TUCK SCHOOL OF BUSINESS AT DARTMOUTH
GLASSMEYER/MCNAMEE CENTER FOR DIGITAL STRATEGIES
VINCENT L. LACORTE CASE SERIES

Case #6-0027

Strengthening the Distribution Channel at Steinway & Sons

From his window in the turn-of-the-last-century-era piano factory in Queens, New York, Bruce Stevens, president of Steinway & Sons, gazed out toward Manhattan where the twin towers of the World Trade Center once stood. He thought about how much the world outside his factory walls had changed. In some ways, much had also changed at Steinway and in other ways, very little had changed. On the one hand, Steinway & Sons was still the most respected name in pianos, and its pianos were still made to designs originally drafted over a century ago, using techniques that were just as old. On the other, Steinway had introduced new product lines and made many changes to its distribution channel. The change that concerned Stevens most at that moment was the poor performance of the Essex line of pianos, introduced by Steinway in 2001 to compete in the low-priced piano segment. Somehow, Steinway had missed the mark. Now Stevens had to make many decisions about the Essex strategy including design, production, and how to re-launch the product line.

History

Heinrich E. Steinweg, a German cabinetmaker, was well-known for the quality of his pianos. Prolific, by the time he and his family set sail for New York in 1850, Heinrich had made more than 400 pianos. While he quickly landed jobs at various piano manufactories, Heinrich was an entrepreneur at heart. In 1853, he anglicized his name and opened the doors to his own firm, Steinway & Sons.

The very first piano Steinway & Sons sold went to a New York family for $500.[1] In 1855 several Steinway & Sons pianos were entered at the American Institute Exhibition. The firm won a gold medal, which Heinrich publicized, helping to double the firm's sales each of the following three years. Recognizing that public acclaim was at least as important to success as craftsmanship, Steinway soon leveraged the testimonials of artists and wealthy patrons to market their products and, in 1866, opened a concert hall: Steinway Hall.

This case was written by Teaching Fellow Robert Batt and Professor M. Eric Johnson of the Tuck School of Business at Dartmouth. It was written as a basis for class discussion and not to illustrate effective or ineffective management practices. Version: February 15, 2007.

After Heinrich's death in 1871, Steinway & Sons continued to grow under the direction of his son William. In the 1870s, William opened a huge factory complex, including a residential and commercial village for the employees in Queens, New York. The new facilities were equipped to manufacture every part of a Steinway piano except its ivory keys.[2] The company also extended its international influence, unveiling a London showroom in 1875 and a factory in Hamburg, Germany in 1880.

Toward the late 1800s, political unrest abroad and a troubled economy at home reduced demand for pianos. The company teetered on the verge of bankruptcy and, after William died in 1896, his nephews tried to sell it. Fortunately, they were unsuccessful, as the economy rebounded soon after and new trends, such as ragtime and silent pictures, had the public clamoring for more and better pianos. By the end of the 1930s, Steinway outsourced iron plates and various other components, choosing instead to concentrate its efforts on its core competencies.

By the early 1960s, Steinway was producing a wide variety of models, and orders for grands were backlogged. But the rising costs of labor and materials, combined with Steinway's inventory-intensive production process, increasingly ate into the company's profits. The entrance of lower-priced competitors into the market compounded these problems.

For the second time in the company's history, the Steinway family considered selling out. This time, they did so. In 1972 they sold their company to CBS, which incorporated Steinway & Sons into its Musical Instruments Division. This division included Rhodes electric pianos, Fender guitars and amplifiers, Rogers drums, and Leslie speakers. Although, like Steinway, these instruments were renowned for their quality, some people wondered aloud whether CBS would try to increase profits by compromising Steinway quality. CBS poured money into its new venture, increasing annual capital spending at Steinway from $100,000 to $1–2 million. Profits picked up, but rumors that Steinway quality had declined began to circulate.

In 1985, when CBS sold off the Musical Instruments Division to a Boston group led by brothers John P. and Robert Birmingham, Steinway & Sons was rolled into the newly created Steinway Musical Properties. In 1995 Steinway Musical Properties was sold to Selmer Co., the number one U.S. manufacturer of band instruments, including Selmer Paris saxophones, Bach trumpets and trombones, and Ludwig drums, and regrouped under the Steinway Musical Instruments (SMI) umbrella. SMI common stock traded on the NYSE under the ticker symbol LVB, honoring Ludwig von Beethoven. Chairman Kyle Kirkland and CEO Dana Messina held 100 percent of the class A stock with 86 percent of the voting rights.

Steinway continued to grow with an eye on vertical integration and modernization. In late 1998, SMI acquired Kluge, Europe's largest manufacturer of piano keys. Noted Bruce Stevens, "We [were] very excited about this opportunity. Kluge has produced the industry's finest piano keys since 1876 and for virtually that entire period Steinway & Sons has been a major customer. Vertically integrating this acquisition will greatly improve our manufacturing efficiency."[3]

Continuing in this vein, in 1999 SMI purchased O.S. Kelly, the largest U.S. manufacturer of piano plates. The piano plate provides a rigid frame needed to anchor the piano strings under tension. That same year, the New York City Industrial Development Agency (IDA) awarded Steinway approximately $4.2 million in "land tax abatements, building tax stabilization, and sales tax exemptions on hard construction costs" to renovate and modernize Steinway's nearly 100-year old, 421,000-square-foot factory. "The ability to proceed with the modernization of our factory in Long Island City was vital to our long-term growth strategy," noted Steinway controller Dennis Tortora.[4] The upgrade also ensured that the firm would stay in New York for a while longer.

By 2005, net sales of Steinway pianos reached $203 million and demand for Steinway grands exceeded domestic production (see Exhibit 1).

Tradition of Quality

Steinway had been a popular choice among artists throughout its history. Early on, the firm had solicited the testimonials of renowned musicians, providing them with special pianos and personal tuners at concert appearances to cultivate their favor. By the early twenty-first century, over 95 percent of piano soloists performing with major orchestras chose to perform exclusively on Steinway pianos.[5] Its roster of "Steinway Artists" listed more than 900 popular ensembles and concert pianists, including Van Cliburn, Harry Connick, Jr., and Billy Joel. In North America, artists selected their Steinway piano for concert performances from the company's unique "piano bank," an inventory of more than 300 pianos valued at over $15 million.[6] In exchange for their endorsement and valuable feedback on its pianos, Steinway Artists were assured access to the best pianos anywhere in the world. Steinway would sometimes go to extraordinary lengths to ensure concert pianists had a piano that matched their liking and style, including flying a piano to Buenos Aires for legendary pianist Arthur Rubinstein when his usual instrument was waylaid in a dock-worker strike. The Steinway Artist program is one of the true endorsement programs in the world as artists are not paid anything for their endorsement. (They are required, however, to own a Steinway.) Stevens noted, "The artists are our biggest fans and our toughest critics. Who knows better than concert pianists what quality means? We have to work very hard to satisfy them because their life depends on our piano. They love us, but if they found a better piano, they would switch. We know that and it motivates us every day."

Quality handcraftsmanship and innovative techniques were part of the tradition Heinrich Steinway had established from the firm's inception. Nearly half the company's 120 patented inventions were developed during its first 40 years in business, becoming the basis for the so-called "Steinway system," the eventual standard for piano manufacture.[7] Particularly notable among these were the technique of overstringing a grand piano to improve its bass sound and an improved cast-iron plate to support the tension of the strings.

More than 150 years after its humble beginning, Steinway was producing about 3,000 pianos a year on its 11-acre site in Queens. However, the company's meticulous craftsmanship and attention to detail could not always keep pace with the demand for its grand pianos, despite a workforce of about 450. Many of these employees were highly skilled craftsmen, often with 15 or more years experience in the industry.

Each piano began as nothing more than raw lumber. The quality grades required by Steinway were unique. For wood suppliers, Steinway was their toughest customer—requiring a quality far beyond their other customers. Even if the wood made it to the factory, nearly 50 percent ended up in the scrap bin.

Production incorporated many of the labor-intensive techniques that had been created and patented years earlier. For example, shaping the inner and outer piano rims by bending them as a single continuous piece, a process Steinway patented in 1878, was still used in 2006. These time-honored techniques, combined with top-of-the-line materials, were the chief ingredients of Steinway's production process.

The process required eight to twelve months to turn a pile of lumber into a $100,000 concert grand piano. The vast majority of the work was hand-done by skilled craftsmen. The rim was bent by hand, or more correctly, by the brute force of six men. The plate was fitted to the rim by hand. The keys and hammers were adjusted by hand. The strings were tuned by hand. And the case was polished by hand.

However, Steinway was not resistant to change itself, just to change that could adversely affect the quality of the product. A few operations were assisted by machines. An automatic winder was used to wind the strings around the tuning pins and drive them into the pin block. The soundboard was trimmed to the exact size of the plate by a CNC router. Also, a machine was used to play scales endlessly (and without complaint) to break in the piano.

Every Steinway was made the same way, by the same people, with the same process. Yet every Steinway still ended up being a little different from every other Steinway. They might look alike, but each one had a unique sound signature. The signature was in the nuances of the tone, the coloration of the notes, and the strength of the voice. Some instruments were mellow and meek, while others might be so powerful that they could overpower a full symphony orchestra. Each piano also had its own feel or touch. The sound and touch gave each Steinway its own personality.

The Competition

Steinway competed in the high-end grand market with long-time European brands such as Bosendorfer and Bechstein, and newcomer Fazioli. While the U.S. once had many piano makers, by 2000 most had either failed or been acquired by foreign firms. In the mid-markets, Steinway's competitors included Mason & Hamlin, an old New England firm rescued from bankruptcy in the mid-1990s by newcomer PianoDisc; Korean powerhouse Samick, established in 1958 and owner of many old brands such as Kohler & Campbell; Asian competitors and partners like Kawai and Young Chang; and longtime rivals Baldwin and Yamaha (see Exhibit 2).

Domestic. Baldwin, the largest American piano builder, was the brainchild of Dwight Hamilton Baldwin, a reed organ and violin teacher who dreamed of creating "the best piano that could be built." In 1891 he unveiled an upright model and four years later introduced the first Baldwin grand piano, a 5'4" model. By 1913 Baldwin was exporting pianos to 32 countries around the world. As at Steinway, the Depression and World War II took its toll on piano sales, but by 1953, Baldwin had doubled its pre-war production.

Baldwin introduced its flagship model, the nine-foot SD10 Concert Grand, which the company touted as “a major advancement in piano design” in 1965. The company further enhanced its lines in 1988 with the purchase of The Wurlitzer Company’s keyboard division and seven years later with the reintroduction of the Chickering name—a nineteenth century rival of Steinway—on a line of its grand pianos.

In the 1990s, Baldwin faltered, eventually declaring bankruptcy in 2001. The company was acquired by prestigious guitar and musical instrument manufacturer Gibson Guitar Corporation. Baldwin offered several lines of grand pianos as well as uprights, digitals, and piano software in a wide range of pricing. These products were sold under several brand names including Baldwin, Wurlitzer, Chickering, Hamilton, and Howard.

Foreign. Yamaha was founded in Japan by Torakusu Yamaha in 1887 to produce reed organs. The first upright piano was crafted in 1900 and a new grand model in 1902. Yamaha first created its own concert grand piano in the 1960s. These grands, like Steinway’s, were crafted by hand of top-grade materials. This craftsmanship, combined with savvy marketing and affordable pricing for mid-range pianos, quickly gained favor with American consumers. By the end of the decade, 44 percent of all grand pianos purchased in the U.S. were imported, and most of these were Yamahas. Yamaha’s biggest consumer base was institutions—schools and universities—that wanted excellent sound at an affordable price. Yamaha, like Steinway, wanted to encourage young pianists in music schools to use their pianos, hoping that they would trade up to a Yamaha concert grand when they advanced in their careers. Yamaha pianos had a stronger, more percussive attack but a shorter and less rich sustain than Steinways.[8]

Yamaha could afford to keep its prices low because of several factors. Vertical integration allowed Yamaha to make most of its piano parts, including the metal frames on which the strings were strung. (Yamaha had gained metalwork experience manufacturing motorcycles.) New technology and assembly line techniques sped up production for all pianos, including uprights and grands, but not concert grands. Technology also ensured a more consistent product as workers had fewer opportunities to make their own value judgments. And, finally, Japanese labor costs were lower than American labor costs. (see Exhibit 3). Yamaha continued to import most of its grand pianos into the U.S. even after it opened a factory in Thomaston, Georgia in the late 1970s. In 1999 the plant produced its first American-made grand piano. Yamaha pianos were sold through its network of approximately 2,000 dealers.[9]

Kawai was founded by Koichi Kawai in Japan in 1927 with the dream of someday creating the world’s greatest piano. This eventually took the form of the EX Concert Grand manufactured in Ryoyo, Japan starting in the 1980s. The EX was chosen by winners of several international piano competitions including the Van Cliburn competition and Rachmaninoff International competition. Kawai was a technology driven company investing millions in advanced robotics to improve manufacturing operations. Kawai was also unique among top piano companies in its switch to using plastic for critical piano action components. While it was widely pilloried for leaving the traditional wood components behind, Kawai felt that plastic provided a more reliable, longer lasting piano that was actually easier to play. By 2005, Kawai was a $US1 billion multi-national corporation selling grands, uprights, and digital pianos all under the Kawai brand.

Young Chang was founded by three brothers in South Korea in 1956. Young Chang was unique in its focus on being a vertically integrated firm producing everything except the hammer felts. Lumber was milled in Washington; plates were cast in China. Young Chang even produced its own paint. The company grew faster than its more established competitors and became the world's largest piano producer in 1992 with an 18 percent market share.[10] The company ran in to difficulties in 2004 when it filed bankruptcy and became entangled in a Korean Fair Trade Commission investigation over Samick's purchase of 44 percent of Young Chang. The company suffered heavily during the following two years of court battles in both Korea and the United States. In 2006, Young Chang was purchased by real estate developer Hyundai Development Corp. and hoped to make a new start. [11] Young Chang sold pianos under the Young Chang and Weber brands. It also sold electronic keyboards and synthesizers under the Kurzweil brand.

Samick was founded in South Korea in 1958 by Hyo Ick Lee. The company started quite small, making only a few upright pianos. However, by 1964 it became the first company to export pianos from Korea. The company had a strong focus on global expansion opening offices in California in 1978 and Germany in 1980. The company opened additional manufacturing facilities in both China and Indonesia and acquired several brands such as Knabe & Co., Pramberger, and Kohler & Campbell. After the founder's death in 1990, the company suffered from a lack of leadership and a Korean bank crisis in the late 1990s. Samick filed for bankruptcy in 1998 under $US300 million of debt. After four years under court control, Samick was purchased for $US100 million by Korean business mogul Jong-Sup Kim. He also owned a large portion of German piano maker C. Bechstein and leveraged the German expertise and processes to improve Samick opereations. Samick's investment in modernizing its factories paid off as the company was growing and debt free by 2005. By 2006, Samick was Korea's largest piano producer and ranked third in world piano production turning out more than 30,000 pianos a year. Samick operated in America under the name Samick Music Corporation selling pianos under several brand names as well as guitars and band instruments.

Steinway's Dealer Network

In the last years of CBS's ownership of Steinway, the 150 authorized Steinway dealers complained about low profit margins, slow moving inventory, and the costs associated with supplying concert grands for Steinway Artist performances.[12] The sales channels were so backed up that Steinway had more than 900 unsold pianos (over four months worth) in its finished goods inventory—a high watermark for a firm that traditionally produced to order.

In 1985, Bruce Stevens, newly installed as CEO, hired Frank Mazurco to be the director of sales and marketing and the two men spent the next six months visiting the discontent dealers around the country. The result of their whirlwind tour was a new dealer relationship plan called the "Steinway Working Partnership." The core of the program was an offer of expanded territory and profit opportunities in exchange for stepped up commitment from the dealers to display and promote Steinway products.[13] With sales running 20 percent below historic averages, dealers were reluctant to make the required investment in upgrading showrooms, increasing inventory and adding salespeople. But as Steinway gradually trimmed its network and dealers saw Steinway making good on its promises of expanded territories, dealers signed on to the program. “It took us about five or six years to gain the trust we needed to fully implement the program,” Mazurco recalled. “Looking back, I understand why the dealers were hesitant to get onboard at first.”[14] By 2006, only 63 dealers remained in the US dealer network, less than half of its mid-1980s level—but they were far more profitable.[15] “It takes trained people, good displays, a lot of inventory, and strong programs to present Steinway pianos to consumers in a way that is consistent with our image and heritage, and that requires profitable retailers,” said Stevens. “Take away the profit and we don’t get the representation in the field we need.”[16]

One of the most visible products of the Working Partnership Program was the creation of over 100 “Steinway Rooms” at dealers across the country. These specially designed and stocked rooms provided an elegant display space for the equally elegant Steinway pianos and created a visual and physical separation from the rest of the store’s inventory.

Another positive result of the Working Partnership Program was an increase in sales to institutions. Mazurco explained, “Years ago, our institutional effort involved waiting for bids to come in from schools. Around 1988 we formalized a program that involved institutional salespeople calling on music schools, doing an analysis of their pianos, and making a formal presentation to the school board. It’s a labor intensive process, and you need strong retail profits to support it, but it has generated tremendous sales volume for us.”[17]

As for the 900 unsold pianos on hand in 1985, Stevens refused to liquidate them at fire sale prices despite heavy pressure from bankers wanting the company to pay down its debt. (Steinway had a 55:1 debt to equity ratio at the time.)[18] Stevens felt that selling Steinways at a discount would severely damage the value of the brand. Instead, he ordered all 900 pianos unpacked, retuned and regulated.[19] Steinway worked with the dealers and patiently sold off the inventory one by one. Stevens explained, “If we had liquidated the pianos, it would have given our cash position a short-term boost, but it would have done serious damage to the Steinway name, and it would have completely compromised the credibility of the management. Holding firm was one of the best decisions I’ve ever made.”[20]

In 2004, Stevens commissioned a research firm to survey the dealer network and find areas of the business that needed attention. In response to the survey, Steinway created dealer discussion groups and provided them with a dealer-only online chat room and an annual meeting to allow dealers to share ideas on subjects such as promotions, prospecting, and store design. “This is the first time that one of my suppliers has proactively promoted the idea of me building a dialog and learning from other dealers in the market,” commented Danny Saliba, Steinway Piano Gallery, Dallas, Texas. “I am sure we will learn a lot from each other that will benefit the customers and retailers alike.”[21]

New Products for a New Era of Distribution

Boston Pianos

In the late 1980s as the Working Partnership Program was taking hold, Steinway realized that the dealers needed a mid-priced piano that could be as profitable as the Steinway line. The goal was to squeeze competitors out of the Steinway dealer showrooms and capture some of the mid-market sales. Steinway dealers were not forced to carry the new line, but rather were offered large margins, around 45 percent, to make Steinway's new line more attractive than the competitors such as Yamaha and Kawai.[22]

Steinway did not want to simply put a Steinway decal on a third party instrument. Rather, it decided to start from scratch and create a completely new Steinway designed piano. It took three Steinway engineers just two years to design a collection of seven models of pianos that would sell under the brand name Boston. The Boston was designed from the ground up with no Steinway parts being used. But the designers did not cut corners. The action was 100 percent wood, the soundboard was solid Sitka spruce, and the pedals and casters were solid brass. Many Steinway patented technologies were used in the Bostons, such as duplex stringing and a tapered soundboard. Steinway decided to outsource the manufacturing of the Boston line to take advantage of the excess manufacturing capacity in the industry and the cost savings of producing oversees. The Kawai piano company in Japan was selected as the manufacturer, thus turning a competitor into a partner. The instruments were made from Japanese materials using Japanese manufacturing techniques.

Steinway management did not make this decision lightly. "We agonized over it," remembered Stevens. "We limited the Steinway branding on the product and went so far as having a different address on the warranty card."[23] The Boston was branded as "designed by Steinway & Sons" to leverage the history and cachet of the parent company without diluting the value of the premier product line. Explained Bob Dove, executive vice president of Boston Piano Co., "Our goal at Steinway is simply to build the finest piano, regardless of cost. With the Boston piano, our goal was to offer the best piano possible at a price that a greater number of customers could afford."[24] At the time of its debut in 1992, the Boston line was priced at about $14,000 while Steinways started at $22,000 and ran up past $65,000.[25]

The Boston line did extremely well, reaching sales of nearly 40,000 pianos in its first ten years.[26] The new pianos caught on with musicians, institutions, teachers and music enthusiasts who were looking for a moderately priced piano and appreciated the connection to the Steinway name and design. The tapered soundboard and low-tension scale gave the Bostons warmth and a long sustain that could not be matched by other similarly priced pianos.

While the unique design played a role in the success, Bob Dove also gave credit to the dealer network. "Our dealers have made all the difference in getting the word out about Boston pianos," noted Dove. "They have done an excellent job of reaching people and organizations who may have felt that a Steinway-designed piano was out of their reach."[27] Stevens was also quite confident of the reputation Boston had already built. "We could sell four times the

Boston pianos than we do if we wanted to, but we don't because everything is designed around Steinway. That's our core business."[28]

Many customers viewed the purchase of a Boston as a stepping stone to someday owning a Steinway. In fact, 75 percent of Steinway owners owned some other brand of piano before buying a Steinway. Steinway created a trade-in program to make trading up from a Boston easy. Steinway would allow a customer to trade in any Steinway designed piano for its full original purchase price and apply that toward the purchase of a new Steinway designed piano. However, this program was not highly promoted.[29]

Essex Pianos

A couple years after the Boston brand started appearing in showrooms and proving itself to be a worthy addition to the Steinway family, the engineers went back to work on yet another new line of pianos. With the Steinway brand firmly entrenched in the top tier of the market, and Boston making strong inroads at the middle tier, the goal of the new line was to secure a place in the lower tier of the piano market where brands like Young Chang, Samick, and Yamaha were major players.

The new brand was named Essex and was styled with an Art Deco motif as a tribute to the 1920s. (See Exhibit 4) Leo Spellman, director of advertising described the 1920s as "… a time in New York City's history that marked the turning point in popular American music with Gershwin, Horowtiz, Rubenstein, Ellington, and 'All That Jazz'. The Art Deco style was the visual standard for all things, from the skyscraper to the elegant home furnishings. We feel Essex is a name symbolic of this time when the intellectual climate was so prolific and artistic."[30] The Essex introduction was part of Steinway's long-term distribution strategy to strengthen its dealer channel. With Steinway sales representing less than 20 percent for some dealers, their attention to Steinway and its customers sometimes faltered.

The internal design of the Essex was quite similar to the Boston. The Essex borrowed the low tension duplex scale of the Boston. This allowed a larger, tapered soundboard that, like in the Boston, created sustain and tone quality noticeably better than the competition. Technology had advanced to the point that engineers could do much of the prototype design and testing by computer simulation, thereby reducing development costs. Four models, available in more than a dozen finishes, were originally available. Prices ranged from $5,200 to $17,800.[31]

Once again, Steinway looked abroad for production facilities and chose the Young Chang piano company in Korea to manufacture the Essex line. Due to the long lead times involved with shipping from Asia (about 30 days), Steinway had to maintain a sizeable finished goods inventory of both the Boston and Essex lines in the United States. Steinway contracted with Keyboard Carriage, Inc. of Elizabethtown, Kentucky to warehouse the inventory and then deliver it directly to the dealers when they placed orders. Keyboard Carriage had similar agreements with several other major piano manufacturers.[32] (Some Steinway pianos were also warehoused in Kentucky, but most were held in New York.) With the release of the Essex in early 2001, Steinway hoped to have a piano for every level of musical ability and budget. This also positioned Steinway to be the primary supplier for many of its dealers.

Essex sales were slower than expected in the first few years. The sluggish economy of 2001 through 2003 played a major role. The Essex line was quite susceptible to overall economic effects since it was marketed at the most price sensitive market segment. To make matters worse, after Korea's banking crisis in 1998, the wage rates steadily increased causing the cost of the exported pianos to rise (see Exhibit 5a and 5b).[33] Thus, what was originally conceived of as a lower tier product actually came to market in the United States with prices that overlapped the Boston line. At the time, Steinway felt that this was not a problem. "When we introduced Boston in 1992, the piano market could be categorized by three price points: high, middle, and low; however in the ensuing years we've seen a new price point emerge, one that clearly divides the middle market into a low- and a high-price point segment," explained Bob Dove. "Boston targets the higher 'middle' price points. Essex opens the lower-priced market to our dealers."[34]

However, this was not how dealers saw it. Because of the overlapping pricing some dealers treated the two brands as essentially the same. They told customers that both brands were designed by Steinway and the primary difference was that one brand came from Japan and the other from Korea.[35]

China joins the music

The other seismic shift in the industry in the early twenty-first century was the emergence of China as a reliable supplier of low-cost pianos. With the average monthly wage for a Chinese factory worker at $85, less than 5 percent of a starting wage in the U.S. or Japan, even inexperienced and technologically deficient manufacturers could turn out pianos at very low prices.[36] (see Exhibit 6) 127 Chinese companies were registered as piano manufactures at the 2005 Music China trade show in Shanghai with estimated annual production to top 250,000 pianos in 2005. Five companies made up 75 percent of the nation's piano production. Most of the remaining 122 manufacturers were really just distributors or assemblers who assembled pre-made parts to finished cabinets. The rest were small entrepreneurs with some manufacturing experience hoping to make it rich shipping cheap musical instruments to the West. "Everyone seems to think they can make their fortune producing musical instruments," noted Professor Hua Tianreng of Shanghai Conservatory of Music.[37]

While the vast majority of the manufacturers were not viable contenders for overseas sales, they created intense local competition, which was holding the price of Chinese products down. This forced the larger manufacturers to focus on quality improvements to break out of the low-cost commodity competition. With large production facilities and improving quality, Chinese manufacturers like Pearl River Piano Group were on the brink of being able to compete in the global piano market.

When Pearl River Piano Group opened in 1956, it was perhaps the world's smallest piano maker, producing only four uprights a month. But through the vision and leadership of company president Zhi-Cheng Tong, Pearl River had since become the largest piano maker in the world with a massive 3.1 million-square-foot factory in Guangzhou turning out close to 100,000 in 2003 with capacity for 130,000. (More than forty times Steinway's Queens, NY capacity.) Key to Pearl River's growth was a willingness to invest in technology despite the incredibly low labor rates.

In 1985, Pearl River hired manufacturing engineer Bud Correy to overhaul the manufacturing process. Correy had previously worked for the Wurlitzer company in America and had designed its Mississippi piano plants. Corey argued that Pearl River had to invest in automation and technology to improve quality even though it offered no economic benefit. The old labor intensive, hand machined, manufacturing processes were too sloppy to produce a piano that could compete in the Western markets.[38] In response, Pearl River invested in CNC machines for cutting keys, hammers, and various other important parts. Pearl River also added an automated finishing system that both applied the finish and sanded and buffed it to a perfect, long-lasting shine. Pearl River even went so far as to air condition the key and action department to keep humidity levels down and prevent the tight-tolerance, wood parts from warping. Describing the changes, Tong commented, "We are not looking for the most cost-effective solution as we improve our piano operations. Rather, we are always looking for the best solution. And, in many cases that requires a very large investment in new machinery."[39]

The investments began to pay off as Pearl River was granted export rights in 1987 and in 1998 became the first Chinese piano maker to earn ISO9001 quality certification. The company received the certification not just on the finished pianos, but also on *all* the parts and components, a rarity even in the U.S. By 2000, Pearl River had a 60 percent domestic market share and 50 percent of the total Chinese piano export market.[40]

In 1995, Pearl River entered a joint venture with Yamaha to establish a small, state of the art factory in Guangzhou. The factory built 9000 units a year in three upright models with various combinations of Yamaha and Pearl River parts. The JV allowed Yamaha access to the growing Chinese piano market in exchange for sharing its manufacturing experience and knowledge with Pearl River.[41] The JV with Yamaha also gave Pearl River credibility oversees helping increase the number of American dealers carrying Pearl River as their entry level piano. In 2006, a customer could own a new Pearl River baby grand for less than $7000.[42]

The Decision at Hand

Bruce Stevens had reason to be pleased. In his twenty years at the helm of Steinway he had strengthened the marquee Steinway brand, successfully introduced the Boston brand and fortified the dealer network with expanded offerings and territories. Steinway products grew to represent 40–60 percent of the dealers' business. Stevens estimated that, while those dealers only represented about 5–6 percent of all keyboard dealerships in the U.S., they represented nearly 25 percent of the industry sales and 30 percent of the profit.

Despite all the success, Stevens was still concerned. The Essex was not the clear-cut success that the Boston line had been. It was priced too high, and with Korean labor rates doubling in the last five years, this problem was only getting worse.(see Exhibit 7) When Steinway designed and planned the Essex in the late 1990s, it had decided that manufacturing in China was not a viable option. But perhaps now the situation was different. Lastly, Stevens wondered if the Art Deco styling had not resonated with the target customer quite like he had hoped. He still had faith in the Essex concept, but he needed to do something to make it a viable product line. He sat down at a Model D concert grand and began to make notes.

Exhibit 1a: Steinway Financial Information

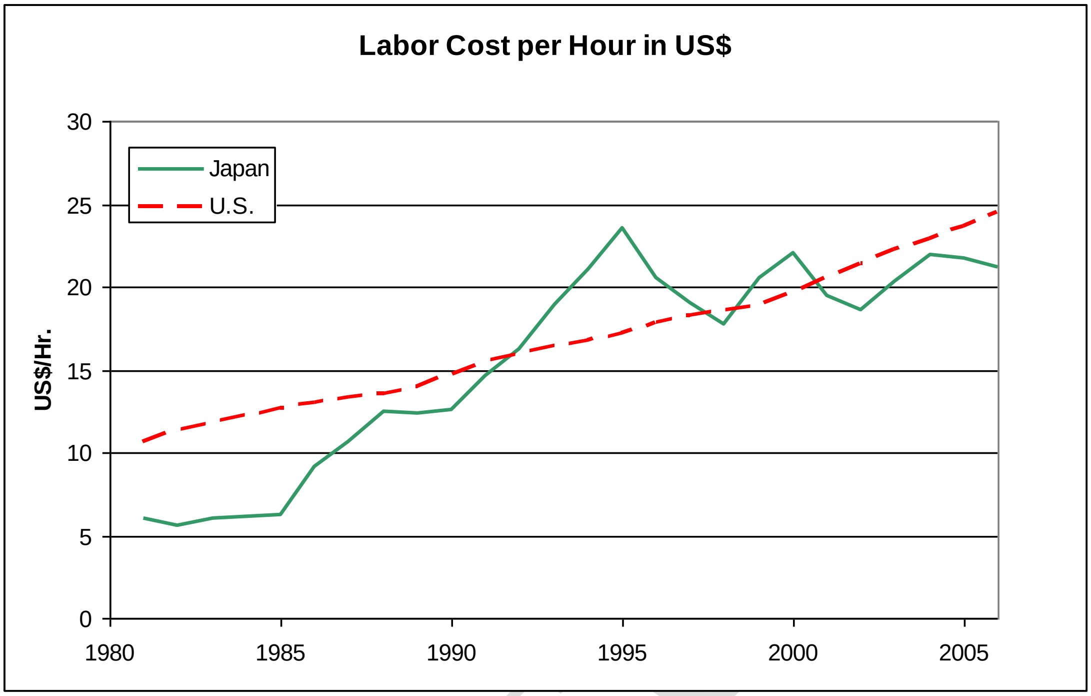
For the years ended December 31,	2005		2004		Change $	Change %
Net sales						
Band	$ 183,626		$ 171,346		12,280	7.2
Piano	203,517		203,688		(171)	(0.1)
Total sales	387,143		375,034		12,109	3.2
Cost of sales						
Band	146,168		137,779		8,389	6.1
Piano	129,441		128,122		1,319	1.0
Total cost of sales	275,609		265,901		9,708	3.7
Gross profit						
Band	37,458	20.4%	33,567	19.6%	3,891	11.6
Piano	74,076	36.4%	75,566	37.1%	(1,490)	(2.0)
Total gross profit	111,534		109,133		2,401	2.2
	28.8%		29.1%			
Operating expenses	76,697		75,255		1,442	1.9
Facility rationalization	—		(363)		363	(100.0)
Total operating expenses	76,697		74,892		1,805	2.4
Income from operations	34,837		34,241		596	1.7
Other income, net	(800)		(3,163)		2,363	(74.7)
Net interest expense	13,645		13,437		208	1.5
Income before income taxes	21,992		23,967		(1,975)	(8.2)
Income tax provision	8,200	37.3%	8,100	33.8%	100	1.2
Net income	$ 13,792		$ 15,867		(2,075)	(13.1)

Exhibit 1b: Steinway Financial Information

December 31,	2005	2004
Assets		
Current assets:		
Cash	$ 34,952	$ 27,372
Accounts, notes and other receivables, net	81,880	88,059
Inventories	159,310	172,346
Prepaid expenses and other current assets	11,653	5,937
Deferred tax assets	7,936	15,047
Total current assets	295,731	308,761
Property, plant and equipment, net	96,664	102,944
Trademarks	13,233	12,325
Goodwill	30,088	31,854
Other intangibles, net	4,128	5,290
Other assets	15,811	16,371
Total assets	$ 455,655	$ 477,545
Liabilities and stockholders' equity		
Current liabilities:		
Current portion of long-term debt	$ 12,977	$ 14,212
Accounts payable	13,805	14,789
Other current liabilities	45,099	43,892
Total current liabilities	71,881	72,893
Long-term debt	191,715	208,580
Deferred tax liabilities	15,326	26,240
Other non-current liabilities	27,903	24,279
Total liabilities	306,825	331,992
Commitments and contingent liabilities		
Stockholders' equity:		
Class A common stock, $.001 par value, 5,000,000 shares authorized, 477,952 shares issued and outstanding	—	—
Ordinary common stock, $.001 par value, 90,000,000 shares authorized, 9,680,508 and 9,595,745 shares issued in 2005 and 2004, respectively, and 7,635,058 and 7,550,295 shares outstanding in 2005 and 2004, respectively	10	10
Additional paid-in capital	83,062	81,129
Retained earnings	126,379	112,587
Accumulated other comprehensive loss	(13,185)	(737)
Treasury stock, at cost (2,045,450 shares of Ordinary common stock in 2005 and 2004)	(47,436)	(47,436)
Total stockholders' equity	148,830	145,553
Total liabilities and stockholders' equity	$ 455,655	$ 477,545

Exhibit 2: Steinway Competitors

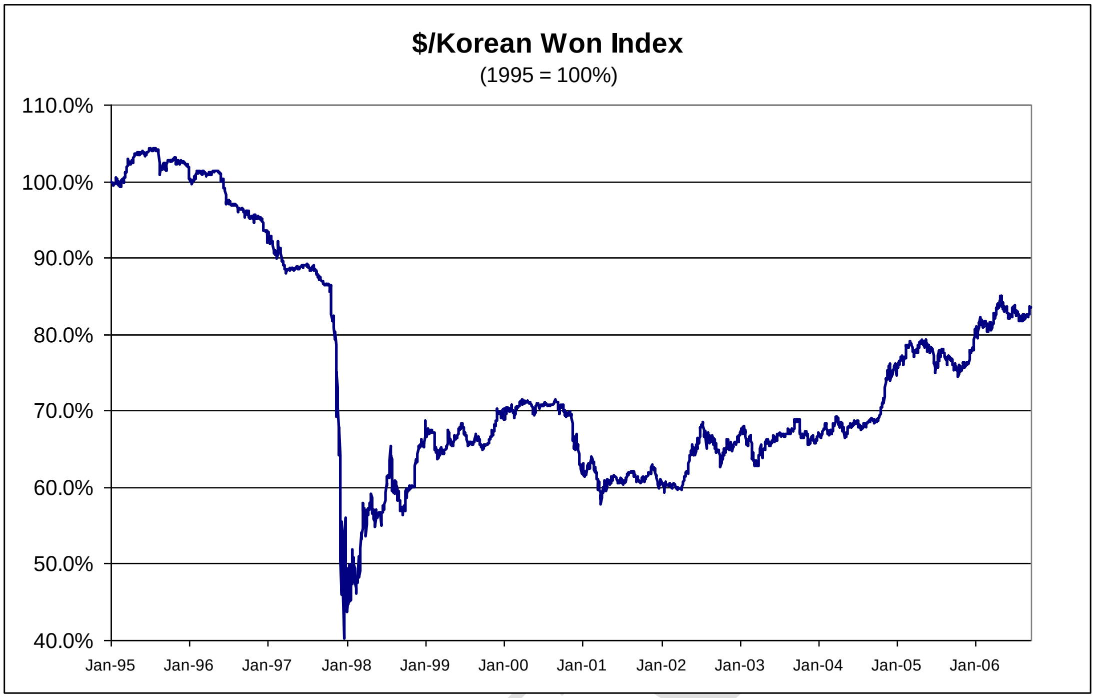
Exhibit 3: Japanese Labor Rates



Source: Economist Intelligence Unit Data Services

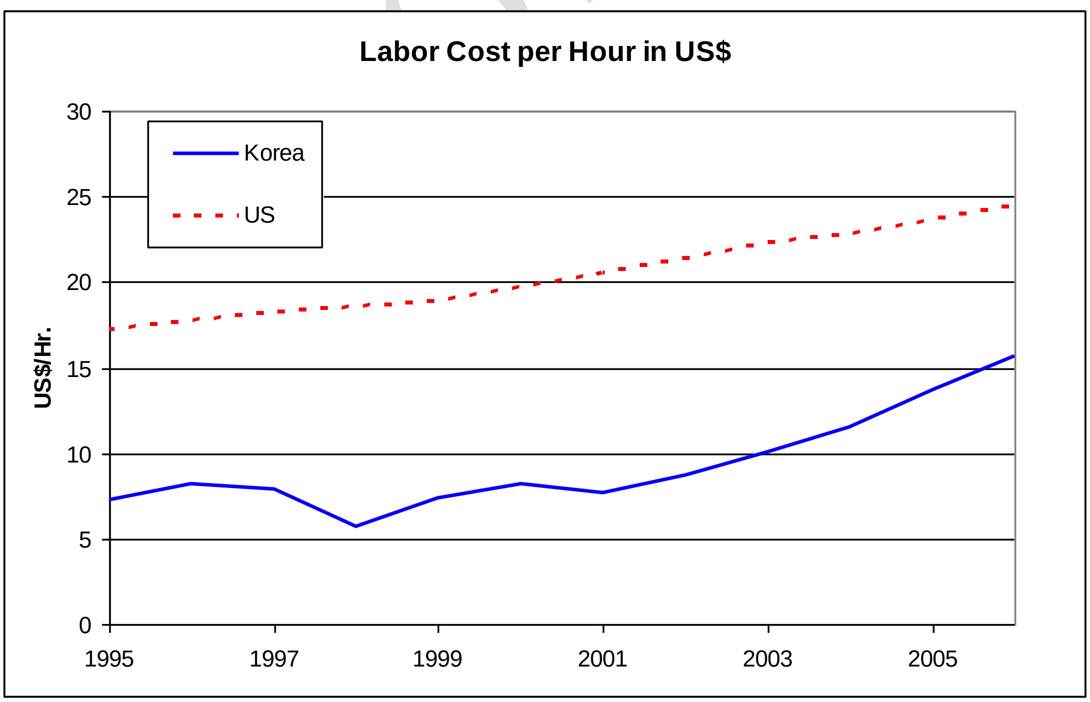
Exhibit 4: Essex Piano

Exhibit 5a: Korean Exchange Rate



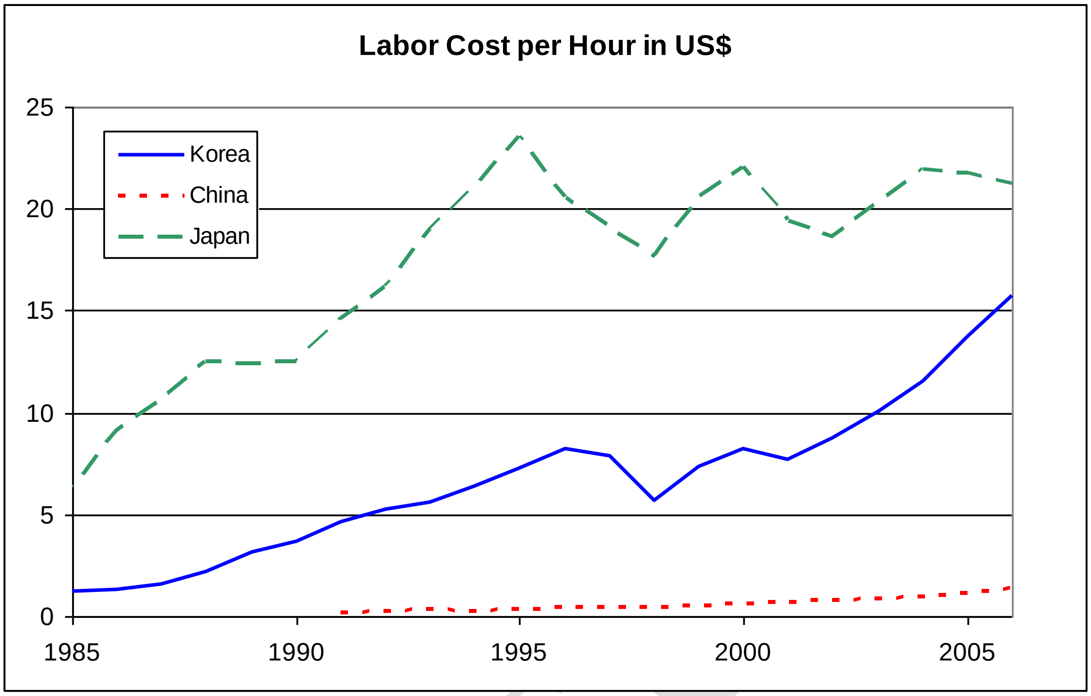
Source: Economist Intelligence Unit Data Services

Exhibit 5b: Korean Labor Rates



Source: Economist Intelligence Unit Data Services

Exhibit 6a: Asian Labor Rates

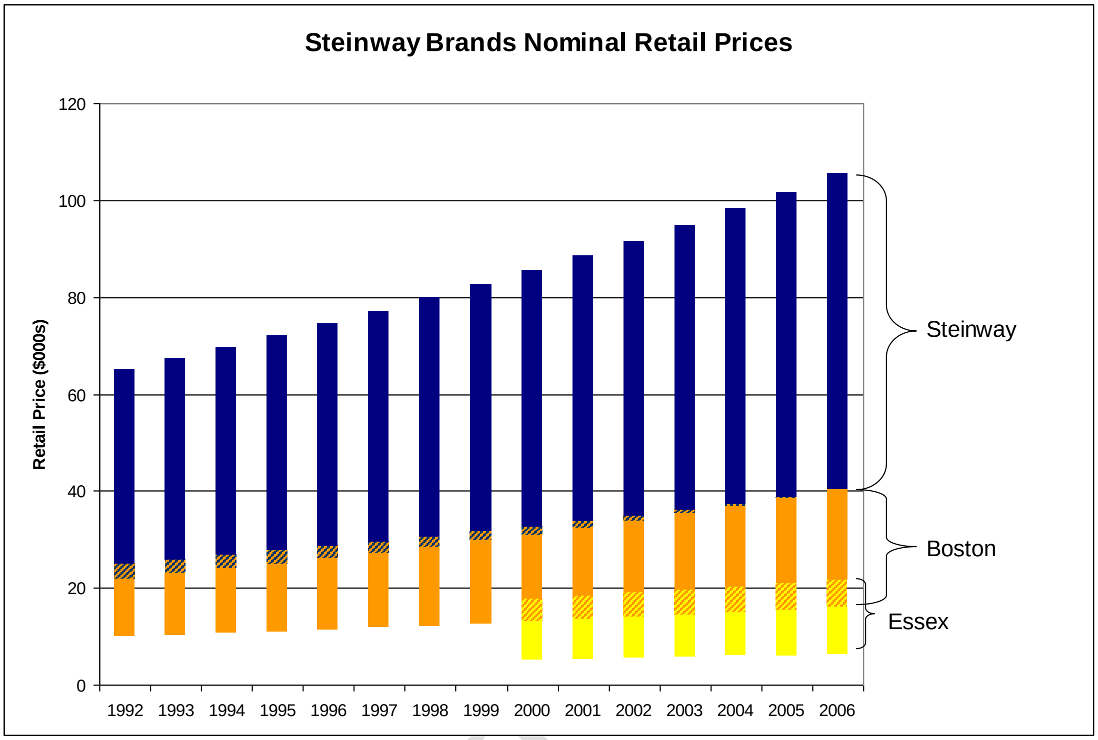


Source: Economist Intelligence Unit Data Services

Exhibit 6b: China Labor Rate

Source: Economist Intelligence Unit Data Services

Exhibit 7: Steinway Retail Prices



[1] *Steinway & Sons*, Richard K. Lieberman, Yale University Press: New Haven and London, 1995.
[2] *Ibid.*
[3] Steinway Musical Instruments, Inc. News Release, January 4, 1999.
[4] Office of the Mayor, News Release 267-99, July 16, 1999.
[5] Steinway Musical Instruments, Inc. News Release, October 21, 1999.
[6] Steinway.com, March 2001.
[7] Steinway.com and *Steinway & Sons*, p. 29.
[8] Interview: Dale Howe, Co-owner, Frederick Johnson Pianos, White River Junction, VT. October 2, 2006.
[9] Interview: Bruce Stevens, President & CEO, Steinway & Sons, October 19, 2006.
[10] "Sawmill Is First Step in Making Fine Pianos "
Pease, David A.. Forest Industries. San Francisco: Jul/Aug 1992.Vol.119, Iss. 4; pg. 11, 3 pgs
[11] "Hyundai Development-led consortium buys instrument firm Young Chang", Yonhap (South Korea), May 22, 2006 Monday, NATIONWIDE INTERNATIONAL NEWS, SEOUL May 22
[12] "Person of the Year: Bruce Stevens" *Music Trades* April, 2006
[13] "Today's Steinway; with a single minded-focus on product quality, limited production and retail profitability, Steinway & Sons' current management has done the near impossible: making the Steinway tradition shine brighter than ever.", *Music Trades*, September, 2003
[14] *Music Trades*, September, 2003
[15] *Music Trades* April, 2006
[16] *Music Trades*, September, 2003
[17] *Music Trades*, September, 2003
[18] Interview: Bruce Stevens, President & CEO, Steinway & Sons, October 19, 2006.
[19] Regulating is the process of adjusting all the mechanical linkages that connect each key to a hammer.
[20] *Music Trades*, September, 2003
[21] "Raising the bar on customer satisfaction", *Music Trades*, March, 2006
[22] *Music Trades*, January, 1992
[23] *Music Trades*, September, 2003
[24] "The Boston piano makes its debut", *Music Trades*, January, 1992
[25] "Steinway Unit to Market Pianos Produced in Japan." Wall Street Journal, (Eastern edition). New York, NY; Jan. 6, 1992, pg. C12
[26] "Boston celebrates a decade of worldwide success", *Boston Piano Newsletter*, Fall, 2002
[27] "Boston celebrates a decade of worldwide success", *Boston Piano Newsletter*, Fall, 2002
[28] Barron, James. "At Steinway, It's Hammer Time." New York Times (Late Edition(east cost)). New York, NY: Nov. 26, 2003, pg. B1
[29] Interview: Dale Howe, Co-owner, Frederick Johnson Pianos, White River Junction, VT. October 2, 2006.
[30] "Steinway expands market reach with Essex", *Music Trades*, October, 2000
[31] Press Release: "Steinway unveils Essex pianos", Jan. 23, 2001
[32] Interview: Dale Howe, Co-owner, Frederick Johnson Pianos, White River Junction, VT. October 2, 2006.
[33] "Steinway debuts new Essex line." *Music Trades*, July, 2006
[34] "Steinway expands market reach with Essex", *Music Trades*, October, 2000
[35] Interview: Dale Howe, Co-owner, Frederick Johnson Pianos, White River Junction, VT. October 2, 2006.
[36] "Boom town! Report from China" *Music Trades*, December, 2005.
[37] "Boom town! Report from China" *Music Trades*, December, 2005.
[38] "Person of the Year: ZhiCheng Tong.", Music Trades, April, 2003.
[39] "Inside Pearl River Piano." *Music Trades*, February, 2001.

[40] "Inside Pearl River Piano." *Music Trades*, February, 2001.
[41] "Inside Pearl River Piano." *Music Trades*, February, 2001.
[42] Interview: Dale Howe, Co-owner, Frederick Johnson Pianos, White River Junction, VT. October 2, 2006.