THE POSTWAR DECADES marked a period of massive expansion and growth. A mill construction and acquisition program launched after World War II expanded the geographical scope of manufacturing operations, adding plants in Tennessee, Alabama, California, and Connecticut. International acquisitions provided the company with a growing presence in Western European, Central American, and South African markets. Diversification added a slew of new products, from cigarette paper to nonwoven fabrics. Kotex and Kleenex marketing campaigns included promotional films on feminine hygiene and cold prevention that were shown to millions of viewers across the country. Sales grew twenty-fold from 1945 to 1971, reaching close to $1 billion in the latter year. In the early 1960s Kimberly-Clark became Wisconsin’s largest corporation, joined the ranks of Fortune 500 companies, and was the nation’s fourth largest pulp and paper company (table 4.1).

The veneer of a classic postwar success story masked strategic problems, however. Kimberly-Clark’s market share shrank precipitously and across the board. Insufficient product development weakened the company’s position in core markets, including sanitary napkins and facial tissue, rendering it vulnerable to resourceful competitors. Attempts to stage a decisive breakthrough in tampon markets were as unsuccessful during the postwar era as they had been in the interwar years. Financial results worsened in the late 1960s. “God, they’re behind the times,” one industry analyst summed up
Wall Street’s view of Kimberly-Clark in the early 1970s. “The big
guys will come in and clean their clock.”

The notion that Kimberly-Clark missed the boat by following out-
dated corporate strategies is misleading, however. Many Fortune 500
companies lost shares in their core markets during the 1960s, and
many tried to solve the widespread problem of declining return on
investment by branching out into new product lines, adding sub-
sidiaries, and entering new markets. Product diversification, acquisi-
tions, and multinational expansion were corporate America’s buzz-
words in the 1960s. Far from missing the boat, Kimberly-Clark
pursued what analysts widely regarded as safe and sound corporate
strategy. The real problem was that mainstream strategy was neither
safe nor sound. Costly acquisitions and product diversification pro-
grams often diverted precious resources from companies’ extant core
businesses, rendering them vulnerable to domestic and foreign com-
petition, which in turn resulted in further declines in market shares.
In more ways than one, Kimberly-Clark’s postwar history encapsu-
lated troubling trends in American business that precipitated the eco-
nomic crisis of the 1970s.

Economic historians have partially attributed this crisis to man-
gers’ inability to learn lessons from the Great Depression. As in the
interwar period, many companies in mature industries—sidetracked
by the acquisition bonanza of the 1960s—failed to develop profitable
new product lines from existing ones, hastening a prolonged down-
turn. This was especially true for companies like U.S. Steel, Interna-
tional Paper, and Ford Motor Company, whose precipitous declines

<table>
<thead>
<tr>
<th>Company</th>
<th>Sales</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Paper</td>
<td>$1,095,671,662</td>
<td>$1,009,398,253</td>
</tr>
<tr>
<td>Crown-Zellerbach</td>
<td>589,101,779</td>
<td>615,959,105</td>
</tr>
<tr>
<td>St. Regis</td>
<td>579,017,961</td>
<td>585,731,035</td>
</tr>
<tr>
<td>Kimberly-Clark</td>
<td>151,238,667</td>
<td>443,678,485</td>
</tr>
<tr>
<td>Mead Corporation</td>
<td>435,116,370</td>
<td>315,231,807</td>
</tr>
<tr>
<td>Champion</td>
<td>357,689,940</td>
<td>253,844,773</td>
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<tr>
<td>Scott Paper</td>
<td>354,449,607</td>
<td>365,985,893</td>
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<tr>
<td>West Virginia Pulp &amp; Paper</td>
<td>276,605,000</td>
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in the 1970s echoed their Depression-era experiences. While managers in these companies were often blind to past mistakes, Kimberly-Clark executives were largely unable to draw lessons from their predecessors’ successes. Bucking industrywide trends as early as World War I, the company had marshaled extant R&D capabilities to develop innovative consumer nondurables and had maintained market leadership through continuous improvements in core product lines throughout much of the interwar period. Postwar managers saw considerable opportunities in consumer markets; but, unlike their interwar counterparts, they banked on acquisitions-based product diversification and multinational expansion while neglecting strategic R&D investments into core product lines. As a result, Kimberly-Clark staged no strategic breakthroughs in product development as it had during the interwar period with Kotex and Kleenex, or as it did in later decades with Huggies diapers.

I.

Kimberly-Clark entered the postwar years under new senior management. Longtime executive Frank Sensenbrenner, who had been one of the company’s key figures since the turn of the century and who had served as president since 1928, retired in 1942, to be succeeded by Cola Parker. A graduate of the University of Chicago law school, Parker had been a senior partner in the New York law firm Wise, Whitney & Parker, who had served as legal counsel to leading paper companies in the 1930s, including Kimberly-Clark. After heading the book manufacturers’ group in the National Recovery Administration, Parker had joined the company as vice president in 1937.³

During his tenure as president, Parker played a key role in formulating the company’s postwar expansion strategy, the early stages of which centered on a massive mill construction and reconfiguration program launched in 1945. At the time, Kimberly-Clark scaled down wartime production—insulating material for the Army, mimeograph paper for the Navy, and packaging material for aircraft manufacturers—to take advantage of surging civilian demand for paper products. Wartime limitations on civilian items such as catalog paper, feminine hygiene products, and wallpaper had created pent-up demand which was released in the closing months of 1945. A year later the Office of Price Administration lifted ceiling rates for most paper products, enabling manufacturers to offset wage increases with higher prices.
Reflecting industrywide trends, Kimberly-Clark’s inflation-adjusted sales shot up more than 30 percent from 1945 to 1947, with solid increases projected for at least a decade.\(^4\)

Responding to the need for greater capacity, Parker and his lieutenants proposed a $67.5 million plant construction and reconfiguration program. The ambitious project—financed through a $14.2 million stock issue, $29.9 million in reinvestments, and $23.5 million in debt—enabled Kimberly-Clark to expand output of key product lines. From 1945 to 1949 book paper output increased 37 percent, pulp 57 percent, and Cellucotton 68 percent. Equally important, Parker’s initiative created production linkages between Kimberly-Clark mills, particularly in pulp manufacture and Cellucotton production.\(^5\)

Additional Cellucotton production and conversion capacity received top priority because the Lakeview mill in Neenah was unable to fill orders for Kotex and Kleenex and lacked sufficient space for major new additions. The centerpiece of the Cellucotton expansion program was a 600,000-square-foot plant in Memphis, Tennessee, acquired by Kimberly-Clark in 1946. Originally built during the war for B-25 bomber production, the Memphis plant featured a single-story layout, in contrast to the multistory designs of the company’s older Wisconsin mills, where transfers of materials from one floor to the next created production bottlenecks. Taking advantage of the building’s architecture, mill engineers devised a mechanized material handling system that enhanced throughput and improved sanitation by reducing “touch labor.” The Memphis mill also featured four paper machines equipped with rolls 13 feet wide, a 40 percent gain over the narrower Lakeview machines. The mill enjoyed considerable location advantages, including low-cost labor and proximity to rapidly growing markets in the Southeast.\(^6\)

The Memphis plant received the bulk of its pulp supplies from a newsprint mill in Childersburg, Alabama, a joint venture of Kimberly-Clark and southern publishers. The region’s newspapers had traditionally been printed on imported Canadian paper, partly because southern pulpwod was unsuitable for newsprint pulp production. But improvements in pulping technology enabled mills to process regional pulps, precipitating newsprint mill construction in many southern states in the postwar years. Shortly after the war, members of the Southern Newspaper Publishers Association approached Parker with a proposal to build a large mill at Coosa Pines, Alabama, to be managed by the Wisconsin papermakers. Parker had little interest
in reentering American newsprint, a product line the company had abandoned in 1916, but he viewed the proposed plant as a valuable source of bleached sulfite pulp for the Memphis Cellucotton mill. In 1946 Kimberly-Clark joined more than one hundred newspaper publishers to form the Coosa River Newsprint Company, contributed $6.7 million to the $32 million dollar venture, and took a leading role in designing, building, and managing the mill. By the early 1950s the Coosa River mill was the premier pulp source for Kleenex disposable handkerchiefs manufactured at Memphis, which became the most important plant in Kimberly-Clark’s postwar mill system.7

Plant improvement and construction programs also created newsprint-Cellucotton linkages north of the border, albeit on a smaller scale than in the South. The Spruce Falls mill in Kapuskasing, Ontario, which supplied The New York Times and other American papers, included a sulfite pulp mill whose daily capacity was 250 tons and whose output was mixed with groundwood pulp to produce newsprint. Beginning in the 1930s Kapuskasing shipped excess sulfite pulp to the Kimberly-Clark mill in Niagara Falls, New York, which produced Cellucotton, Kotex, and Kleenex. The Niagara Falls mill exported some of its output to Canada until 1945, when Kimberly-Clark built a Cellucotton plant with 30 tons daily capacity next to the Kapuskasing mill. Using an advanced process of chip distribution and independent acid recovery, the newsprint mill increased its output of bleached sulfite pulp, which was pipelined to Kimberly-Clark’s new Cellucotton plant. The latter, operated by the wholly owned subsidiary Kimberly-Clark of Canada, Limited, shipped its entire output to a new manufacturing plant in Niagara Falls, Ontario, which converted it into Kotex and Kleenex.

Similar synergisms developed in the production of printing papers, where the postwar expansion program raised annual production capacity from 186,000 tons in 1946 to almost 245,000 tons four years later. In 1945 Parker announced a $5 million upgrade of the Niagara, Wisconsin, mill, the largest investment into Kimberly-Clark’s printing paper business since 1920. The program added a single-story mill building, two fourdriniers, and a material handling system resembling that of the Memphis mill. Like the latter, Niagara procured most of its raw materials from a pulp mill located several hundred miles away, in this instance a major new plant in Terrance Bay, Ontario. The $15 million Terrance Bay mill, one of the largest built in postwar Canada by U.S. paper companies, came onstream in 1948 with a daily capacity of 250 tons, most of which went to the
Niagara mill for conversion into machine-coated grades. Niagara, Kimberly-Clark’s largest printing paper mill, supplied publications such as *Business Week, Newsweek, Esquire,* and *New Yorker.*

Several years after the expansion program that began in 1945 was completed, the company added important new mills on the West Coast and in the Northeast. The first new mill, a Cellucotton manufacturing and converting plant at Fullerton, California, was initially a topic of considerable controversy among executives. Citing a long list of failed paper mill projects in the region, senior engineers claimed that the buildup of freshwater-dependent manufacturing operations in water-scarce Southern California could result in long-term operational problems. Andrew G. Sharp, vice president of sales, and other marketing managers strongly endorsed the concept of “bringing the plant to market,” arguing that the Fullerton mill would improve the competitiveness of consumer product lines in one of the nation’s fastest-growing regional markets. The latter argument convinced Parker and a majority on the board of directors, which approved a $20 million appropriation for construction of the Fullerton plant. The mill, whose design incorporated advanced water purification and recycling technology, produced its first batch of Kotex in 1955 and became one of the largest plants in the Kimberly-Clark system. A similar Cellucotton mill was built in New Milford, Connecticut, in the late 1950s to supply metropolitan New York.

The results of Parker’s plant construction and reconfiguration program were mixed. Additional volume capacity enabled the company to cope with the staggering order backlogs of the late 1940s and early 1950s and to defend its market share in key product lines. Inflation-adjusted net sales grew by more than 230 percent from 1945 to 1955. The massive expansion of Cellucotton production reestablished Kleenex as the dominant product in disposable handkerchief markets, which had turned to competing products in the immediate postwar years because Kimberly-Clark lacked sufficient volume capacity to fill orders. Parker’s claim that production linkages and plant efficiency gains would yield better financial results—an important rationale for the expansion program—stood on feeble grounds, however. Return on investment in fact declined during the early 1950s (table 4.2). Although corroborating evidence is lacking, one may speculate that Parker’s attempt to network geographically dispersed plants (instead of building integrated pulp and conversion plants at single sites) contributed to a low return on investment because pulp shipments from Alabama to Georgia (280 miles) and from Northern Ontario to Nia-
gara Falls (580 miles) resulted in higher transportation costs. John R. Kimberly, Parker’s successor, nevertheless continued to foster production linkages between plants in disparate locales well into the 1960s, until the strategy came under attack by critics who attributed Kimberly-Clark’s worsening cost structure to high transportation charges.10

Parker, who believed that disappointing earnings were the result of excessive volatility in Kimberly-Clark’s core markets, advocated diversification into more stable product lines to prevent an earnings roller coaster. In 1951 he negotiated the acquisition of the Munising Paper Company, a manufacturer of sulfite bond papers that operated a two-machine mill in Michigan. The $4 million transaction marked a turning point in Kimberly-Clark’s product diversification strategy, which had heretofore evolved new product lines from existing ones within the company. Acquisitions-based product diversification, which became the norm over the next decade or so, was far from risk-free, however. Marketing of unfamiliar products frequently presented major challenges, particularly for companies like Kimberly-Clark whose marketing operations were highly centralized. Acquired product lines were often poor fits with a company’s extant core business,
blocking the types of production linkages and technological synergisms which Parker fostered in pulp and Cellucotton production. Then there was the possibility that acquisitions would prove to be lemons, as Kimberly-Clark learned in the case of Munising Paper. Touted as a leader in fine papers with advanced manufacturing operations and a strong record of product development, Munising’s mill was poorly maintained and required a major repair program that curtailed operations for months. As Kimberly-Clark stockholders learned in 1953, “[D]uring the year certain conditions [manifested] themselves [that] called for expenditures . . . and [for] further expenditures in later years substantially in excess of those previously contemplated. This, plus some easing in demand for pulp and the Munising types of paper during the year, affected profits adversely.” Subsequent plant upgrades failed to improve the performance of Munising’s pulp division, which was shut down permanently in 1961.

Shortly before his retirement in 1955, Parker laid the groundwork for the acquisition of the International Cellucotton Products Company (ICPC), completed by his successor John R. Kimberly. Established as a wholly owned subsidiary to market Kotex and Kleenex, ICPC had evolved into a semi-independent corporation during the 1930s when the parent company sold some its stock holdings to Kimberly-Clark managers and employees. Although it developed a separate management organization (headquartered in Chicago) and controlled valuable trademarks and patents for Kotex and Kleenex independently, ICPC remained a marketing arm for Kimberly-Clark’s consumer product lines. Seeking to solidify Kimberly-Clark’s position in consumer markets, Parker and Kimberly engineered the acquisition of ICPC through a stock swap involving 3 million Kimberly-Clark shares. ICPC headquarters were moved to Neenah and integrated into the Kimberly-Clark marketing organization, which took direct control of Kotex and Kleenex advertising, promotion, and sales.

II.

By the time of the acquisition, ICPC had accumulated a strong marketing record that stretched back to the early 1940s. Capitalizing on the success of Marjorie May’s 12th Birthday, first issued in the United States in 1932, it launched major advertising campaigns to enhance brand name recognition for Kotex among teenagers, the
fastest-growing consumer group of the 1940s and 1950s. These efforts were partly designed to fend off competitors in the sanitary napkin market, notably Johnson & Johnson, whose brochure entitled Growing Up and Liking It had gained popularity among teenagers. Meanwhile, tampon producers marketed their products aggressively as more “modern” alternatives to feminine pads. In 1942 Tampax Corporation published a series of ads headlined “I didn’t know it was so simple to use Tampax—No Belts, No Pins, No Pads, No Odor”—all direct references to sanitary napkins, which required belts and pins as fasteners.14

In 1940 ICPC responded with an advice booklet entitled As One Girl to Another which inaugurated a new phase in menstruation discourses. The booklet replaced the fictional mother/daughter exchange presented in Marjorie May’s 12th Birthday with a factual narrative. It also substituted flowery prose (“‘Mother, dear, you are the best in the whole world,’ said Marjorie May after her birthday guests had gone home”) with lively, everyday-life language: “Girls have all sorts of crazy nicknames [for menstruation],” it read. “You may have heard them talk about ‘falling off the roof’—or ‘getting the pip’—or ‘grandma is coming to visit.’ Some call it ‘the monthlies.’ And if you’re a shark at Latin you can guess why. For menstruation comes from the Latin word menses . . . meaning month.”15 Like most other pieces of advice literature, As One Girl to Another rarely mentioned physical or emotional discomfort, cheerfully reassuring readers that menstruation “causes most girls no trouble at all!” Admitting nebulously that menstruation is “a bit of a nuisance at times,” the text hastened to add that this was “nothing like was it used to be, before Kotex was invented!”16 After stressing that age variation and slight irregularities in the menstrual cycle were normal, it encouraged the use of a menstrual calendar (helpfully provided in the back of the booklet) so “you don’t get caught unprepared.” “If you’re going off on an all-day outing in the country it’s awfully easy to slip a Kotex pad and belt in your purse or pocket.” Grabbing the opportunity to pitch another ICPC product, the text then counseled consumers to “fold [pad and belt] up in a piece of Kleenex . . . [and] pop a rubber band around them.”17 Advocating “normal” physical activity, including sports, As One Girl to Another cautioned against diving into cold water and swimming because it could result in temperature shocks, purportedly seen by many physicians as detrimental to menstrual health. (In truth, pad makers discouraged diving and swimming because highly absorbent sanitary napkins were unsuited for use under water.)
Young women who felt uncomfortable engaging in strenuous physical activity could expect understanding from their peers, including the opposite sex. “You know, boys know all about menstruation,” the booklet claimed optimistically. “They don’t think it’s peculiar; it’s a perfectly natural life process that they respect highly. They won’t mention it . . . but they’ll take the hint if you prefer the movies, or listening to the radio to playing some strenuous game.”

Although the bulk of *As One Girl to Another* marked a step toward a more candid menstruation discourse, the last several pages contained a problematic discussion of tampons that capitalized on popular myths and prejudices. In a transparent attempt to safeguard Kotex’s market dominance, the authors claimed that “most authorities say young girls shouldn’t use tampons without *first* consulting their doctor.” Without going so far as to raise the specter of accidental deflowering in as many words, the text pointed out that “there’s . . . a membrane called a hymen which partly closes the entrance to the vagina—from which comes the menstrual flow. Therefore, Kotex sanitary napkins are more comfortable, and better suited to a young girl’s needs, than tampons of any type”—hardly the logical explanation it purported to be. After having thoroughly discouraged tampon use, the booklet recommended Fibs for the “particular case [where] it’s all right to use tampons.” If anything, the lukewarm endorsement for “particular cases” was a telling comment on the relative insignificance of Fibs tampons in the ICPC product line. For more than a decade Kotex marketers continued to play on unspoken fears that tampons could rupture hymens, a myth authoritatively dispelled by gynecologist Robert L. Dickinson in *The Journal of the American Medical Association*.

Like many other marketers who jumped on the patriotic bandwagon during World War II, ICPC launched a series of advertisements that linked sanitary protection to military themes. The ads were designed by San Francisco–based Foote, Cone & Belding, successor to the Lord & Thomas advertising agency which had handled Kotex advertising since the early 1920s. A Kotex ad released in 1944, for example, depicted a camouflaged sniper (one of the first men to appear in a sanitary napkin ad since 1920), whose “safety depends on concealment” (figure 4.1). “Useful at home, too. For its sharp strategy to hide your feelings at times . . . ‘certain’ times, especially.” Unlike post–World War I marketers, FCB carefully avoided suggestions that menstruating women had anything in common with wounded soldiers—a widespread practice in wartime advertising, which preferred
conquering warriors over battlefield casualties. The ad carried its militaristic metaphor to the extreme by claiming that Kotex enabled young women to “‘Dress to kill’ in your fetchingest [sic] frock!”—not unlike the sharpshooter who went hunting for the enemy attired in a burlap suit. The accompanying artwork depicted young men and (presumably menstruating) women dancing in a conga line and listening to the radio with Red Skelton’s telltale cry “I doo it” blaring from the speaker.

In 1946 ICPC supplemented its print advertising campaigns with the promotional film The Story of Menstruation, a Walt Disney production that was viewed by more than 100 million high school students over the next several decades. The film was part of a rapidly growing marketing trend when corporations commissioned “informational” productions to peddle their wares. Postwar pioneers of these so-called ephemeral films included the Electric Auto-Lite Company, which released The Right Spark Plug in the Right Place in
1945, followed by Westinghouse’s *The Dawn of Better Living* and Johnson & Johnson’s *Bathing Time for Baby*. While most early productions were shown in movie theaters before feature presentations, *The Story of Menstruation* was one of the first corporately sponsored films distributed to high schools, whose vast captive audiences received free printed material to supplement the film, including instructional guides for teachers and student handouts. In a telling comment on postwar education, *The Story of Menstruation* and other, similar attempts to commercialize the classroom rarely attracted criticism from teachers who used films as teaching tools. Many, in fact, enthusiastically endorsed corporately sponsored motion pictures, which were usually more carefully crafted than dull public-service films thanks to higher production budgets. Moreover, the Kotex film producers preempted criticism by deliberately avoiding excessive product pitches, showing a box of Kotex only at the end of the film. The accompanying teaching material, including the student booklet *Very Personally Yours*, featured more frequent Kotex references and expanded on recent advertising themes by discouraging tampon use.

Work on *The Story of Menstruation* began in 1945, when Disney produced the first script drafts and conceptualized the visual material. Concerned that “adverse criticism from the medical profession could wreck the entire undertaking,” the producers hired gynecologist Mason Hohl as a consultant to ensure scientific accuracy, enhancing the likelihood that school nurses and physicians who would preview the film before classroom screenings would give it a thumbs up.\(^2\) As a result, all script drafts placed stronger emphasis on biological themes than other ICPC marketing material and adopted a far more reserved tone than the snazzy *As One Girl to Another*. “Mother Nature controls many of our routine bodily processes through automatic control centers called glands,” the final draft adopted in June 1945 explained.\(^3\) In adolescents the pituitary gland released a “maturing hormone” via the bloodstream to the ovaries to precipitate egg growth. Because unfertilized eggs did not require “the thickened lining [of the uterus that provides] nourishment for the budding human being,” the lining was discharged from the body, producing “the flow which we call menstruation.”\(^4\) The remainder of the script admonished teenagers to keep a calendar, maintain normal levels of physical activity, and bathe regularly. All questions relating to menstrual hygiene were answered in the “very interesting booklet called *Very Personally Yours* [that] has been prepared to enlarge upon what
you learn from this brief film," a script phrasing that linked the film inextricably to the promotional brochure.26

Unlike the script, visual material for *The Story of Menstruation* underwent major revisions before ICPC officially released the film. Eschewing costly full-scale production of the visual components, the Disney team outlined the film on seventy-six storyboards for presentation to high school test audiences. The test screenings, conducted in late 1945, resulted in major changes. Teachers objected to the depiction of a smiling embryo—not on scientific grounds, but because the image violated school policies that prohibited the showing of nude figures in classrooms. Students took exception to a scoreboard that compared the menstrual cycle to the change of seasons, inserted by the producers because it "had great possibilities for charm and beauty."27 "Here we go again—back to the birds, the bees and the flowers," said one high school senior summing up student reaction. The idea of using animated Disney characters for *The Story of Menstruation* was quickly discarded because "no girl will identify herself with Disney cartoon characters." A draft of the opening credits included the film title and the words "presented by," followed by an image of a box of Kotex. Adult viewers were unconcerned about the sequence's commercialism but complained that it could unnerve high school audiences by starting the presentation with a product that caused "apprehension." The producers moved the Kotex box to the end, "where it appeared after the confidence of the audience had been won." The film's animation format—selected because it created "impersonal objective qualities"—won universal approval from test audiences and was heartily endorsed by ICPC because "the picture was kept dateless—was assured long life," enhancing amortization of production costs.28

While Disney worked on full-fledged production of the film, ICPC developed supplemental material, including a resource manual for educators that included a chart of menstrual physiology and a teaching guide. The latter encouraged teachers to address menstruation informally in fourth grade and follow up with more systematic discussions in seventh grade. Copies of *Very Personally Yours* would be distributed several days prior to screenings, and mothers would be invited to view the film together with their daughters in class. The manual also included a list of standard questions and answers. The recommended answer to "Can girls of 14 wear tampons?" was, without further explanation, "It would be wise to see a doctor before attempting to use tampons."29 The use of Kotex was presumed in
most standard exchanges, including “Can one prevent odor during the menstrual period . . .?” The suggested answer was, “Kotex sanitary napkins should be changed frequently.”

The Story of Menstruation received an enthusiastic reception when it premiered before an audience of high school teachers in 1946. A school director of health commended the film for its time-saving features, claiming, “In this day of increasing demands on teachers’ time, it covers in ten short minutes far more subject matter than a teacher could handle in forty-five minutes, even with careful preparation.” Although nobody addressed the issue publicly, showing a film also reduced the amount of verbal explanation a teacher had to provide. Some students liked the film because it made them “feel relaxed. I enjoyed it instead of feeling hush hush,” one girl remarked in comments that were included in ICPC marketing material for The Story of Menstruation. The Library of Congress, claiming that the film had “potential historical significance,” ordered two prints for its collection. The American Medical Association reviewed it favorably, as did Parents’ Magazine.

Retrospective analyses were far less sanguine, criticizing the film’s aseptic depiction of the female body and its normative assumptions of womanhood. Historian Joan Jacobs Brumberg, commenting on a revised version released in the 1950s, writes:

In the Disney world, the menstrual flow is not blood red but snow white. The vaginal drawings look more like a cross section of a kitchen sink than the outside and inside of a woman’s body. There are no hymen, no clitoris, no labia; all focus is on the little nest and its potentially lush lining. Although Disney and Kimberly-Clark advise exercise during the period, the exercising cartoon girls (who look like Disney’s Cinderella) are drawn without feet; bicycles magically propel themselves down the street without any muscular or mental direction from the cyclist. The film ends happily ever after, with a shot of a lipsticked bride followed immediately by a shot of a lipsticked mother and baby.

In addition to suggesting a problematic link between menstruation and motherhood, The Story of Menstruation squandered an opportunity to introduce some of the informal and at times funny vocabulary of As One Girl to Another into high school sex education. Instead of imitating casual teenage language, the producers offered scientific phraseology that set a tone of grave seriousness for class-
room discussions. ICPC, convinced that “a detail that might cause a snicker” would ruin the film, in fact marketed it to schools by stressing its “objective,” “scientific,” and “unemotional” presentation that left no room for smiles.

Postwar “Are You in the Know?” advertisements, by contrast, were modeled after the lively wartime ads that juxtaposed Kotex pitches with advice on etiquette, dating, fashion, and grooming. The series, which continued well into the 1960s, imitated the question-and-answer format of advice columns in teenage magazines. The latter were periodically surveyed by ICPC marketers who selected frequently asked questions as a basis for “Are You in the Know?” ads. They also discussed ad drafts with editors of teenage magazines as well as with test audiences composed of young women. Text and artwork were designed to “intrigue girls and women into reading by appealing to their vanity,” marketers claimed.34 A typical ad released in 1949 abounded with teenage slang, coupled with references to recent developments in aircraft propulsion. Showing a waiter cleaning a patron’s dress, the ad asked, “If he spilled a soda on your best dress, would you: [A] grieve and leave [B] grin and forget [C] call the manager.” A young woman “in the know” would select B because “that’s good sportsmanship. And it jet-propels your rating. Your confidence, too, hits the stratosphere—where you hurdle ‘certain’ handicaps with Kotex.” The depiction of self-confident and at times wisecracking young women who enjoyed the admiration of smiling male companions in Kotex ads contrasted with marketing material developed by arch-rival Johnson & Johnson, which often conveyed more conservative messages. A Modess sanitary napkin advertisement released by Johnson & Johnson in 1949 criticized the tone of recent Kotex ads, asking suggestively whether “it’s out-of-date to be tactful. . . . The wisecrack ‘candid kid’ may get laughs—even applause,” the ad declared soberly. “But it’s still good old tact that wins, and holds, friendship.”

Encouraged by the widespread use of The Story of Menstruation, ICPC approached Disney in 1949 with a proposal for a promotional film for Kleenex disposable handkerchiefs entitled How to Catch a Cold. Taking a leaf from the underhanded commercial strategy that allowed ICPC to bill the Kotex film as educational material, the Kleenex marketing manager in charge of the project told team members, “[W]e do not want to load [How to Catch a Cold] with commercials. I would think that credits at the beginning and at the end of the picture, plus a few shots of cold sufferers taking tissues from the
Kleenex package in the picture itself, would suffice." Disney, which
had recently phased out promotional motion pictures, agreed to take
on the project as a public service message. Produced under the scient-
ific supervision of a consulting physician, the color film featured a boy
hero named Common Sense who helped his sneezing friend The Com-
mon Man avoid colds. Unlike The Story of Menstruation, it was
intended to make audiences laugh at The Common Man’s clumsy mis-
takes, including golfing in wet weather and failing to cover his sneeze.
Common Sense, always present with helpful advice, handed The Com-
mon Man a Kleenex at the end of the ten-minute presentation.

The $150,000 production, released in 1951, was initially distrib-
uted to high schools and community organizations. Reviews indicated
that ICPC’s strategy of keeping commercial elements at a minimum
paid off. “Even though the box of disposable tissues thrust by Com-
mon Sense under the running nose of The Common Man at the close
of the picture is unmistakeably [sic] labeled ‘Kleenex,’ we think it
should be acceptable in the classroom, as well as for industrial and
community use,” Film News noted. The film’s decisive breakthrough
as a public service production came in autumn 1952, when the
National Broadcasting Corporation selected How to Catch a Cold for
a demonstration of color television and continued to broadcast it for
several years. Over the next decade the film was seen by more than
200 million viewers, more than any other Disney production.

Although The Story of Menstruation and How to Catch a Cold
marked milestones in product promotion, they had little appreciable
impact on ICPC’s market shares. Kleenex accounted for 50.2 percent
of all sanitary napkins sold in the United States in 1950, a figure that
remained almost unchanged for the next three years, when viewship
of How to Catch a Cold skyrocketed. Aware of its limited value for
Kleenex marketing, ICPC kept advertising and distribution budgets
for the film at a bare minimum through much of the 1950s. In 1955,
after absorbing ICPC into its central marketing organization, Kim-
berly-Clark raised appropriations for the film by almost 40 percent,
again without significant impact on Kleenex’s market share. Man-
agement started to look for other ways to improve the balance sheet.

III.

In 1955 Kimberly-Clark chairman Cola Parker was succeeded by
John R. Kimberly, grandson of one of the company’s founders. Born
in 1902, he graduated in 1926 from the Massachusetts Institute of Technology with a degree in chemical engineering; he rose through the ranks to become manufacturing manager in the late 1930s. After a brief stint at the federal Office of Production Management, he was appointed vice president of sales in 1943 and executive vice president in 1952. A strong supporter of Parker’s product diversification strategy, he was instrumental in acquiring the Munising Paper Company and ICPC. In addition to growing the company through further domestic acquisitions and plant improvements, Kimberly launched an ambitious international expansion program. Western Europe emerged as an area of particular interest in the late 1950s because paper consumption was projected to increase by 50 percent in 1965, compared to 39 percent in the United States.40

Kimberly began his twelve-year tenure as chairman by further diversifying the company. The $2 million acquisition of the Neenah Paper Company, completed through a stock swap in May 1957, marked Kimberly-Clark’s return to cotton papers, a product line it had largely phased out more than seven decades before. Demand for cotton-based grades had declined precipitously in mainstream markets but remained strong in the niche market for fine business papers, where Kimberly-Clark had sought to stake a claim with the Munising acquisition. Designed to supplement the latter, the purchase of Neenah Paper enabled Kimberly-Clark to offer a complete line of business papers.41

The acquisition of Schweitzer Incorporated in February 1957 added cigarette and other thin specialty papers to Kimberly-Clark’s product line. Schweitzer’s origins dated to 1920, when Russian immigrant Peter J. Schweitzer acquired a paper mill in Jersey City, New Jersey, to produce cigarette paper and other thin grades. In 1922 his sons Louis and William Schweitzer incorporated and expanded the business, adding a major new mill in Elizabeth, New Jersey, which manufactured cigarette paper from flax pulp. The latter formed the basis for Schweitzer’s meteoric rise in the 1930s and 1940s, when it became the leading paper supplier of the American Tobacco Company, Phillip Morris, and other major American cigarette companies. Determined to avail himself of the advanced French cigarette paper production technologies, William Schweitzer acquired Papeteries de Mauduit, a leading French company headquartered in Quiperlé, and formed a partnership with Papeteries Bollore, which operated three mills at Odet, Casadec, and Troyes. When Kimberly-Clark acquired Schweitzer for $18 million in 1957, it gained not only seven major
cigarette and specialty paper mills in New Jersey, Pennsylvania, and Massachusetts (which produced more than 30 percent of the nation's thin paper output) but also a strong foothold in Western European markets through Schweitzer’s French operations.42

The same year, Kimberly-Clark established a presence in British consumer product markets. Attempts to build up British operations dated to the 1920s, when Kimberly-Clark formed a subsidiary to market Kotex and Kleenex, but sales remained minuscule until after World War II. Initially shunning the establishment of full-fledged manufacturing operations in Britain, Kimberly-Clark negotiated a long-term agreement with Aylesford-based Albert E. Reed, Limited, which produced Cellucotton for exclusive distribution by a Kimberly-Clark subsidiary. John R. Kimberly, convinced that European markets for Kotex and Kleenex held considerable growth potential, engineered a joint venture between Kimberly-Clark and Reed to build a new Cellucotton production and conversion plant at Larkfield, which came onstream in 1957. Managed by the newly formed British subsidiary Kimberly-Clark, Limited, the plant helped sales grow strongly during subsequent years, and at the end of the 1960s sales had achieved more than 20 percent annual growth.43

British operations enabled Kimberly-Clark to expand into the West German market, where it teamed up with the Aschaffenburger Zellstoffwerke A.G. and the Dutch Unilever Corporation to form Zellwatte Limited as a joint venture (“Zellwatte” is a literal translation of “Cellucotton”). Zellwatte, whose conversion plant in Stockstadt churned out its first batches of Kotex and Kleenex in 1957, received the bulk of its Cellucotton supplies from the Larkfield mill. Sales presented major problems, however, because Zellwatte tried to compete with the German wholesalers that dominated consumer product markets. Attempts to sell directly to large retailers failed, resulting in a bulging inventory as Zellwatte missed projected sales by 70 percent in 1958. The joint venture remained a trouble spot throughout much of the 1960s as a result of poor operation and sales management.44

Kimberly’s international expansion also produced mixed results in non-European markets, where Kimberly-Clark teamed up with local investors and paper companies in the late 1950s and 1960s. Kotex, Kleenex, and printing grades were exported to Mexico until 1955, when Kimberly-Clark formed a joint venture with Mexican investors to build a paper mill and conversion facilities in La Aurora, managed by the newly formed Kimberly-Clark de Mexico. Kimberly would
have preferred to run Mexican operations through a wholly owned subsidiary, but “there is considerable pressure on foreign-owned companies to offer substantial interests to the Mexican public,” he reported to the board of directors in February 1961. Like Scott Paper, which faced similar pressure when it established a Mexican subsidiary in 1955, Kimberly-Clark willy-nilly agreed to reduce its ownership by 40 percent by offering stocks to Mexican investors. Printing paper sales waxed strongly from the start, but consumer products sales and profits lagged in the early 1960s because Kimberly-Clark de Mexico tried to circumvent wholesalers by marketing Kotex and Kleenex directly to large retailers. Unlike Zellwatte, it managed to turn the tide by signing a long-term distribution agreement with an exclusive wholesaler, markedly improving sales and earnings. At the end of the 1960s Kimberly-Clark de Mexico was one of that nation’s largest consumer products companies and reported annual sales growth exceeding 30 percent, precipitating the construction of a large new mill in Orizaba in 1969 which supplied Central American markets.

In 1958 finance manager William Clifford recommended substantial investments in South Africa. Arguing that “South Africa appears to have a favorable political climate for further foreign investment,” Clifford suggested to the board of directors that Kimberly-Clark of South Africa, a small sales organization formed in 1936, be turned into a full-fledged manufacturing subsidiary. A proposed consumer products plant near Johannesburg would procure Cellucotton supplies from South African Pulp and Paper Industry, a leading African company that operated a paper mill nearby. A Neenah executive who visited South Africa in 1958 concluded, “This proposal appears to be considerably more attractive than the alternative building of our own machine.” Kimberly-Clark of South Africa signed a ten-year contract with South African Pulp and Paper to secure Cellucotton supplies for its new Johannesburg conversion plant and became one of Africa’s largest sanitary napkin producers.

In contrast to overseas, where local conditions often forced Kimberly-Clark to rely on joint ventures and long-term supply contracts with other manufacturers and wholesalers, domestic operations were highly integrated. Kimberly, like Parker a proponent of vertical integration, advocated plant improvements and acquisitions to create new production linkages. A textile mill in Berkeley, North Carolina, that had been acquired during Parker’s tenure received several upgrades that enabled Kimberly-Clark to manufacture the bulk of cotton gauze and nonwoven fabrics used as sanitary napkin wrappers.
without having to rely on outside sources. To gain additional pulp production capacity, Kimberly-Clark invested $8.4 million into Irving Pulp & Paper Limited, which operated a pulp mill in St. John, New Brunswick, with an annual capacity of 75,000 tons and 100,000 acres of timberland. “Our objective,” Kimberly later recalled, “was to render ourselves fully self-sufficient in the area of quality pulp for as far into the future as our estimates and requirements could be projected.” Kimberly-Clark, which shared ownership of Irving Limited with Canadian investors, took over management of the pulp mill, whose output was processed by a new Cellucotton production and conversion mill nearby, completed in 1960.

Kimberly’s attempts at vertical integration ran into trouble in California during the 1960s. At the beginning of the decade the company completed a $9.6 million acquisition of the Ralph L. Smith Lumber Company, which owned extensive landholdings and operated four lumber mills in northern California, where Kimberly-Clark planned to build a pulp and paper mill in Anderson to supplement the Fullerton mill in Southern California. By 1965 the Fullerton mill received the bulk of its pulp supplies from the new Shasta mill in Anderson, which also produced printing papers. Sanitary products, printing papers, and other items manufactured at the Fullerton and Shasta mills were marketed by Blake, Moffitt & Towne (BMT) of San Francisco. BMT, a major paper distributor with thirty-four outlets in the western United States, was acquired in 1960 for $5.4 million in stocks. It was the largest western paper distributor with $65 million in annual sales which accounted for 15 percent of the region’s paper merchant sales. The acquisition raised eyebrows throughout the industry because BMT scaled back its purchases from Kimberly-Clark competitors to concentrate on the marketing of Kimberly-Clark products. The antitrust division of the United States Justice Department, which viewed Kimberly-Clark’s acquisition of BMT as part of a disturbing trend in paper wholesaling (Champion Paper, Mead Corporation, and Nekoosa Edwards all acquired major paper distributors in the early 1960s), launched an antitrust suit in 1962. Five years later a U.S. District Court ruled that the acquisition violated Section 7 of the Clayton Antitrust Act and ordered a divestiture. The divestiture, completed in 1968, removed a cornerstone of Kimberly-Clark’s California operations, forcing the Fullerton and Anderson mills to develop sales partnerships with independent distributors in competition with other paper companies.

In manufacturing, Kimberly’s attempts to foster production linkages
between mills failed to yield cost-efficiency gains. High manufacturing costs had been a persistent problem across product lines, particularly in printing papers, where Georgia-Pacific and other rivals had eroded Kimberly-Clark’s market share with better products. In response Kimberly had launched a costly equipment update and quality assurance program which narrowed the gap between production costs and sales prices throughout the early 1960s. The picture was hardly more encouraging in consumer products, despite efforts to improve the cost structure through plant networking. A consumer division task force admitted in 1965 that “several competitors were putting their products into the market at a lower cost than Kimberly-Clark, charging comparable prices, and thus achieving higher return on sales.” Far from reducing manufacturing costs, intermill production linkages in fact worsened the cost structure because the geographic dispersion of networked plants burdened Kimberly-Clark with high transportation costs, the task force claimed: the Fullerton, California, mill was supplied by the Anderson, California, mill, separated by 560 miles, causing as much as 30 percent in extra shipping expenses per ton. Arguing that competitors like Procter & Gamble enjoyed the advantage of “integrated mills that produced pulp at the tissue manufacturing site,” the task force recommended the construction of an integrated pulp and conversion plant in Beech Island, South Carolina, completed in 1968.

IV.

A strong research and development organization had long been one of Kimberly-Clark’s most important competitive assets. Its laboratories, which had developed Cellucotton, sanitary napkins, insulating material, and scores of other products, employed more research scientists and engineers than any other paper company lab by the end of World War II. In 1946 Kimberly-Clark abolished its technical department where scientists and engineers had worked together under technical director Henry Rothchild, replacing it with separate R&D and engineering departments. All R&D activities, previously housed in various mill buildings, were centralized at the old Neenah paper mill, converted into a 60,000-square-foot research center staffed by 160 scientists and support personnel. Headed by Rothchild until 1953 the center included an experimental paper machine and Cellucotton production equipment, as well as chemical
and mechanical pulping facilities. The engineering division, which moved into a separate building in Neenah, employed one hundred engineers and their support staff who were responsible for paper machine installation, maintenance, and general repairs. The organizational separation of R&D and engineering, which came under criticism during subsequent years because researchers developed products without paying sufficient heed to practical engineering problems, was reversed in 1964.55

R&D played a key role in postwar product diversification. Capitalizing on wartime plastics research, scientists developed resin-impregnated paper trademarked Kimpreg which was marketed to industrial customers as a plywood surface and a core stock for laminates. To boost Munising’s fine business paper sales, researchers experimented with new sulfite-based pulps for bond paper, ledgers, and mimeograph grades. Collaborating with cigarette paper specialists in the Schweitzer division, the Neenah research center developed tea bags and reconstituted binder tobacco for cigar manufacturers. To support the American Envelope Company, acquired in 1959, it developed new glues for mailing envelopes. Experiments with diverse new products required the hiring of additional specialists, almost doubling the staff of the Neenah research center, which employed more than 300 people by the early 1960s.56

The new research initiatives diverted resources from Kotex development, which became lackluster in the postwar years. During the late 1940s scientists improved the design of the “equalizer strip” used in high-absorbency pads by embossing the strip with curved lines to stop moisture from running to the ends of the pad. Following the commercialization of the improved equalizer strip in 1950, the Neenah lab abandoned Kotex development for almost five years, leaving the task of safeguarding the market share of Kimberly-Clark’s most profitable product to Foote, Cone & Belding advertisers. Kotex, which generated 35 percent of the company’s gross domestic profits, received a paltry 6 percent of the overall research budget, an internal review noted in 1958. “The professional research effort devoted to this major profit producing product for Kimberly-Clark appears much too small,” it concluded.57 Part of the blame rested with Rothchild, head of Kimberly-Clark’s R&D operations since the late 1920s, who was convinced that Kotex required little product development to capitalize on the breakthroughs of the interwar period. However, aggressive marketing failed to maintain Kotex’s market share, which dropped from 72 percent (1951) to 62 percent (1957),
reducing Kimberly-Clark’s profits by an estimated $32 million.\textsuperscript{58}

The key factor in Kotex’s declining market share was successful product development by Johnson & Johnson which caught Kimberly-Clark off guard. Johnson & Johnson, which produced Modess sanitary napkins, had challenged Kimberly-Clark’s market dominance during the Depression in a bruising price war, followed later by advertising campaigns that stressed more conservative themes than the “Are You in the Know?” series. In the late 1940s its research division developed a soft masslin cover for the pad’s absorbent material. (Masslin is an oil-impregnated, synthetic fabric.) Initial results were discouraging because the wrapper lacked the absorbency of conventional gauze, leaving side stains and a clammy feel that received low marks in consumer tests. Instead of abandoning the initiative, however, Johnson & Johnson researchers continued to work on the wrapper’s absorbency, achieving significant improvements in the early 1950s. These efforts went hand-in-hand with advertising campaigns claiming, “New Design Modess is wrapped in a whisper-soft fabric that’s smooth, gentle . . . cannot chafe . . . more absorbent than gauze!” From 1950 to 1957 net Kotex sales grew by 3 percent compared to a whopping 80 percent increase in Modess sales. Kimberly-Clark product managers, who had initially dismissed claims that Johnson & Johnson had developed a superior product, admitted internally in the 1957 report, “Modess held a quality advantage over Kotex for five or six years.”\textsuperscript{59}

Aware that Kotex development had suffered neglect in the early 1950s, Kimberly-Clark’s new director of research and development Walter Swanson assembled a research team to catch up with Johnson & Johnson. In less than a year his team developed an innovative woven gauze that replaced the coarser Cellucotton cover. Labeled “Lenosoft,” the new Kotex wrapper was introduced in early 1956, supported by an advertising campaign touting the “New Kotex—Softest Ever.” Sawson’s confidence that Kimberly-Clark had recaptured quality leadership was shattered in spring 1956, however, when Johnson & Johnson test-marketed an improved version of its masslin wrapper featuring a highly absorbent perforated surface. “This new product immediately caused us much concern,” a product manager stated in 1957. “It was tested by Politz [test marketers] in the 1956 summer product tests and found superior to leno Kotex, 52% to 40%, with 8% of the respondents having no preference.”\textsuperscript{60} “Thus, the Kotex napkin has measured up to Modess in quality only one year since 1950,” another commented.\textsuperscript{61} Johnson & Johnson, keenly
aware of its competitive advantage, triumphantly announced in a new advertising campaign, “Discovery! Feminine Fabric . . . sheerest luxury . . . perfected protection.” Partly in order to recover the staggering $2.4 million in advertising costs, Johnson & Johnson raised wholesale prices for Modess in August 1957, giving Kotex a temporary advantage. However, no one doubted that “greater competition is coming in the sanitary protection field,” as the 1957 memo concluded. The “feminine hygiene war,” precursor to the tissue and diaper wars of the 1960s and 1980s, was on.

An internal study completed in 1958 detailed the reasons for the decline in market share and laid out Kimberly-Clark’s long-range response. A comparison of Kimberly-Clark’s and Johnson & Johnson’s marketing budgets led reviewers to believe that “we cannot [attribute] our present market position to insufficient expenditures in advertising.” But Johnson & Johnson committed its entire, 202-member consumer goods sales force to the marketing of Modess pads, while Kimberly-Clark’s 255 salesmen peddled a wide variety of consumer products in addition to Kotex pads, including sanitary belts, Kleenex tissues, table napkins, and paper towels. To avert a repeat of Kimberly-Clark’s failure to prevent loss of market share through timely product development, closer coordination between the sales and marketing divisions was imperative. Sanitary napkin R&D required more appropriations and manpower to develop a non-woven pad cover resembling the Johnson & Johnson wrapper, as well as other Kotex improvements. More strategically, the study recommended systematic diversification into “entirely new sanitary protection products.”

The Kotex research team quickly followed up on these recommendations. In addition to a nonwoven wrapper and brighter wadding, it developed a rayon-based material dubbed Kimlon that was designed to enhance pad absorbency. Placed between two layers of Cellucotton, nonabsorbent Kimlon slowed moisture penetration, resulting in a more even distribution of moisture in the two layers. Thanks to better coordination between Kotex R&D and marketing, researchers received detailed information about competitors’ product changes, enabling them to respond quickly with further Kotex improvements. When Johnson & Johnson added a polyethylene baffle to the Modess pad in the early 1960s in order to improve absorbency, the Neenah research team developed a similar additive that went into commercial production only six months after the research initiative had been launched. Combined with aggressive
advertising and discounts, continued product development slowed but failed to halt the erosion of Kotex's dominant market position. The annual decline in market share averaged 2.2 percent from 1951 to 1959, and 1.75 percent from 1960 to 1965.65

At first glance Kimberly-Clark’s overall standing in sanitary napkin markets was more encouraging because the company introduced a second brand, trademarked Fems, as a niche market product. The brainchild of Kotex product manager David Smith, Fems pads were slightly longer than Kotex to fit plus-size women, whose share in the U.S. population had doubled since the 1930s. The introduction of Fems in 1958 was part of a broader trend toward specialty designs in sanitary napkins. Johnson & Johnson developed form-fitted Modess Vee pads in the late 1950s, followed in 1960 by Scott Paper, which entered the sanitary napkin market with the Confidets brand featuring a triangular-shaped design that was tapered to body contours. Kimberly-Clark introduced Fems in a $1.6 million marketing program that was “the most powerful ever to launch a K-C consumer product,” Smith claimed, including $714,000 for advertising and $570,000 on consumer coupon campaigns.66 The brand captured almost 3 percent market share within a year, raising the possibility that Fems could not only offset continuing Kotex losses but even increase Kimberly-Clark’s overall market share in sanitary napkins. In 1961, however, Scott Paper introduced the innovative Confidets design, which quickly gained popularity among specialty pad consumers. Scott also launched what Smith deemed an “extremely aggressive move”67 to establish itself in niche markets through large discounts and lavish advertising. Confidets, in fact, reached 6.7 percent market share by 1965, largely at the expense of Fems, whose share leveled off at less than 5 percent. Faced with strong competitive pressure from other new entrants, Kimberly-Clark withdrew the product in the early 1970s.68

V.

Following the recommendations of the 1957 review, Kimberly-Clark started a new tampon development initiative in 1959. Previous attempts to break Tampax Corporation’s quasi monopoly in tampon markets had failed, most notably in the ill-fated Fibs program of the 1930s which fizzled out during the postwar years. An effort was launched in 1943 to develop a cotton-based, high-quality tampon
with the brand name Kotams; the new product went into pilot production at the Lakeview mill but was abandoned eleven years later because of engineering problems and high raw material costs. Moreover, ICPC focused its marketing effort on Kotex and made “no serious commitment . . . to the tampon business,” a product manager complained. A marked increase in competitors’ tampon sales from 3 to 8 percent annually during the late 1950s, combined with the recommendations of the Kotex study, precipitated new research initiatives that resulted in the development of stick tampons in 1959.

Mindful that earlier attempts to produce premium tampons had suffered from excessive costs, project managers decided to develop an inexpensive product to compete at the low end of the market. A Kimberly-Clark research team headed by scientist Howard Whitehead shelved early attempts to develop a design- and cost-intensive tube applicator, preferring a stick applicator that was deemed “less messy and easier to dispose of” than the Tampax applicator. Instead of expensive plastic sticks considered early on in the project, Whitehead’s research team selected lollipop paper sticks. Eschewing Cellucotton, which had proved unsuitable for tampons during the Fibs debacle, the team developed an inexpensive cotton-rayon absorbent that could be inserted with the stick applicator and removed with a string.

Following established practice in menstrual hygiene product research, the Whitehead team developed regular as well as highly absorbent versions of the stick tampon. In February 1962 they compared the Kimberly-Clark tampon to competing brands in a clinical test to determine absorbency. In addition to Tampax, the test included a new tampon with the brand name Colleens. In a replay of the flawed Fibs tampon tests of the 1930s, researchers played down product deficiencies that bedeviled the Kimberly-Clark tampon, claiming “regular and super absorbent [Kimberly-Clark tampons] and Tampax absorbed approximately the same grams.” “That does not appear to be at all obvious from the data,” a tampon review team commented more than a decade later. Worse, the authors of the 1962 test report underestimated the Colleens tampon: “Because the outward appearance of Colleens are [sic] so very similar to Tampax and because of a possible higher price, a consumer wouldn’t be inclined to change to an unknown, new brand name.” The International Latex Corporation, a girdle manufacturer that subsequently acquired the Colleens brand, evidently agreed that the product needed a better brand name. In 1967 it relaunched Colleens as Playtex, an established trademark.
for International Latex’s girdle products. Playtex tampons became the fastest-growing menstrual hygiene brand of the late 1960s and 1970s.

Kimberly-Clark’s tampon testing programs remained substandard during subsequent years. “The major flaws in the testing conducted in this 6-year period [1960–1965] seem to be: (1) Bias in the tests or analyses, leading to underrating of competitors and excessive praise of K-C products, and (2) incorrect use and interpretation of statistical methods,” a review concluded.75

Engineers and mill staff meanwhile built tampon production lines at the Berkeley, North Carolina, mill. From the outset the program suffered from insufficient coordination between research scientists and engineers. The latter were not consulted in the early stages of the tampon project, a common problem since 1946, when the breakup of the old technical department had separated research and engineering. The result was an awkward “machine design that strings together a bunch of jigs and fixtures developed by Research for clinical and use testing,” a product reviewer noted.76 Blending cotton with rayon in a batter to produce absorbent material involved problems because the batter devised by the Whitehead research team lacked precision controls, resulting in weight variations of ±15 percent in high-volume production. “Our blending operation is . . . best described as an art form,” the product reviewer commented. “Unfortunately, critical product attributes such as absorbency, string pull and stick pull are dependent on the blend.”77 The finished cotton-rayon batts were calendered, conditioned, and formed into a fibrous web, which was rolled into long cylinders. Air jets tucked the tab into the cylinder, which was then wrapped into a protective cover and cut to tampon length. Taking a leaf from Tampax production technology without infringing on vital patents, the Whitehead team had devised a hydraulic turret that precompressed the tampon and molded it into its final shape. The turret design, however, received low marks from production engineers, who complained that the precompressor stopped each time it picked up or ejected a cylinder. To compensate for the precompressor’s low productivity, engineers installed seventeen tampon lines at the Berkeley mill to achieve sufficient volume capacity. Each line was staffed by an operator who performed quality controls, stacked tampons on trays, and fixed the failure-prone equipment.78

Brand manager David Smith, adding tampons to his extant responsibilities for Kotex and Fems pads, developed a marketing strategy for the stick tampon. Simulating a $1 million advertising campaign, a market test launched in June 1960 introduced the prod-
uct in eight metropolitan regions. Consumer surveys resulted in the adoption of the brand name Kotams. Based on the test results, Smith predicted that Kotams would quickly capture about 10 percent of tampon markets, but he noted that “peak market shares were reached in 4–6 months and then leveled” in test marketing—a fairly accurate forecast of the actual performance of Kotams stick tampons in national markets (table 4.3). Consumers reportedly liked Kotams because of their low price and convenience, but they frequently switched to lower-priced rival brands once Kimberly-Clark phased out initial promotional deals. Attempts to boost market share by substituting the Kotams brand name with “Kotex Tampon” led nowhere. In summer 1965 Kimberly-Clark responded to stagnant sales by suspending all Kotex tampon promotion, advertising, and research because was the product was “a failure as a profit producer and sales getter,” a product manager believed. Refusing to admit defeat, however, Kimberly-Clark restarted the Kotex stick tampon initiative in February 1966 with an “aggressive cost cutting program” to reduce production costs by 30 percent. A $1.7 million program budget for fiscal year 1966–1967 included heavy consumer discounts; it
increased market share by 0.5 point, to 12.2 percent, and was considered a failure.81

The tampon initiative also suffered from product management deficiencies. Researchers and engineers, like Smith busy with diverse projects, failed to adhere to a long-range product development agenda. A review blamed “some apparent compulsion by technical managers that each professional must have several projects in addition to his primary project, i.e., there is too much shotgunning and too much daily reordering of priorities.” Personnel turnover exacerbated these problems, the report noted. “It takes three to five years to bring a technical man to the point of making a contribution in the tampon area and the constant parade of new faces has worked against tampon development.”82

Kimberly-Clark’s inability to stake a claim in tampon markets impaired its leadership in feminine hygiene products. Tampon sales tripled over the course of the 1960s while sanitary napkin sales remained flat early in the decade and in fact declined at an average annual rate of almost 2 percent from 1966 to 1969 (table 4.4). The company dominated what was widely seen as a stagnant market.

**TABLE 4.4**
Sanitary napkin and tampon sales, 1960–1970
Parallel developments in disposable handkerchiefs became a major source of concern for Kimberly-Clark because Kleenex—one of the company’s most reliable profit makers—yielded market share to new competitors (table 4.5). During the 1950s Kleenex was still the predominant product, controlling about 50 percent of the market, with store brands accounting for much of the remainder. Scott Paper tried to stake a claim in facial tissue markets through heavy advertising of its Scotties brand, but the product captured less than 10 percent of the market. In 1959, however, Procter & Gamble, the Cincinnati-based consumer products company, launched a strategic offensive in paper-based consumer products, including facial tissues, paper towels, toilet paper, and paper napkins. Procter & Gamble was quickly followed by other new entrants, transforming the competitive dynamics of markets that had traditionally been controlled by two companies, Kimberly-Clark in facial tissue and Scott Paper in paper towels and toilet paper.

Procter & Gamble was widely “judged one of the best-managed American corporations,” according to Time magazine. Thriving on

**TABLE 4.5**

Kleenex market share, 1949–1965

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its core business in soaps, laundry detergents, and toothpaste, it entered papermaking in 1958 with the acquisition of Charmin Paper Mills, Incorporated, of Green Bay, Wisconsin, described by a Procter & Gamble executive as “a pilot plant and a little pilot marketing area with which to learn the [paper] business.” A market survey conducted shortly after the Charmin acquisition determined that consumers wanted greater softness and absorbency in paper tissues. Company researchers quickly launched an R&D initiative to improve the quality of Charmin, developing an innovative pulp fluffing process that separated fibers in a hot air stream. Procter & Gamble introduced two new products that were based on dry fluffed pulp: White Cloud toilet paper and Puffs facial tissue.

These moves raised eyebrows at Scott Paper and Kimberly-Clark. Harrison F. Dunning, president of Scott Paper, stated belligerently, “If they [Procter & Gamble] want to pour in money, and try to blast their way into sanitary tissues, that’s their business—but I’ll tell you this: We aren’t sitting around here in fear and trembling of anybody.” Kimberly-Clark’s reaction was more subdued. Lewis Phenner, vice president in charge of consumer products, reported to the board in April 1959: “Procter & Gamble is testing a new facial tissue, Puffs. It is understood that this product will be pushed with a very heavy promotional program.”

In 1960 Procter & Gamble introduced Puffs nationwide with a multimillion dollar advertising campaign that touted the new product’s superior softness, coupled with a promotional program that offered consumers steep discounts. Although detailed statistics on Puffs’ market share are unavailable, the campaign appears to have had a serious effect on Kleenex, whose market share tumbled from 47.3 percent in 1960 to 36.2 percent in 1963—a development most analysts attributed to Procter & Gamble’s entry into the facial tissue field. Furthermore, in the early 1960s Crown-Zellerbach joined the fray with its own line of facial tissue, and Scott ratcheted up attempts to improve Scotties sales through heavy advertising and promotion, as did distributors of private labels.

Kimberly-Clark’s first major move in what the business press called the “tissue war” was a new packaging format named Space Saver, featuring compressed tissues in smaller boxes than those used for regular Kleenex. Test marketing results were encouraging, Phenner told the board in December 1960. “Despite Procter & Gamble’s very heavy promotional expenditures, Kleenex tissues . . . held their own in the one area where the Space-Saver box was in distribution.”
Subsequent marketing research determined that Space Saver boxes containing at least 300 tissues were popular with consumers, and the format went into national distribution in November 1962.89

Kimberly-Clark also tried to fend off Procter & Gamble and other competitors with heavy discounts. Phenner explained to the board in April 1961, “[T]he facial tissue market is feeling the impact of the Procter & Gamble Puffs promotional program and Scott has stepped up its promotion in response. In May we are commencing a heavy free-goods promotion, one case of Kleenex tissues free with 20 cases of any product.”90 Kleenex sales increased temporarily, but earnings declined in 1961 compared to the previous year as a result of heavy promotional activity, which became a permanent feature of the facial tissue market. “Competition in consumer products lines today makes heavy promotion a necessity,” Phenner believed.91 Price competition increased during subsequent years. Procter & Gamble and Scott cut wholesale prices for facial tissue 5 percent in mid-1963, forcing Kimberly-Clark to follow suit in November. To limit the effect on earnings Phenner initiated a cost-saving program in Kleenex production, including new manufacturing standards that mandated higher per-worker output. The program yielded annual savings of $2.5 million throughout the consumer products division, offsetting some of the staggering costs of promotional activity and price cuts. However, what one executive called the “cost-price squeeze” remained a constant source of concern.92

Paralleling attempts to shore up its position in sanitary napkins with the addition of a new brand, Kimberly-Clark introduced Kleenex Boutique facial tissue in 1967. Development of this new brand was motivated by surveys indicating that “consumers viewed virtually all brands of facial tissues as soft and/or absorbent, leaving package size (sheet count) and price the major differences. This lack of palpable difference between products and brands was unsatisfactory in a mature market situation.” Product uniformity across brands did not meet “the requirements of a changing life styles [sic] and a changing market (more young people, greater affluence, greater attention to décor relative to other products used in the home, etc.).”93 Kleenex managers expected that Boutique tissues “would be additive to present business and would hopefully increase the volume of total market instead of merely cannibalizing or taking business away from other Kimberly-Clark facial tissue products.”94 Featuring a large variety of deep colors, the new brand was first introduced in Seattle and Indianapolis in early 1967 as “new and excitingly different tissue.”95
Foote, Cone & Belding, which handled advertising, suggested the name Boutique to appeal to the “younger, better educated, affluent and urban housewife who wants a little more—and a little more style—in the product she buys.” Marketing was key to the brand’s success because “the central idea behind Boutique [was] a mood, spirit or feeling about the product rather than any kind of performance identification.”

Encouraged by the results of successful test marketing, the board approved an ambitious advertising program to introduce Boutique nationally in 1968. Television advertising figured prominently, requiring considerable sums to position the brand. In 1968 alone, Kimberly-Clark spent more than $2 million on Boutique advertising, amounting to 22 percent of advertising expenses in the entire tissue paper industry. The result was a 2 percent market share at the end of 1968. By comparison regular Kleenex, with a market share of 30 percent, received a $3.5 million advertising budget in 1968. A year later Boutique captured a 6 percent market share, raising Kimberly-Clark’s aggregate share from 32.5 percent in 1968 to 34 percent in 1969.

About one-third of Boutique users had previously used regular Kleenex, but the remainder switched from competing brands. The 1.5 percent gain in the company’s aggregate market share came at a steep price, however. Boutique did not take substantial market share from Kleenex, but it cannibalized the latter’s advertising budget. By 1971 the company had spent $6.5 million in Boutique advertising, reducing the amounts available for regular Kleenex advertising from $3.5 million annually in 1968 to $1.9 million in 1971. A product manager noted in 1971, “Boutique alone will account for about 19% of total industry advertising dollars to support only about 6% of industry sales”—hardly an encouraging statistic.

While Kimberly-Clark sought to maintain market leadership in facial tissues with new box designs and colors, Procter & Gamble exploited opportunities in product development, single-handedly creating the market for disposable diapers which it dominated with the Pampers brand for almost two decades. The program had a rough start. In 1957 a research team headed by director of exploratory development Vic Mills launched a diaper development initiative that capitalized on market surveys conducted by Charmin Paper Mills, the papermaker acquired by Procter & Gamble. After several failed design attempts, the Mills team completed a diaper featuring an absorbent pad encased in a plastic cover. Like Kimberly-Clark in tampons, Procter & Gamble encountered unexpected engineering problems when it
tried to build a full-scale production line, an engineer recalled: “It seemed a simple task to take three sheets of material—plastic sheet, absorbent wadding, and water repellent—fold them in a zigzag pattern and glue them together. But the glue applicators dripped glue. The wadding generated dust. Together they formed sticky balls and smears which fouled the equipment. The machinery could run only a few minutes before having to shut down and be cleaned.” Unlike the designers of Kimberly-Clark’s tampon production line, however, Procter & Gamble engineers had greater control over machinery design and thus were able to work out the kinks.

Marketing diapers initially presented major challenges. Surveys determined that mothers found disposable diapers more convenient than washable cotton diapers, but some “felt that the amount of time they spent caring for their babies reflected the amount of love the babies were receiving. Using disposables made these women feel guilty because they spent less time caring for their babies’ physical needs.” To address these concerns Procter & Gamble chose a brand name that suggested that mothers pampered their babies by using disposable diapers. Advertising downplayed Pampers’ convenience for mothers, highlighting instead the comfort babies derived from dry bottoms. These marketing strategies, combined with low prices, established Pampers as one of the fastest-growing consumer non-durables of the decade. Despite strenuous attempts by major pulp and paper companies to stake claims in the $200 million diaper market, Procter & Gamble remained the undisputed leader, producing about 90 percent of all diapers sold at the end of the 1960s.

VII.

Financial results reflected Kimberly-Clark’s loss of competitiveness in the 1960s. At first glance overall figures were impressive, particularly compared to other pulp and paper companies. Inflation-adjusted net sales increased by 118 percent from 1956 to 1969, compared to Crown-Zellerbach’s 98 percent and International Paper’s (IP’s) 43.8 percent. Closer examination revealed disturbing trends, however. Kimberly-Clark’s profits averaged 6.6 percent from 1956 to 1969, one-half percentage point below the IP and Crown-Zellerbach averages (table 4.6). This was a far cry from the 1930s, when Kimberly-Clark had bested every large paper company except Scott.
IP, still the world’s largest pulp and paper company, staged a comeback that dated to the late 1930s, when it started to focus on consumer nondurables. In addition to cutting its newsprint capacity in half by selling a large Canadian mill that dragged down profits, it terminated an ill-conceived foray into hydroelectric power through divestiture in 1941. Simultaneously, IP expanded its linerboard capacity to supply manufacturers of corrugated containers and bleached milk cartons through a large-scale kraft mill construction program. In 1940 it integrated forward into linerboard conversion through the acquisition of Agar Manufacturing Company, a corrugated carton producer, followed six years later by the acquisition of Single Service Containers, Incorporated, which converted bleached linerboard into milk cartons. The latter transaction laid the groundwork for a liquid packaging division that produced the bulk of IP profits during the postwar decades. Investing heavily into plastic-coated carton research and development during the 1950s, IP became the nation’s leading supplier of milk and juice cartons. Net profits during the 1950s averaged more than 9 percent, two points ahead of the Kimberly-Clark average.102

### TABLE 4.6

<table>
<thead>
<tr>
<th>Year</th>
<th>Kimberly-Clark</th>
<th>IP</th>
<th>Crown-Zellerbach</th>
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<td>1956</td>
<td>10%</td>
<td>8%</td>
<td>6%</td>
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<td>1957</td>
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The gap narrowed in the 1960s, when IP’s average profits dropped to 6.5 percent compared to Kimberly-Clark’s 6.2 percent. The drop was partly attributable to an overall trend in the U.S. pulp and paper industry, whose profitability declined as a result of overcapacity and heightened price competition. IP’s earnings ratio fell disproportionately because of its ill-conceived diversification into lumber products through the acquisition of Long-Bell Lumber Company, whose poor performance during the 1960s dragged down profits. Furthermore, instead of shoring up its core business through a capital investment program into its aging kraft paper mills in the late 1960s, IP tried to diversify into the burgeoning diaper market by building a $50 million mill on the West Coast. This product line, however, required advanced marketing capabilities, traditionally one of IP’s greatest weaknesses. Like Kimberly-Clark in tampons, IP abandoned the venture at a multimillion-dollar loss. When kraft paper sales fell sharply in 1970 during that year’s recession, IP suffered disproportionate financial losses, precipitating what one analyst described as the “dispossessing of [IP’s] chief executive officer,” Edward Hinman, who was replaced by a former AT&T executive. Unlike Kimberly-Clark, IP remained bedeviled by management turmoil and disappointing financial results in the 1970s.

Crown-Zellerbach’s greatest postwar challenge was the entry of Kimberly-Clark, IP, and other extra-regional competitors into the West Coast paper market, where the San Francisco–based newsprint and white paper producer had long been the predominant player. As a result of mill construction programs and acquisitions launched by competitors, Crown-Zellerbach’s share in the West Coast paper market declined from more than 35 percent in the 1930s, to 24.4 percent in the late 1950s. Crown-Zellerbach responded by encroaching on IP’s and Kimberly-Clark’s home turf, acquiring in 1955 Gaylord Container Corporation with mills in Louisiana and Ohio and launching a joint venture with Time, Inc., the magazine publisher, to build a coated paper mill in Louisiana. It also added new kraft paper capacity in California and British Columbia, primarily to supply punch cards to International Business Machines (IBM), one of its largest customers. Crown-Zellerbach’s Canadian subsidiary produced newsprint for the Los Angeles Times until 1965, when the newspaper company started its own mill, creating havoc at Crown-Zellerbach Canada, Limited, for the remainder of the decade. Simultaneously, International Paper competed fiercely with Crown-Zellerbach for the IBM punch card business, precipitating price erosion in this once-prof-
itable market during the late 1960s. Pollution problems, combined with more stringent environmental regulation, meanwhile forced Crown-Zellerbach to close three pulp mills, contributing to a steep fall in profits. 105

While Kimberly-Clark shared the problem on declining profitability with other large paper companies, comparisons with consumer products companies illustrated strategic trends that disturbed pulp and paper executives. Throughout the 1950s Kimberly-Clark’s profit ratio was consistently higher than that of Johnson & Johnson, but the latter started to make significant headway in the early 1960s (table 4.7). By 1964 both companies reported close to identical profitability. However, while Kimberly-Clark’s rate began to stagnate, Johnson & Johnson’s continued to grow, and by 1969 Johnson & Johnson was 50 percent more profitable than Kimberly-Clark. The growing gap was partly the result of Johnson & Johnson’s continued success in sanitary napkin development, as well as its successful move into pharmaceuticals through the acquisition of McNeil Pharmaceutical Company, makers of the profitable Tylenol painkiller. More importantly, Johnson & Johnson’s financial performance was not
weighted down by printing grades and other general paper commodities, whose lackluster performance became a growing source of concern for Kimberly-Clark executives because the paper industry’s profitability started to lag behind that of other manufacturing industries.\textsuperscript{106}

Scott Paper’s postwar financial history confirms that paper commodity lines compared unfavorably to consumer goods (table 4.8). Unlike Kimberly-Clark, Scott remained far more profitable than other paper companies, maintaining the lead it had established during the interwar years. Until the late 1960s Scott shied away from printing grades and remained focused on paper-based consumer products, adding Confidets sanitary napkins to its extant business in paper towels and toilet paper. Furthermore, the company improved its marketing with television advertising and the establishment of the Scott Store Advisory Service, which offered store managers free advice and counsel on various aspects of store management. By the mid-1960s Scott not only was the nation’s most profitable large paper company but also compared favorably to Johnson & Johnson and other consumer product companies. Scott’s performance deteriorated in the late 1960s, however, when it launched an unsuccessful attempt to gain a foothold in the soaring disposable diaper market. Trademarked BabyScott, its diaper featured a flushable pad in a reusable panty that compared unfavorably to the one-piece Pampers among consumers. A $2.4 million BabyScott advertising campaign launched in 1970 (compared to Procter & Gamble’s $4.9 million advertising budget for Pampers) failed to improve its marketability, forcing Scott to abandon its foray into diapers in 1971 at a major loss. More important, Scott’s declining profitability was the result of the ill-conceived, $134 million acquisition of S. D. Warren, a producer of printing grades. Echoing Kimberly-Clark’s experience, Scott’s printing paper business started to dilute the profits of its consumer products division. In 1971 chairman Dunning admitted that the company had entered a period of “stress and strain” as a result of the unsatisfactory performance of the acquisition.\textsuperscript{107}

These developments reflected larger trends in the comparative financial performance of the pulp and paper industry. In the 1950s its aggregate corporate earnings rate had been 0.5 to 1 percent higher than that of all manufacturing industries. But the trend lines crossed in 1962, when the paper company earnings rate dropped below the general manufacturing average, where it remained for the rest of the decade.
Investors, concerned about decreasing dividends, started to shun pulp and paper shares during the 1960s. By mid-decade, only one of the fifty stocks most widely held by mutual funds was issued by a paper company (IP), compared to three chemical, five electrical and electronic, and eleven oil company stocks. Paper company shares performed poorly in the stock market, rising a paltry 8 percent in the first half of the decade, compared to a 61 percent increase in the industrials average. James W. Davant, managing partner of Paine, Webber, asked in 1966: “Is the public giving inadequate recognition to the strengths and prospects of the paper industry? Or does its lackluster interest merely reflect performance by the paper industry itself?” The latter, he argued, was closer to the point. . . . In the past ten years, corporate profits have increased about 67 per cent while paper company profits have advanced only 40 per cent. This is not only below the pace of total corporate earnings, but well below the leading profit gainers during this period. Profits per share of some leading paper companies are where they were ten years ago; some are actually below those levels. \textsuperscript{108}
Kimberly-Clark’s dividends per share, for example, fell from $2.84 in 1955 to $2 in 1966. Davant attributed the downward trend partly to “the industry’s failure to come up with the kind of marketing and research break-throughs [sic] that might have solved many . . . capacity and pricing problems.”109 This prognosis applied to the Wisconsin papermaker, whose unsuccessful attempts to break into tampon markets was a prime example for the industry’s R&D shortcomings.

Other analysts blamed investors’ lack of interest in paper stocks on price volatility. Lawrence Ross of Burnham & Company argued that “the instability of demand and earnings is sufficient . . . to prevent the industry from offering the investor the consistent earnings patterns seen in such defensive industries as public utilities, oils or food.” According to Ross, the chief culprit was a latent encouragement of overproduction which destabilized the relationship between costs and prices. In an industry notorious for its capital intensity, its large overheads, and its high depreciation charges,

mill managers are pushed to run their machines full, because full operation provides the greatest number of tons over which to spread . . . fixed costs. The simultaneous presence of steeply falling cost curves, a fractioned market structure and much commodity tonnage results in a basically unstable price structure and contributes to the instability of earnings. It is a perverse fact of this industry’s economics that when unit costs are poor, at low operating rates, that can be the very time that prices are weak, as pressure to run at higher rates increases. And when the mills are full and overhead absorption best, that’s the very time it’s a seller’s market with good prices.110

These problems were magnified by attempts of major companies to encroach on one another’s home turf, both geographically and in terms of product lines, often motivated by hopes that expansion into new markets could offset declining profitability in core businesses. Kimberly-Clark, IP, and St. Regis built new mills on the West Coast, putting competitive pressure on Crown-Zellerbach, which responded in kind. Scott started to compete with Kimberly-Clark in facial tissue and sanitary napkins, while the Wisconsin firm diversified into paper towels.

Busy trying to wrest market shares from one another, paper companies failed to develop innovative paper products like disposable
diapers, leaving the job to outsider Procter & Gamble, which entrenched itself as the market leader in the fastest-growing paper market of the 1960s. When paper companies launched belated efforts to catch up, Procter & Gamble beat all comers. IP with its inadequate marketing capabilities was not likely to succeed, but Procter & Gamble also managed to fend off Scott, who was (along with Kimberly-Clark) the savviest marketer in the American paper industry and whose extensive marketing campaigns failed to position BabyScots for success.

Later developments in disposable diaper markets demonstrated that Procter & Gamble was hardly invulnerable. Kimberly-Clark assumed market leadership with the Huggies brand, relegating Pamper to second place in the 1980s. The key to that success was not simply expensive advertising but a combination of effective marketing and product development. The latter was largely neglected by Scott and other paper companies of the 1960s—a telling verdict on the state of the American pulp and paper industry.

VIII.

Kimberly-Clark’s senior management identified the “cost-price squeeze” as a serious and persistent problem in the late 1950s, when president Kimberly asked executive vice president William Kellett to propose strategic solutions. Kellett, a chemical engineer who had joined the company in the 1920s, had served as superintendent of the Niagara Falls, New York, consumer products plant in the early 1930s and later managed the Badger-Globe and Lakeview mills in Neenah. He became general superintendent of manufacturing during World War II and joined the board of directors in 1945. During the 1950s he served as vice president of manufacturing and as executive president. Known as a tough and experienced production man with a strong record of cost control, Kellett proposed a large-scale reorganization plan that decentralized Kimberly-Clark’s management structure in 1959. Under the old structure the company had been organized into centralized functional divisions (Engineering, R&D, Manufacturing, Administration, Personnel, and Finance and Law) supervised by Kellett as executive vice president. Kellett, who noted that “the principal objective of [the reform plan] is to pinpoint profit responsibility,” divided senior executive functions into three separate areas of responsibility (table 4.9).\textsuperscript{111}
Kimberly headed long-range planning as chairman of the board and remained directly responsible for Canadian operations, for cigarette and other thin papers in the Schweizter division, and for the Coosa Pines newsprint operation in Alabama. Kellett, who took over Kimberly’s office as president in 1959, managed the remaining functional divisions, as well as the new industrial and consumer products divisions. G. Kenneth Crowell, succeeding Kellett as executive vice president, headed finance, legal affairs, and international operations. The new products divisions, headed by senior vice presidents, became responsible for mills that had heretofore been managed through centralized functional divisions. Following recent trends in postwar capital budgeting systems, Kellett also implemented earnings, sales, and investment targets for each division. Executives assessed the division’s performance and needs based on quarterly (later monthly) cash-flow reports that detailed progress toward the financial targets.112

these programs got under way very slowly, it appears that gains are being made and that ultimate savings in the neighborhood of five million dollars a year are possible. Revised personnel policies have been established which it is believed will reduce total employment by several hundred within a year.”

Kellett’s “revised personnel policies” marked a turning in Kimberly-Clark’s employment practices, which had heretofore avoided permanent layoffs through reductions in overtime and shorter workweeks. A key aspect of company paternalism—guaranteed employment even in slack times—fell victim to formal capital budgeting as management struggled to improve the company’s competitiveness. The failure of Kimberly-Clark’s company unions to challenge Kellett’s program facilitated the rise of independent unions affiliated with the American Federation of Labor (AFL), which replaced company unions as collective bargaining representatives at several Kimberly-Clark mills in the early 1960s.

Kellett’s cost control program continued unabated. In January 1962 he appointed a committee to study Kimberly-Clark’s major service divisions (financial, administrative, and personnel). Its purpose was to “determine what services they were providing, whether such services were necessary and were being fully utilized, whether there was any overlap, and what changes, if any, might be made to improve efficiencies and reduce costs.”

The ax fell a few weeks after the committee had issued its report: in addition to laying off 5 percent of hourly workers, Kimberly-Clark reduced salaried personnel by 3.5 percent. But cost savings were largely offset by declining orders for printing papers which forced Kimberly-Clark to reduce its prices by $10 per ton. The consumer products division meanwhile reported the largest annual decline in Kleenex market share to date, from 43.5 percent (1961) to 38.7 percent (1962), precipitating a 5.6 percent drop in sales. Kimberly-Clark’s overall earnings ratio fell from 7.4 percent (1961) to 6.1 percent (1962). Alarmed directors issued a statement in December 1962: “that the Corporation must take all steps necessary to remain competitive and that continued emphasis on quality and customer service are [sic] vital. To counteract current price weaknesses, continued effort must be exerted on the cost control programs now in effect throughout the organization.” Kellett obliged in early 1963 with a top-to-bottom review of fringe benefits that resulted in a recommendation to reduce employee life insurance benefits.

Kellett’s proposal strained industrial relations as five AFL unions mounted a defense of established fringe benefit programs. Contract
negotiations reached a deadlock in June 1963, when union members at five Kimberly-Clark mills voted to strike. The unions agreed to a short-term extension of negotiations. Kellett “hoped a solution satisfactory to all parties might be found during the forthcoming negotiations, but in the event that it was not, there was the possibility of a strike.” Management and union representatives worked out a last-minute compromise, averting what would have been the first strike at Kimberly-Clark mills in more than fifty years, but pressure to improve the company’s cost structure continued to build. Contract negotiations finally broke down in 1964, when the Shasta, California, and Moraine, Ohio, mills were shut down by strikes. Combined with poor profits in consumer products, the strikes contributed to Kimberly-Clark’s poor financial performance in 1964, when profits barely exceeded 6 percent.

Strikes became a persistent problem during subsequent years. Stung by management’s cost-saving programs and company unions’ failure to object to changes in work schedules and benefits policies, Kimberly-Clark workers joined AFL unions in growing numbers. The movement quickly spread from the company’s newer mills in California and Canada to the Wisconsin mills, which had long been bastions of company unionism. In October 1966 a one-week labor conflict over Sunday work idled the Lakeview and Badger-Globe mills, with “adverse effect on earnings for the [last] quarter” of 1966, management reported. This conflict was followed in summer 1968 by a series of labor disputes over wages and benefits which shut down the Anderson, California, pulp and paper mill; two Canadian consumer products plants; the Irving pulp mill in St. John, New Brunswick; two U.S. consumer products plants; two U.S. business paper mills; and the Schweitzer specialty paper mill in Lee, Massachusetts. The strikes forced the consumer products division to defer several long-planned promotional programs for Kotex pads and tampons, Fem’s sanitary napkins, and Kleenex in fall 1968. Profits for the year dropped to 5.5 percent, the lowest rate since the late 1940s. The decrease was particularly galling to management because its cost-savings programs had closed the profitability gap with large competitors in the paper industry during the previous year, but IP—largely unaffected by strikes—once again pulled ahead of Kimberly-Clark in 1968.

Reorganization and ill-advised investment strategies exacerbated these problems. In the early 1960s Kimberly-Clark bought out its investment partners in the Coosa River Newsprint Company, turning the joint venture into a fully integrated newsprint division. Manage-
ment had originally invested into the Coosa River venture to secure pulp supplies for the Memphis, Tennessee, Cellucotton plant, shunning a full-scale return to American newsprint. Citing possible antitrust problems, however, the southern newspaper publishing companies that owned the bulk of Coosa River Newsprint Company shares asked Kimberly-Clark to take over the entire investment. Despite weak newsprint prices the Kimberly-Clark board and shareholders approved the plan. Arguing that newsprint “has plenty of long-term growth ahead,” John R. Kimberly convinced the board to invest $45 million into the Coosa River mill to expand annual output by a staggering 150,000 tons, turning it into the nation’s largest newsprint mill. Combined with additional newsprint capacity installed by competitors, the investment raised aggregate industry output by 680,000 tons in 1967 alone, precipitating an immediate softening in prices. The industry tried to raise prices, but “history—if not economics—suggests that newsprint producers will have a good deal of difficulty making the price rise stick in the face of sagging demand,” Forbes magazine surmised. Asked whether “producers have enough market leverage to put the increase into effect,” Kimberly replied, “I sure hope so. All our costs, particularly labor costs, are up.” Surprisingly, the newsprint industry did manage to implement a $4 price increase per ton, but even at that level “newsprint prices have not kept up with labor and other costs,” Kimberly-Clark reported in 1969.

Similarly questionable investments into additional white paper capacity reinforced the “cost-price squeeze.” Softening demand for printing and business grades notwithstanding, vice president for industrial products Andrew Sharp recommended a five-year, $43.7 million investment program to raise annual capacity by 140,000 tons in the early 1960s. Kellett, a major supporter of Sharp’s proposal, argued that “such a plan is essential to the orderly development of our manufacturing facilities.” Kimberly-Clark implemented a slightly scaled-down version of the program by installing two new fourdriniers, reconfiguring extant machines, and upgrading the aging printing paper mill in Niagara Falls, New York. Growing competitive pressures forced Kimberly-Clark to cut printing paper prices during subsequent years, however, frequently making it impossible for the industrial products division to meet its earnings targets during the 1960s. A sharp drop in prices depressed the printing paper business in 1968, followed by a slow recovery a year later, “but not enough to offset increased raw material and labor costs,” management told stockholders.
The buildup of vast newsprint and printing paper capacities changed Kimberly-Clark’s image on Wall Street. In the early 1960s investment analysts frequently commended the company for its attempts to maintain and expand its position in consumer nondurables, whose growth potential exceeded that of conventional pulp and paper products. However, Kimberly-Clark’s $100 million investment into its paper business during the 1960s, coupled with its inability to develop viable new consumer products, led some observers to believe that the company was turning into a conventional papermaker. Investment analyst Joseph Olmsted argued in 1971, “Kimberly I think, as well as Scott, is somewhat in a transition period, going from a marketing trademark product basis to sort of a commodity product basis.”127 Given the increasingly problematic performance of conventional paper commodity lines, this was hardly an encouraging assessment. In 1970 consumer products accounted for 56 percent of Kimberly-Clark’s operating profits but received a mere 21 percent of net capital expenditures.128

The mounting strategic and structural problems of the late 1960s coincided with the resignation of John R. Kimberly, who reached the company’s mandatory retirement age of sixty-five in 1968 and was succeeded as chief executive by Guy Minard. Born in 1907 in Ottawa, Ontario, Minard joined the company in 1928 and became technical director of the Spruce Falls newsprint mill. Promoted to vice president in 1951, he succeeded Kellett as president in the 1960s and was elected chairman at age sixty-one in 1968.129

Given the company’s mandatory retirement policy, Minard was little more than a caretaker CEO. But he insisted on serving as president after his election as chief executive, instead of appointing a younger executive to assume responsibility for operational management. The latter required close attention and determined leadership because Kimberly-Clark faced some of the most serious challenges in its history. Sanitary napkin sales were flat. Kleenex’s market share had shriveled to little more than 30 percent. Attempts to develop tampons had reached dead ends. Return on the printing paper investment program of the 1960s was effectively zero. Shortly after Minard’s election, the company was engulfed in labor conflicts that left industrial relations in tatters. Even when the company recovered from strike-related losses, profits failed to break the 6 percent mark in 1969. A chastened Minard finally agreed to delegate operational management to Darwin E. Smith, former vice president of administration, who was elected president in late 1969 at age forty-four.130
The energetic Smith could do little to avert the crisis that exploded a few months into his tenure, when the recession of 1970 took a tremendous toll on Kimberly-Clark. Triggered by overproduction, inflation, and rising interest rates, the recession wreaked havoc on corporate profits in most industries. Already weakened by long-term difficulties, Kimberly-Clark’s profits fell by 26 percent, “a deep disappointment,” management admitted in its annual report.\(^{131}\)

“Changes in consumer spending habits became noticeable as the year progressed,” the report stated. “Many shoppers, apparently reacting to the lag in the economy, held off buying our products until coupons or other promotions made them available at reduced prices. As a result, our promotional costs were far above normal and adversely affected profitability.”\(^{132}\) A series of disastrous labor conflicts, precipitated by disagreements over wage increases, exacerbated these problems. In fall 1970 a strike idled the giant consumer products mill in Memphis, Tennessee, for forty-nine days. Printing paper operations fared even worse. “The publishing industry, already off in circulation and lineage at the beginning of the year, was further depressed throughout the year,” the annual report stated. “This, coming at a time when capacity to produce coated and uncoated papers was at a new high, resulted in extremely competitive conditions.”\(^{133}\) Wage strikes shut down three printing paper mills, including the Neenah and Niagara, Wisconsin, mills, for a total of 245 days. Management explained that labor conflicts remained “a source of great concern, not only because of their adverse impact on current earnings but also because of the longer range implications which would have occurred by attempting to avoid the strikes through the granting of demands which could have jeopardized the vitality of the Corporation and the job security of the striking employees.” Promising to do everything in its power to avoid future strikes, management pleaded with “our unionized employees, their locals and their internationals to exert the same effort.”\(^{134}\)

Minard’s prediction that 1971 would bring a turnaround was disputed by industry analysts, who pointed to long-term structural problems in the industrial products division. Investment analyst Milward Martin claimed, “Kimberly’s major earnings problems today are in the white printing-communications area, and I think this will have a slow cyclical recovery like some similar companies.”\(^ {135}\) The 1971 financial results were in fact worse than those of the previous year, despite peace on the labor front. Net earnings dropped one-seventh, to 3.4 percent. In light of a moderate upturn in consumer products...
sales, the decline was largely attributable to the horrendous performance of the industrial products division, observers agreed. An analysis of historical data concluded that Kimberly-Clark “over the past five years . . . has made no return on assets in these business areas.” Turnaround was nowhere in sight. Analysis of future market trends determined that “there was little likelihood of making a return over the next five years which would meet our criteria.” John R. Kimberly’s $40 million capital investment program into printing papers, which had diverted precious resources from Kimberly-Clark’s consumer products business during the 1960s, had produced a financial albatross.

IX.

In one respect Kimberly-Clark’s performance in the early 1970s echoed the Depression years: the 1971 earnings ratio was the company’s worst since 1934. In the latter year, however, it had still performed far above industry average while major competitors accumulated staggering losses. By 1971 there were only marginal differences in the financial results reported Kimberly-Clark, IP, Crown-Zellerbach, and other large paper companies. Kimberly-Clark had joined the industry mainstream.

During the postwar decades, the company pursued far more conventional corporate strategies than it had in the interwar years, including acquisitions-based product diversification and multinational expansion. Abandoning the focused approach to product development that had sustained Kotex’s and Kleenex’s market dominance in the 1920s and 1930s, the company vastly expanded the scope of its R&D activities to support product diversification, spreading itself wide and thin. This created strategic openings for nimbler competitors, notably Johnson & Johnson, which wrested leadership in sanitary napkin development from Kimberly-Clark, followed by Procter & Gamble in facial tissues.

Kimberly-Clark’s responses to these challenges varied by product line. In sanitary pads the company launched sustained product development initiatives that slowed the decline in market share during the 1960s. At the end of the decade Kotex still maintained a considerable lead over competing products. By contrast, Kimberly-Clark’s response to Procter & Gamble’s entry into the facial tissue market focused on new packaging formats and discounts. Reflecting management’s belief
that facial tissue had essentially turned into a commodity product whose market performance depended more on price and packaging than on quality, this competitive strategy produced less satisfactory results: in the 1960s Kleenex’s market share declined more rapidly than that of Kotex. The costly and ultimately futile attempt to safeguard market share with Boutique tissues—strictly leveraged as “image products”—shed further doubt on the wisdom of marketing-focused competitive strategies.

Kimberly-Clark’s failure to gain a foothold in tampon markets revealed weaknesses in R&D strategy that were shared by many pulp and paper companies. In contrast to the interwar period, when Kimberly-Clark had leveraged Kotex as a high-quality product at premium prices, postwar tampon initiatives sought to carve out a niche at the low end of the market. Based on flawed market research, this strategy resulted in a substandard product. International Latex, meanwhile, banked on premium-priced Playtex, the first tampon that had successfully challenged Tampax’s market dominance. In the 1970s Kimberly-Clark derived crucial lessons from its defeat in tampons for its foray into disposable diapers: like Kotex and Playtex, Huggies were design-intensive products that competed at the high end of the market, successfully challenging Procter & Gamble’s quasi monopoly.

Kimberly-Clark’s strategic offensive in diapers was part of a larger effort to reposition itself as a consumer products company at a time when pulp and paper, its traditional mainstay, descended into a long-term structural crisis. Kimberly-Clark’s large-scale mill construction and reconfiguration program of the 1960s contributed to the downward spiral of excess capacity, price competition, and overproduction that weakened the industry years before the onset of the economic crisis of the 1970s. Pulp and paper companies faced an economic quagmire in the new decade. Ambitious expansion programs could only serve to deepen the lingering overproduction crisis. Lack of investor interest in paper company stocks compelled most firms to finance capacity expansion through borrowing, driving up their debt-to-equity ratios. Forced to service large debts, many companies soon lacked sufficient resources for ambitious product development and diversification initiatives. Kimberly-Clark’s management, painfully aware that pulp and paper had dragged down its consumer products business for much of the 1960s, avoided some of the problems that bedeviled the industry in the following decade by opting for the most radical solution. Catapulting itself out of the mainstream, Kimberly-Clark liquidated its coated paper business in the 1970s.