debt	0
Value of Capitalized Operating Leases	(1,139,240,506)
Equity Value	**1,128,831,010**
Number of Shares at Fiscal 2007 year-end	69,560,080
Estimated Share Value (intrinsic)	**16.23**

Table 28. Summary of Valuation Models

Valuation Model	Intrinsic Share Price (2/1/07)	Actual Share Price (2/1/07)	Over-priced / (Under-priced) in $	Over-priced / (Under-priced) in %
P/E Ratio	$18.82	$20.02	$1.20	5.99%
Enterprise DCF	$16.86	$20.02	$3.16	15.78%
Economic Profit	$16.92	$20.02	$3.10	15.48%
Adjusted Present Value	$16.23	$20.02	$3.79	18.93%

considered by many analysts to be the most practical and realistic since this model considers the element of changing capital structure. The APV model is divided into two parts for valuation: the unlevered equity and interest tax shields. If there is a change in the capital structure the effects will be reflected in the value of the interest tax shields. This makes the APV model more flexible and realistic. The P/E ratio model has more weaknesses than the other models. Both the Enterprise DCF and the Economic Profit models assume a constant WACC, which implies the debt to value ratios will remain constant forever. This is unlikely to occur in the real world.

Sensitivity Analysis

A sensitivity analysis is performed in order to assess the impact on PacSun's intrinsic value when a number of variables are changed. The analysis can be divided into two categories. The first category looks at the impact different market risk premiums have on the cost of equity and WACC and how these changes will impact the intrinsic value. The second category will focus on testing changes in RONIC and g in the calculation of terminal values in the various models, and how these changes affect the intrinsic value. A summary of the results are presented in Table 29 and Table 30.

This first analysis assesses how sensitive the intrinsic price is to a change in the market risk premium when all other factors remain constant. It can be seen from the results in Table 29 that when the market risk premium is at a higher level the intrinsic share price decreases across all of the models. On the other hand, when the market risk premium decreases the intrinsic price increases. Both the enterprise DCF and economic profit model prices increase dramatically compared to the adjusted present value. The conclusion can be drawn from the analysis that

even a minor 1 percent change in the market risk premium will have a dramatic effect on the intrinsic price.

Table 29. Changing Market Risk Premium

	Conservative Scenario		Current Scenario	Optimistic Scenario	
Market Risk Premium	6%		5%	4%	
Expected Return on market E(Rm)	11%		10%	9%	
	Intrinsic Price	% Change	Intrinsic Price	Intrinsic Price	% Change
Enterprise DCF	$11.93	-29.24%	$16.86	$23.78	41.04%
Economic Profit	$11.99	-29.14%	$16.92	$23.85	40.96%
Adjusted Present Value	$12.54	-22.74%	$16.23	$20.97	29.21%

Table 30. Changing RONIC and g

	Conservative Scenario		Current Scenario	Optimistic Scenario	
RONIC	7%		8%	9%	
g	3%		4%	5%	
	Intrinsic Price	% Change	Intrinsic Price	Intrinsic Price	% Change
Enterprise DCF	$12.18	-27.76%	$16.86	$28.26	67.62%
Economic Profit	$12.45	-26.42%	$16.92	$27.98	65.37%
Adjusted Present Value	$10.72	-33.95%	$16.23	$25.93	59.77%

The second analysis assesses how sensitive the intrinsic price is to a change in the RONIC and g when all other parameters remain constant. Table 30 displays the results.

The results in Table 30 show the intrinsic price is very sensitive to changes in the rates of return and growth. The results would seem to indicate that a change in the RONIC and growth rate will have a greater impact on the intrinsic price than a change in the risk level. This difference appears to be much more dramatic for the optimistic scenario than the conservative.

Chapter 7

CONCLUSIONS

Until recently, PacSun has successfully grown its business with a combination of increased same store sales and expansion. Through its marketing efforts PacSun has increased its brand recognition, which has helped to drive revenue growth. However, PacSun has been moving away from its core competency (surf and skate industry) by branching out into the hip-hop fashion industry with the introduction of the DEMO stores and the specialty shoe store industry with the One Thousand Steps stores. These attempts at diversification have not been as successful as PacSun would have hoped. At the end of fiscal 2007 PacSun announced the closure of 75 underperforming DEMO stores; this represents one-third of all DEMO stores in operation. The fifteen One Thousand Steps stores in operation at fiscal year-end 2007 continue to drag on company performance and no plans for new stores have been announced at this point. PacSun CEO Sally Frame Kasaks in the most recent annual report indicated that PacSun will concentrate on growing revenue by increasing same store sales and cutting costs to improve margins (PacSun Investor Relations, 2007). PacSun has a strong customer base and strong brand recognition in the surf and skate industry. These strengths should help drive same store sales and revenue growth. In an effort to improve margins PacSun will be remodeling older stores and relocating underperforming stores to hopefully better locations.

The Porter's Five Forces theory has helped in the understanding of PacSun's market position and its strengths and weaknesses. The financial models used to measure PacSun's value have further enhanced the understanding of

PacSun's intrinsic value. Financial models provide a starting point from which to judge a company's value and make decisions. Managers, analysts, and investors should not rely solely upon financial models to determine the true value of a company. Financial models are based upon accounting figures presumed to be accurate. The accuracy of accounting has been called into question over the past few years as multiple firms have fallen prey to scandals that have forever changed the landscape of the finance world. It is vital to have an in-depth understanding of the assumptions behind each of the financial models to avoid conclusions based solely upon the assumptions, rather than the economic facts of the problem. Currently there is no single model that can be used to perfectly value any company, but as new research is completed and new models developed the hope of improvement of financial concepts exists. Quite possibly there may not be one single financial model that can replace the need for various models. Managers, analysts, and investors might always need multiple points of view in order to make wise decisions.

In this thesis only four different models were used in the valuation of PacSun. There are many other models not discussed that are valid and have merit. These other models are vast and varied and represent topics available for future research. The goal of this thesis was to provide a better understanding of PacSun from a strategic and financial viewpoint. There may be other models more suitable for this industry both strategically and financially, but the models applied provide for a solid understanding of the company and its future prospects.

My financial evaluation indicates that at the end of Fiscal 2007 PacSun is over-valued from 15.5 percent to over 18 percent. The overvaluation is due to several factors. PacSun's operating and profit margins have declined dramatically over the past few years and competition from rivals such as Zumiez and Hollister

has increased dramatically. PacSun also relies heavily upon branded merchandise. Branded merchandise, which typically generates lower profit margins than private-label merchandise, accounts for two-thirds of PacSun's total revenue.

PacSun will have inconsistent returns as they operate in an industry with difficult to predict fashion trends, intense competition, and low customer switching costs. New competitors in the surf and skate market, Zumiez and Hollister, have successfully taken market share from PacSun. Increased expenses are anticipated as PacSun adds a new distribution center and revamps its distribution system to try to better control inventory in an attempt to be able to more quickly respond to changing fashion trends. Also, the fifteen One Thousand Steps stores are not yet profitable and additional growth in this market segment is seen facing heavy competition from already established companies including Nordstrom and Journeys.

PacSun's continued growth will depend upon its ability to grow both the DEMO and One Thousand Steps stores. In the latest annual report, management forecast its belief that the footwear concept could ultimately expand to as many as 800 stores. PacSun's diversification into unrelated fashion concepts has proven difficult, but will also allow it to continue to grow the number of stores in prime locations with out cannibalizing sales from existing stores. PacSun's history and continued stock repurchases affirms management's confidence in its business. I believe the company is currently over-valued but is worth monitoring for possible future improvements.

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APPENDIX

Historical Financial Statement Analysis

	Historical NOPLAT (PacSun)					
	3-Feb-07	**28-Jan-06**	**29-Jan-05**	**31-Jan-04**	**1-Feb-03**	**2-Feb-02**
Net Sales	1,447,204,000	1,391,473,000	1,229,762,000	1,041,456,000	847,150,000	684,840,266
Cost of Revenues	(1,001,807,000)	(884,982,000)	(781,828,000)	(668,807,000)	(554,829,000)	(464,660,657)
SG&A Expenses	(313,273,000)	(246,057,000)	(226,236,000)	(199,273,000)	(170,847,000)	(148,752,071)
Depreciation	(72,529,000)	(63,161,000)	(51,685,000)	(45,149,000)	(40,254,000)	(27,145,557)
Operating Lease Interest	66,075,949	59,101,266	51,906,329	44,637,975	40,856,962	0
Adjusted EBITA	**125,670,949**	**256,374,266**	**221,919,329**	**172,864,975**	**122,076,962**	**44,281,981**
Operating Cash Taxes	60,252,298	100,483,258	79,293,092	56,859,714	43,861,972	17,005,644
NOPLAT	**65,418,651**	**155,891,008**	**142,626,238**	**116,005,261**	**78,214,990**	**27,276,337**
Operating Taxes						
Reported Taxes	24,594,000	76,734,000	64,998,000	48,759,000	30,960,000	17,186,000
Taxes on interest income	(1,769,435)	(2,144,965)	(714,251)	(276,767)	0	(180,356)
Tax Shield on interest Expense	0	0	0	0	228,093	0
Tax Shield on lease interest	25,306,734	22,346,223	19,626,343	16,877,480	15,688,879	0
Operating taxes on EBITA	48,131,298	96,935,258	83,910,092	65,359,714	46,876,972	17,005,644
Dec (inc) in deferred taxes	12,121,000	3,548,000	(4,617,000)	(8,500,000)	(3,015,000)	0
Operating cash taxes	60,252,298	100,483,258	79,293,092	56,859,714	43,861,972	17,005,644
Reconciliation w/net income	**3-Feb-07**	**28-Jan-06**	**29-Jan-05**	**31-Jan-04**	**1-Feb-03**	**2-Feb-02**
Net Earnings	39,621,000	126,212,000	106,904,000	80,200,000	49,666,000	27,565,621
Increase in deferred taxes	(12,121,000)	(3,548,000)	4,617,000	8,500,000	3,015,000	0
Goodwill Amortization	0	0	0	0	0	0
Adjusted Net Income	27,500,000	122,664,000	111,521,000	88,700,000	52,681,000	27,565,621
After-tax interest expense	0	0	0	0	365,907	0
After-tax lease interest expense	40,769,216	36,755,043	32,279,986	27,760,494	25,168,083	0
Total income available to investors	68,269,216	159,419,043	143,800,986	116,460,494	78,214,990	27,565,621
After-tax interest income	(2,850,565)	(3,528,035)	(1,174,749)	(455,233)	0	(289,284)
NOPLAT	**65,418,651**	**155,891,008**	**142,626,238**	**116,005,261**	**78,214,990**	**27,276,337**

| | Historical Invested Capital | | | | | |
| | Investing Perspective | | | | | |
	3-Feb-07	**28-Jan-06**	**29-Jan-05**	**31-Jan-04**	**1-Feb-03**	**2-Feb-02**
Working Cash	52,267,000	95,185,000	64,308,000	109,640,000	36,438,000	23,136,386
Receivables, net	11,216,000	12,679,000	8,129,000	5,194,000	2,916,000	3,043,916
Inventories	205,213,000	215,140,000	175,081,000	147,751,000	123,433,000	102,512,329
Pre-paid expenses	27,748,000	22,360,000	19,943,000	16,492,000	14,871,000	11,855,978
Other current assets	7,291,000	6,446,000	6,134,000	8,225,000	4,975,000	4,281,765
Operating current assets	**303,735,000**	**351,810,000**	**273,595,000**	**287,302,000**	**182,633,000**	**144,830,374**
Accounts payable	66,581,000	47,550,000	38,753,000	38,668,000	28,456,000	37,493,357
Accrued expenses	43,338,000	33,649,000	49,028,000	54,966,000	34,522,000	17,743,295
Income taxes payable	8,706,000	14,896,000	5,993,000	15,019,000	8,000,000	9,435,597
Other current liabilities	21,908,000	26,376,000	0	0	0	0
Operating current liabilities	**140,533,000**	**122,471,000**	**93,774,000**	**108,653,000**	**70,978,000**	**64,672,249**
Operating working capital	163,202,000	229,339,000	179,821,000	178,649,000	111,655,000	80,158,125
Net property and equipment	420,886,000	355,822,000	304,222,000	272,869,000	201,513,000	194,999,269
Capitalized operating leases	1,139,240,506	1,018,987,342	894,936,709	769,620,253	704,430,380	0
Invested Capital (ex. Goodwill)	**1,723,328,506**	**1,604,148,342**	**1,378,979,709**	**1,221,138,253**	**1,017,598,380**	**275,157,394**
Goodwill	6,000,000	6,500,000	6,492,000	6,492,000	6,492,000	6,492,076
Invested Capital w/ Goodwill	**1,729,328,506**	**1,610,648,342**	**1,385,471,709**	**1,227,630,253**	**1,024,090,380**	**281,649,470**
Excess Cash	0	0	0	0	0	0
Investments	31,500,000	74,911,000	79,223,000	66,235,000	0	0
Net other non-current assets/liabilities	(117,772,000)	(107,198,000)	(93,653,000)	(80,657,000)	(8,566,000)	(7,106,933)
Total funds invested	**1,643,056,506**	**1,578,361,342**	**1,371,041,709**	**1,213,208,253**	**1,015,524,380**	**274,542,537**

| | Financing Perspective | | | | | |
	3-Feb-07	**28-Jan-06**	**29-Jan-05**	**31-Jan-04**	**1-Feb-03**	**2-Feb-02**
Short-term debt	0	0	1,536,000	1,886,000	2,350,000	1,258,416
Long-term debt	0	0	403,000	1,455,000	3,338,000	25,328,976
Capitalized operating leases	1,139,240,506	1,018,987,342	894,936,709	769,620,253	704,430,380	0
Debt and equivalents	1,139,240,506	1,018,987,342	896,875,709	772,961,253	710,118,380	26,587,392
Deferred income taxes	463,000	12,584,000	16,132,000	11,515,000	3,015,000	0
Net common stock and paid in capital	6,479,000	24,603,000	62,059,000	139,661,000	93,503,000	88,743,739
Retained Earnings	496,874,000	522,187,000	395,975,000	289,071,000	208,888,000	159,211,406
Equity and equity equivalents	503,816,000	559,374,000	474,166,000	440,247,000	305,406,000	247,955,145
Total funds invested	**1,643,056,506**	**1,578,361,342**	**1,371,041,709**	**1,213,208,253**	**1,015,524,380**	**274,542,537**

	Historic Cash Flows					
	Operating Cash Flows					
	3-Feb-07	**28-Jan-06**	**29-Jan-05**	**31-Jan-04**	**1-Feb-03**	**2-Feb-02**
NOPLAT	65,418,651	155,891,008	142,626,238	116,005,261	78,214,990	27,276,337
Depreciation	72,529,000	63,161,000	51,685,000	45,149,000	40,254,000	27,145,557
Employee Stock option Expense	0	0	0	0	0	0
Gross Cash Flow	137,947,651	219,052,008	194,311,238	161,154,261	118,468,990	54,421,894
Investment in Op. Working Capital	66,137,000	(49,518,000)	(1,172,000)	(66,994,000)	(31,496,875)	(80,158,125)
Net Capital Expenditures	(137,593,000)	(114,761,000)	(83,038,000)	(116,505,000)	(46,767,731)	(222,144,826)
Investment in Cap. Operating leases	(120,253,165)	(124,050,633)	(125,316,456)	(65,189,873)	(704,430,380)	0
Investment in Goodwill	500,000	(8,000)	0	0	76	(6,492,076)
Inc (dec) in other operating assets	7,396,000	(4,272,000)	(2,657,000)	(2,484,000)	13,805	(9,118,805)
Gross Investment	(183,813,165)	(292,609,633)	(212,183,456)	(251,172,873)	(782,681,105)	(317,913,832)
Free cash flow	**(45,865,514)**	**(73,557,625)**	**(17,872,218)**	**(90,018,612)**	**(664,212,115)**	**(263,491,938)**
After-tax interest income	2,850,565	3,528,035	1,174,749	455,233	0	289,284
Dec (inc) in marketable securities	43,411,000	4,312,000	(12,988,000)	(66,235,000)	0	0
Cash flow to investors	**396,051**	**(65,717,590)**	**(29,685,469)**	**(155,798,379)**	**(664,212,115)**	**(263,202,654)**
	Financing Cash Flows					
	3-Feb-07	**28-Jan-06**	**29-Jan-05**	**31-Jan-04**	**1-Feb-03**	**2-Feb-02**
After-tax interest expense	0	0	0	0	365,907	0
After-tax lease interest expense	40,769,216	36,755,043	32,279,986	27,760,494	25,168,083	0
Decrease (increase) in debt	(120,253,165)	(122,111,633)	(123,914,456)	(62,842,873)	(683,530,988)	(26,587,392)
Dec (inc) other long-term liabilities	(3,178,000)	(17,817,000)	(15,653,000)	(74,575,000)	(1,445,262)	(16,225,738)
Flows to debt holders	(82,661,949)	(103,173,590)	(107,287,469)	(109,657,379)	(659,442,260)	(42,813,130)
Dividends	64,934,000	0	0	17,000	(10,594)	(131,645,785)
Net shares repurchased (issued)	18,124,000	37,456,000	77,602,000	(46,158,000)	(4,759,261)	(88,743,739)
Flows to equity holders	83,058,000	37,456,000	77,602,000	(46,141,000)	(4,769,855)	(220,389,524)
Cash flow to investors	**396,051**	**(65,717,590)**	**(29,685,469)**	**(155,798,379)**	**(664,212,115)**	**(263,202,654)**

After Goodwill	3-Feb-07	28-Jan-06	29-Jan-05	31-Jan-04	1-Feb-03	2-Feb-02
			Historic Economic Profit			
Invested Capital (beginning of year)	1,610,648,342	1,385,471,709	1,227,630,253	1,024,090,380	281,649,470	
WACC	6.72%	6.72%	6.72%	6.72%	6.72%	
Capital Charge	108,219,512	93,089,887	82,484,515	68,808,664	18,924,037	
NOPLAT	65,418,651	155,891,008	142,626,238	116,005,261	78,214,990	
Capital Charge	108,219,512	93,089,887	82,484,515	68,808,664	18,924,037	
Economic Profit	**(42,800,861)**	**62,801,121**	**60,141,723**	**47,196,597**	**59,290,953**	
Before Goodwill						
Invested Capital (beginning of year)	1,604,148,342	1,378,979,709	1,221,138,253	1,017,598,380	275,157,394	
WACC	6.72%	6.72%	6.72%	6.72%	6.72%	
Capital Charge	107,782,777	92,653,689	82,048,317	68,372,467	18,487,834	
NOPLAT	65,418,651	155,891,008	142,626,238	116,005,261	78,214,990	
Capital Charge	107,782,777	92,653,689	82,048,317	68,372,467	18,487,834	
Economic Profit	**(42,364,126)**	**63,237,318**	**60,577,920**	**47,632,794**	**59,727,156**	