
A Report to the Center for Paper Business and Industry Studies at Georgia Institute of Technology

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ABSTRACT

National antitrust policies have potentially profound effects on global competitiveness of individual industries. Public policy interventions affecting organizational arrangements within industries, enforcement of commodity standardization, and price competition, as well as the regulation of intellectual property rights, are the major tools by which Government executes antitrust policies. This study documents the frequency, extent, and impact of U.S. antitrust policies toward the pulp and paper industry between 1950 and 1990.

Passage of the Celler-Kefauver Antimerger Act in 1950 marked the beginning of a new antitrust experience across the whole U.S. economy. Yet, the application of the Act required government to forge industry specific standards of competitive structure. The antitrust experience of the pulp and paper industry, and its distinct segments, was particularly industry specific when it came to the enforcement of Celler-Kefauver Act and its consequences.

Between 1950 and 1990, antitrust disadvantaged pulp and paper firms whose competitive strategy was based on regional or product specialization. As in other industries, antitrust appeared to encourage successful and growth-seeking paper firms to diversify into new areas of business. Unlike in other industries, successful pulp and paper firms relatively rarely undertook so-called conglomerate mergers, and preferred to diversify and expand into other segments of the forests products industry. In the context of pulp and paper industry, new incentive structures that emanated from antitrust facilitated the rise of large scale forests products giants that resembled each other in terms of strategy and structure.

Antitrust between 1950 and 1990 shaped significantly the competitive structure of the U.S. pulp and paper industry, and probably transformed traditional arrangements for technological learning and the course of technological innovation. Industry’s recent performance and contemporary global competitiveness outlook cannot be understood without reference to its post-World War II antitrust experience.
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Introduction

Antitrust intervention in the United States pulp and paper industry since 1950 has received little attention from scholars of the industry. Yet influential students of economy and business argue that antitrust is one of the central forces shaping industries and their evolution. This report has grown out of an effort to document and understand federal antitrust intervention in the U.S. pulp and paper industry between 1950 and 1990, and thereby to improve our ability to understand the industry’s evolutionary dynamics.

The report seeks to answer the following historical questions: How much antitrust policy intervention occurred between 1950 and 1990? What statutes were most often applied by antitrust officials? What industry sectors attracted the most legal challenges? Did antitrust shape the behavior of firms and managers, and if so, how? Answers to these questions enable us to gain an overview of the role of public policy in shaping the competitive structure of the U.S. pulp and paper industry between 1950 and 1990, and into the future.

Without exception, the period under study has been characterized by scholars of business and the economy as a period of unprecedented merger mania and intense

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antitrust intervention with mixed outcomes for the competitiveness of U.S. industries.\(^3\)

The onset of merger activity in the post-World War II U.S prompted serious political response, and on December 29, 1950, the Congress passed legislation that gave antitrust officials expanded and improved ability to intervene in corporate mergers. The new Section 7 of the Clayton Act, customarily called the Celler-Kefauver Act after the senators who sponsored the bill, was the most important piece of antitrust legislation since the enactments of Sherman and Clayton Acts.

The Celler-Kefauver Act allowed the Federal Trade Commission and the Department of Justice to prevent mergers and order divestiture if a given combination would have significantly lessened or threatened to lessen competition in a given line of commerce. Previous antitrust legislation centered on fair trade practices and cartelization, and was a less efficient tool for public policy to shape organizational arrangements within industries.

Antitrust officials regarded the Celler-Kefauver Act as one of their primary tools to maintain the competitive structure of American economy, and the increasing number of mergers intensified this emphasis during the post-World War II decades. In 1952, the Federal Trade Commission observed some 720 mergers a year, a rate at which merger activity remained for a long time, until it accelerated rapidly in the mid-1960s. In 1969, the Commission argued that disappearance of firms through mergers and acquisitions had reached unprecedented proportions, and its officials were swamped with cases as the number of mergers reviewed by the Commission increased from 600 in 1966 to over 4,000 by 1969. Conglomerate mergers accounted for 84 percent of the assets of all recorded mergers in 1969. As the merger movement in the

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American economy reached unprecedented proportions, annual reports of Federal Trade Commission voiced alarming concerns over its consequences. Its studies confirmed that the largest manufacturing companies played a very central role in the merger movement, and antitrust officials warned of potential effects on the competitive structure of the U.S. economy. In response to these concerns, the Commission placed a high priority upon enforcement of the Celler-Kefauver Act during that decade, and the Department of Justice shared this policy.  

Table 1. Major pulp and paper U.S. government antimerger cases in order of year of merger, completion of the legal case, and type of merger between 1950 and 1990.

<table>
<thead>
<tr>
<th>Merger</th>
<th>Compl.</th>
<th>Acquirer</th>
<th>Acquired</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954</td>
<td>1961</td>
<td>Crown Zellerbach</td>
<td>St Helens Pulp and Paper</td>
<td>h</td>
</tr>
<tr>
<td>1956</td>
<td>1957</td>
<td>International Paper</td>
<td>Long-Bell Lumber</td>
<td>bv</td>
</tr>
<tr>
<td>1951-6</td>
<td>1962</td>
<td>Scott Paper Company</td>
<td>3 pulp firms</td>
<td>bv</td>
</tr>
<tr>
<td>1966</td>
<td>1966</td>
<td>St. Regis Paper</td>
<td>3 corrugated box firms</td>
<td>fh</td>
</tr>
<tr>
<td>1958-</td>
<td>1966</td>
<td>Union Bag-Camp</td>
<td>5 corrugated box firms</td>
<td>fh</td>
</tr>
<tr>
<td>1960</td>
<td>1966</td>
<td>Inland</td>
<td>General Box Company</td>
<td>fh</td>
</tr>
<tr>
<td>1960</td>
<td>1966</td>
<td>Westvaco</td>
<td>U.S. Envelope Company</td>
<td>fv</td>
</tr>
<tr>
<td>1961</td>
<td>1967</td>
<td>Kimberly-Clark</td>
<td>BMT</td>
<td>fv</td>
</tr>
<tr>
<td>1961</td>
<td>1968</td>
<td>Champion</td>
<td>Carpenter Paper and others</td>
<td>fv</td>
</tr>
<tr>
<td>1961</td>
<td>1970</td>
<td>Mead</td>
<td>Several paper distributors</td>
<td>fv</td>
</tr>
<tr>
<td>1961</td>
<td>1977</td>
<td>Hammermill</td>
<td>Western Newspaper</td>
<td>fv</td>
</tr>
<tr>
<td>1966</td>
<td>1977</td>
<td>Hammermill</td>
<td>Carter Rice</td>
<td>fv</td>
</tr>
<tr>
<td>1981</td>
<td>1981</td>
<td>Weyerhauser</td>
<td>Menasha Corporation</td>
<td>fv</td>
</tr>
<tr>
<td>1984</td>
<td>1986</td>
<td>Champion</td>
<td>St. Regis</td>
<td>h</td>
</tr>
<tr>
<td>1987</td>
<td>1987</td>
<td>St. James River</td>
<td>Flexible Packaging Division</td>
<td>h*</td>
</tr>
</tbody>
</table>

*Merger abandoned before case concluded
h = horizontal merger bv = backward vertical merger, fv = forward vertical merger

The character and effectiveness of antimerger efforts by government repeatedly became a matter of concern in American politics. Several scholars, business leaders, and politicians argued that antitrust practices undermined the competitiveness of U.S.

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industries. The primary charge against the Celler-Kefauver Act was that it induced successful and growth-seeking corporations to diversify into unrelated areas of business, and thereby undermined the ability of these corporations to draw on their specialized organizational and technological capabilities.  

The pulp and paper industry followed other industries in its merger mania and gave rise to similar concerns. Antitrust officials instituted several cases in the industry in order to shape and check merger activity. The major cases are listed in Table 1. (As with the remainder of this report, the table is limited to pulp and paper cases only and omits plywood and other forests products cases.) When pulp and paper managers responded to competitive pressures with mergers and acquisitions, their corporate strategies collided repeatedly with the new antitrust policy.

Government’s antitrust intervention into the competitive structure of the pulp and paper industry between 1950 and 1990 was both extensive and frequent. It had wide-ranging effects on the competitive strategy of individual firms, on the structure and health of various industry segments, and ultimately on the competitiveness of the entire industry. In addition, the report suggests that antimerger activity and cartel policing addressed the same dynamic forces of industry evolution, but from different ends. This tentative conclusion deserves more attention and research in the future.

The antitrust experience of individual pulp and paper industry segments appears to have been patterned similarly, and followed an identical cycle. Most industry segments were characterized by intensive merger activity after World War II and during the 1960s. This also invited heightened scrutiny by antitrust officials, who

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forged antimerger standards specific to each segment of the industry. Legal
precedents, divestiture orders, and policy interventions were major practices through
which government officials shaped the competitive environment in merger cases.
Such activity swept through the sanitary paper, paper container, fine and printing
paper, board, and other industry segments between 1950 and 1970.

<table>
<thead>
<tr>
<th>Table 2. Major pulp and paper cartel cases 1950-1990</th>
</tr>
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<tbody>
<tr>
<td>International Cellucotton (1951)</td>
</tr>
<tr>
<td>Corrugated Container Antitrust (1977)</td>
</tr>
<tr>
<td>Folding Carton Antitrust (1977)</td>
</tr>
<tr>
<td>Fine Paper Antitrust (1978)</td>
</tr>
</tbody>
</table>

It is very striking how the character and focus of government antitrust efforts
changed over the 1970s, when antimerger cases declined in number and importance
and antitrust policy centered on high profile cartel cases (Table 2). This observation
highlights the need for future research to consider how cycles of antitrust co-evolved
with changes in industry structure and competitive dynamics, including closer study of
how antitrust enforcement and the evolution of organizational structures may have
shaped the course of technological innovation.6

6 Literature on the relationship between antitrust, innovation, and competitiveness is increasing rapidly.
For the purposes of this report, see: David M. Hart, “Antitrust and Technological Innovation in the U.S:
Steven W. Usselman, “Fostering a Capacity for Compromise: Business, Government, and the Stages of
(1996):30-39; For a call to relaxation of antitrust in order to boost innovation, see: Michael L.
Dertouzos, Richard K. Lester, and Robert M. Solow, Made in America. Regaining The Productive
upon pulp and paper industry after 1990 are: Toivanen, Learning and Corporate Strategy; Toivanen,
Historical Perspectives on Contemporary Problems; Martin Pesendorf, “Horizontal mergers in the paper
industry.” RAND Journal of Economics Vol 34, No. 3, Autumn 2003, 495-515; Laurits R. Christensen
and Richard E. Caves, “Cheap talk and investment rivalry in the pulp and paper industry.” Journal of
Beginning of a new antitrust experience: Sanitary paper industry in the 1950s

The Federal Trade Commission case in 1951 against International Cellucotton Products Company, a subsidiary of Kimberly-Clark Corporation, marked the beginning of a distinct antitrust experience for the U.S. pulp and paper industry. Managers of International Cellucotton struggled to maintain the company’s leading position in the sanitary paper industry in the face of intensifying competition, but post-World War II antitrust policy was designed to prevent concentration in specialized market segments. Although the case was not based on the recently amended Celler-Kefauver Act, it involved the very questions of competitive industry structure the new amendment was intended to address.\(^7\)

The International Cellucotton case illustrated in particular how maturation of technology, expiration of intellectual property rights, and structural change in the U.S. pulp and paper industry introduced new competitive pressures into highly specialized market segments. FTC investigators alleged that International Cellucotton used tying and exclusive-dealing contracts in the sale of its Kotex sanitary napkins and Kleenex facial tissues. The complaint charged that the trade practices prevented merchants from exercising “free and independent judgment in selecting sources of supply.”\(^8\)

The charges implied that a product innovation once considered unique and proprietary had become a basic commodity, and thus indicated how the strategic value of innovation and imitation had undergone a transformation in the industry. Kimberly-Clark Corporation had produced an amazing array of innovative sanitary paper products, such as sanitary napkins, facial tissues, and feminine hygienic products, in the early 20\(^{th}\) century, and had devised a distinct strategy to protect the lucrative

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\(^8\) Annual Report, 1951, 41.
markets it had created. Strong and broad patents covered the basic manufacturing processes, and the company created equally strong brand names for its products, such as Kotex and Kleenex. The new business was organized in a special unit, International Cellucotton Products Company.9

Kimberly-Clark’s efforts to protect its lucrative and rapidly growing sanitary paper business were relatively successful until the mid-1940s, when patent expiration and technological change in kraft pulping and bleaching prompted industry imitation. Perhaps the most significant case of such strategic imitation was undertaken by a powerful Wisconsin papermaker, Clark D. Everest, who decided to enter new paper product markets in the early 1950s. Relying on new bleaching technology for kraft pulp and paper, Everest ordered his research and development staff to imitate Kimberly-Clark sanitary products. Imitation and entry of firms in the sanitary paper business underlined the importance of internal economies and distribution networks for managers of incumbent firms, such as Kimberly-Clark and Scott Paper Company.10

In this context of technological and industrial change, antitrust officials alleged that International Cellucotton, which in the Commission’s assessment “substantially dominated the field,” used unfair trade practices to frustrate the distribution of competitors’ products through national dealer networks. The case complemented the larger, emerging antitrust policy framework that emphasized consumer welfare and sought to prevent concentration in narrow industry segments. The pulp and paper industry was particularly vulnerable to such a policy because of its fragmented

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organization, with numerous standardized product segments reaching from newsprint, milk cartons, fancy wrapping paper, to plywood.\textsuperscript{11}

The International Cellucotton case marked the beginning of a distinct antitrust regime in the pulp and paper industry, because it suggested an emerging conflict between the internal dynamics of the industry and antitrust policy. Across several different segments of the pulp and paper industry, managers faced problems associated with maturation of technology, expiration of intellectual property rights, and acute shortages of materials. These challenges prompted paper companies to revisit strategies of vertical integration. While International Cellucotton clearly violated old Clayton Act statutes of unfair trade practices, the case concealed and impeded its attempts to deal with these new competitive pressures.

Mergers and acquisitions offered managers an obvious mechanism to respond to such pressures, and, along other U.S. industries, pulp and paper witnessed unprecedented merger mania. This response accentuated the conflict between the internal dynamics of the pulp and paper industry and new antitrust policy as culminated in Section 7 of the Clayton Act as amended on December 29, 1950. It was only a matter of time before pulp and paper companies faced additional antitrust scrutiny under the new law.

In the sanitary paper industry, such a case followed quickly on the heels of the International Cellucotton case. In 1956, the FTC alleged that recent acquisitions by Scott Paper Company, then the largest producer of sanitary paper, violated the amended Section 7. The FTC ordered divestiture. Pennsylvanian Scott had established his firm as a non-integrated paper merchant house around 1900, and its management had pioneered new sales, advertising, and distribution techniques in the

mass consumer paper markets, paying special attention to the emerging sanitary paper products such as napkins and toilet paper. For a long period, the company remained a pure merchant house, but after World War II its managers intensively pursued backward integration into pulp and paper production.12

The acquisition policy of Scott was part of a broader effort by its management to reach out from its traditional East Coast markets and establish the company as the leading national, fully integrated producer of consumer sanitary paper products. In order to secure its paper supply, the company acquired a specialized pulp manufacturer in Washington state, Soundview, for about $60 million in 1951. It followed with acquisitions of Detroit Sulphite & Pulp Company in 1954 for about $11 million and of Massachusetts Hollingsworth & Whitney Company for $38 million later that same year. All of these companies specialized in the manufacture of pulp, and Scott invested further about $50 million to add sanitary paper manufacturing machines at the acquired mills.13

The Scott case opened a standards-setting process at the FTC. Congress had not set clear measures for what constituted an illegal merger. The FTC examiner in charge of the Scott case initially concluded that the Celler-Kefauver Act had not been violated, but the Commission quickly appealed the case and issued a divestiture order again in 1959. The FTC now emphasized Scott’s dominant position in sanitary paper markets, in particular in those lines of paper products that were distributed through groceries and supermarkets. Scott’s total shipments of all sanitary paper products had increased from 317,213 tons in 1950 to 504,216 in 1955, and its respective share of national markets had increased from 27 percent to 33. In smaller niches, the company controlled even larger market shares. It claimed 60 percent of the retail market for

paper towels and roughly half of the retail market for regular grade toilet tissue. The FTC required Scott to divest fully its acquisitions and refrain for ten years from acquiring pulp and paper companies. Scott unsuccessfully challenged the ruling, and a final decision was handed down against the firm in 1964.14

Antitrust intervention in the sanitary paper industry during the 1950’s significantly shaped the ability of leading firms to forge competitive strategies. The International Cellucotton ruling enforced strict competitive trade practices, while the FTC divestiture order in the Scott case defined political economy for the whole pulp and paper industry. Political economy did not favor, to say the very least, incumbent sanitary firms looking to deepen their specialization within certain market segments. Rather, public policy encouraged such firms to diversify into related paper product segments.

**Regional specialization and antitrust in the 1950s**

A central aspect of the new antitrust experience was the way antimerger laws shaped leading firms’ strategies of growth. The Scott case exemplified how antitrust policy encouraged product diversification. Two other important antimerger cases demonstrated similar policy goals in regard to regional specialization. In the 1950s, government pursued two antimerger investigations into the Pacific pulp and paper industry that established legal precedents with wide implications for the whole national industry. The cases against the two largest U.S. pulp and paper firms, Crown Zellerbach Corporation and International Paper Company, set policy standards.

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regarding how regional giants could expand within home markets and enter new regions.\textsuperscript{15}

In February 1954, the FTC challenged under the Celler-Kefauver Act the acquisition of St. Helens Pulp and Paper Company by the Crown Zellerbach Corporation (hereafter C-Z). San Francisco-based C-Z was one of the world’s largest pulp and paper manufacturers, with assets totaling almost $250 million. The FTC alleged the merger created a monopoly in the Western kraft paper markets.\textsuperscript{16}

C-Z mills controlled about half of the kraft paper markets in three Pacific Coast states. Tacoma, Washington-based St. Helens controlled twenty percent. Longview Fiber Company, controlled by International Paper, was the only significant competitor in the Western kraft paper markets, with its fifteen percent market share. C-Z manufactured practically all kinds of coarse and fine papers, whereas St. Helens specialized exclusively on coarse papers. The FTC alleged that the merger limited supply of kraft papers to paper jobbers and paper converters in an already oligopolistic market, and ordered C-Z to divest St. Helens, a ruling confirmed by the federal Appeals Court in 1962.\textsuperscript{17}

The FTC won the case by demonstrating how the combination controlled regional markets. C-Z would have controlled some 60 percent of Western coarse paper markets, and much higher shares in specialized paper grades. In addition, the combination would have reduced the supply of paper to independent paper converters and thus reduced competition in paper products, such as paper bags. In bag paper, the combination would have controlled 80 per cent of Western markets. St. Helens was an important element for the competitive structure of the Pacific paper bag industry.

because it had no paper bag converting operations, and sold most of its bag paper through independent paper jobbers who distributed paper to specialized converting firms. C-Z, on the contrary, operated large bag converting plants supplied by its own paper mills. The bag paper it sold unconverted was mostly distributed through Zellerbach Paper Company, its wholly owned subsidiary paper merchant house.18

The case marked a culmination point for the evolution of the Pacific pulp and paper industry, which constituted a relatively independent industrial organization from the rest of the nation. Together, the Mid-West, Southern, Middle-Atlantic, and Northeast regions constituted a relatively well integrated geographical paper market, where mills from all different regions competed for the same customers. The same firms operated in all of these regions because the expansion of the Southern pulp and paper industry during the 1930s and 1950s had been pioneered primarily by a narrow group of Northeast and Mid-West firms. In contrast, the Pacific market was walled off behind the Rocky Mountains and increased freight rates. It was dominated by firms of local origin. The only notable exception was Longview Fiber, which had been established by Wisconsin papermakers and later acquired by the largest pulp and paper firm in the world, International Paper Company, based on the East Coast.19

_Crown Zellerbach Corp. v. FTC_ suggested that leading Pacific firms had outgrown their original markets, and their managers should look for growth in other regions and products. Crown Zellerbach began a move eastwards and entered the corrugated paper industry by acquiring Wisconsin-based Gaylord in 1955. Another

Pacific forests industry giant, Weyerhaeuser Corporation, made an identical move by acquiring a Wisconsin paper container firm, Kieckhefer-Eddy, in 1957. Crown-Zellerbach and Weyerhaeuser had little prior experience in the paper container industry and no production in the East. Within a decade, both firms ranked among the leading U.S. container producers and had extensive operations in the Mid-West and South.\textsuperscript{20}

International Paper, in contrast, began a move towards the West in 1956, when it acquired the West Coast located Long-Bell Lumber Corporation and Long-Bell Lumber Company, which together controlled substantial timber lands in Oregon and Washington. Even before the acquisition, International Paper towered over other North American forests products firms with its 21 million acres of forest land and paper production capacity three times that of the next largest firm, Crown-Zellerbach. The FTC viewed the acquisition in light of IP’s announced plans to build a new West Coast mill, and set strict conditions for merger approval.\textsuperscript{21}

In response to the FTC challenge, International Paper agreed to divest all of its other West Coast assets, namely the earlier acquired Longview Fiber, and refrain from acquiring any competitors for the next ten years. It also conceded to “sell at least 40 percent of its proposed West Coast mill to independent, non-integrated wholesalers, converters, and other purchasers located in Western states.” Although the FTC order permitted IP’s entry into the West, it also significantly restricted the firm’s strategy in other segments of the pulp and paper industry. In his insightful history of the corrugated paper industry, Grover Daly has pointed out that antitrust action restricted

\textsuperscript{20} Smith, \textit{History of Papermaking}, 531-571.
International Paper from acquiring firms, whereas all other firms participated in “merger orgy [sic]” during the 1950’s.\textsuperscript{22}

Government antimerger cases against the two largest U.S. pulp and paper firms suggest that antitrust policy facilitated geographical and product diversification of large-scale forest products enterprises. The competitive environment favored a growth strategy through which firms entered new regions, rather than expanding their presence in their home regions. St. Regis Paper Company exemplified this point perhaps better than any other U.S. firm. The Northeast-based company increased its annual sales from about $50 million in 1945 to almost $540 million by 1960, without objection from the FTC. St. Regis aggressively acquired firms in order to enter the South and Pacific markets and to supplement and diversify its product portfolio, which had been dominated by newsprint.\textsuperscript{23}

Antimerger cases against Scott, Crown Zellerbach, and International Paper established a rather well articulated policy framework that guided merger and acquisition policies of U.S. pulp and paper firms in terms of geography and product focus. Yet the decisions left large tracts of the competitive landscape without clear standards against which managers could weigh the legality of potential acquisitions and mergers. Beginning in the late 1950s, antimerger enforcement activity by government in pulp and paper concentrated on forging industry-specific standards for each market segment.


Industry specific standards of the Celler-Kefauver Act

Regional and product specialization were the two fundamental foci of antitrust enforcement in pulp and paper under the Celler-Kefauver Act. Such enforcement policy centered on individual product or process segments of the entire pulp and paper industry. Rarely if ever did they consider competitive structure in the forest products industry as a whole. Perhaps no other case demonstrated this as clearly as *U.S. v. Kimberly-Clark*.

Launched by government in 1962 when Kimberly-Clark Corporation attempted to acquire a large paper merchant house that supplied the major Pacific markets, the case eventually resulted in a significant clarification of the circumstances under which courts would declare mergers in the pulp and paper industry illegal under the Celler-Kefauver Act. For the first time since Congress had amended the Clayton Act in 1950, the industry could operate under definitive quantitative or qualitative tests through which all parties could gauge the likely legality of a given merger.24

Government antimerger intervention came on the heels of an exhaustive expansion and diversification program by Kimberly-Clark. The growth strategy had recast the traditional Wisconsin manufacturer of fine and sanitary paper as a national multi-product forest products firm. This transformation complicated application of the Celler-Kefauver Act, because the Act was designed to stymie concentration within specified regions or product segments. Government proceedings in the case functioned as something like a collective exercise in standard-setting, whereby officials, courts, and the industry learned how antimerger statutes actually worked in the context of the U.S. pulp and paper industry during a period in which all the leading firms were adopting a similar national, multi-product structure.

Kimberly-Clark had adopted mergers and acquisitions as the primary vehicle of an aggressive expansion strategy during the 1950s, and the company quickly entered new regional markets and lines of business. It acquired two smaller Mid-West paper companies in 1951 and 1956, and after absorbing the International Cellucotton Products Company in 1951, it re-organized its key intellectual property rights, production facilities, and distribution outlets connected with sanitary products. In 1957, Kimberly-Clark entered tobacco fine papers through the acquisition of a leading manufacturer, and two further large acquisitions marked its entry into the envelope paper industry in 1959 and 1961.25

Strategic acquisitions of regional or product-specialized firms punctuated the expansion of Kimberly-Clark, and, indeed, all leading pulp and paper firms. Acquisition of firms was the major method by which managers attempted to enter new regions or product lines. In so doing, managers carefully tried to walk the line between illegal and legal merger activity, but this line was vaguely construed before courts handed down segment-specific benchmark decisions in the early 1960s. When Kimberly-Clark managers decided to enter the Pacific markets in the late 1950s, they prompted a lengthy legal process that defined such standards.

In 1956, Kimberly-Clark constructed a new mill and converting plant in Fullerton, California that produced sanitary paper products. It also acquired large virgin West Coast pulpwood tracts from the Ralph L. Smith Lumber Company in 1961 and announced that it would build a fully integrated pulp and printing paper mill at Anderson, California. Also in 1961, attempting to complete its entry into Western markets, Kimberly-Clark acquired Blake, Moffit, and Towne (hereafter BMT), the largest Western merchant house, with 34 outlets in six Western states and over $65

million annual sales in 1960. Antitrust officials of the Department of Justice challenged the forward merger 1962, a move eventually upheld by courts in 1967.\textsuperscript{26}

A central reason why antitrust officials took issue with Kimberly-Clark was its ranking as the fourth largest U.S. pulp and paper firm, one that sold practically all kinds of papers. The company had about a 7.5\% share of the U.S. fine and printing paper markets, and totaled half a billion dollar annual sales volume in 1962. Moreover, Kimberly-Clark controlled lucrative niche markets in sanitary paper products (Table 3.). On these grounds, government alleged that acquisition of BMT by Kimberly-Clark was injurious to competition in the Western market and nationally in the “printing and fine paper, sanitary paper products, coarse paper and paper products combined.”\textsuperscript{27}

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent share</th>
<th>Total value of the market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facial tissues</td>
<td>59.96%</td>
<td></td>
</tr>
<tr>
<td>Sanitary napkins</td>
<td>52.65%</td>
<td></td>
</tr>
<tr>
<td>Sanitary products</td>
<td>24.00%</td>
<td>$192</td>
</tr>
<tr>
<td>Thin paper</td>
<td>16.06%</td>
<td></td>
</tr>
<tr>
<td>Printing and fine papers</td>
<td>7.50%</td>
<td></td>
</tr>
</tbody>
</table>


Although Kimberly-Clark held the largest market shares in sanitary paper products, government pursued its case in the context of the fine and printing paper industry. The Department of Justice argued that Kimberly-Clark’s acquisitions increased the momentum towards industry concentration in this segment, and maintained that the Celler-Kefauver Act was legislated by the Congress to arrest a

\textsuperscript{26} United States v. Kimberly-Clark Corporation. 
\textsuperscript{27} United States v. Kimberly-Clark Corporation.
trend of industry concentration before it caught momentum. Government cited recent
Supreme Court decisions that had defined the meaning of the Celler-Kefauver Act: “to
preserve competition among many small businesses by arresting a trend toward
concentration in its incipiency before the trend developed to the point that a market
was left in the grip of a few big companies.”

Government documented how fine and printing paper firms had acquired in
total some 33 independent paper merchant houses between 1956 and 1966. Five firms-
- Mead, Champion, Kimberly-Clark, Hammermill, and Nekoosa-Edwards-- accounted
for 25 of these acquisitions. These firms specialized in the rapidly expanding office
copy paper market that consisted to a large degree of small businesses and consumers,
who government believed were best supplied through specialized paper distribution
networks.

Table 4. The rank and share of the 20 leading U.S. manufacturers of fine
and printing paper in 1967.

<table>
<thead>
<tr>
<th>Company</th>
<th>Total tonnage</th>
<th>Share of industry</th>
<th>Cumulate share of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. International</td>
<td>700,635</td>
<td>8.11%</td>
<td></td>
</tr>
<tr>
<td>2. Mead</td>
<td>545,941</td>
<td>6.33%</td>
<td>14.44%</td>
</tr>
<tr>
<td>3. Champion</td>
<td>536,891</td>
<td>6.22%</td>
<td>20.66%</td>
</tr>
<tr>
<td>4. Kimberly-Clark</td>
<td>456,172</td>
<td>5.28%</td>
<td>25.94%</td>
</tr>
<tr>
<td>5. West-Virginia</td>
<td>436,042</td>
<td>5.05%</td>
<td>30.99%</td>
</tr>
<tr>
<td>6. Hammermill</td>
<td>430,095</td>
<td>4.98%</td>
<td>35.97%</td>
</tr>
<tr>
<td>7. St. Regis</td>
<td>362,330</td>
<td>4.11%</td>
<td>40.19%</td>
</tr>
<tr>
<td>8. Oxford</td>
<td>352,597</td>
<td>4.08%</td>
<td>44.27%</td>
</tr>
<tr>
<td>9. Consolidated</td>
<td>342,398</td>
<td>3.96%*</td>
<td>48.23%</td>
</tr>
<tr>
<td>10. Crown Zellerbach</td>
<td>286,243</td>
<td>3.31%*</td>
<td>51.54%</td>
</tr>
<tr>
<td>11. Boise Cascade</td>
<td>231,095</td>
<td>3.68%</td>
<td>54.22%</td>
</tr>
<tr>
<td>12. Weyerhaeuser</td>
<td>215,024</td>
<td>2.49%</td>
<td>56.71%</td>
</tr>
<tr>
<td>13. Northwest</td>
<td>214,824</td>
<td>2.49%</td>
<td>59.50%</td>
</tr>
<tr>
<td>14. Nekoosa Edwards</td>
<td>198,217</td>
<td>2.30%</td>
<td>61.50%</td>
</tr>
</tbody>
</table>

“industry trend” in the context of Celler Kefauver Act, see also: Brown Shoe Co. v. United States, 370
* As in original.
<table>
<thead>
<tr>
<th></th>
<th>Company</th>
<th>Sales</th>
<th>Market Share</th>
<th>Market Share</th>
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<tbody>
<tr>
<td>15.</td>
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<td>63.50%</td>
</tr>
<tr>
<td>16.</td>
<td>Blandin</td>
<td>175,383</td>
<td>1.98%</td>
<td>65.48%</td>
</tr>
<tr>
<td>17.</td>
<td>Fraser</td>
<td>170,130</td>
<td>1.97%</td>
<td>67.45%</td>
</tr>
<tr>
<td>18.</td>
<td>Glatfelter</td>
<td>136,147</td>
<td>1.58%</td>
<td>69.03%</td>
</tr>
<tr>
<td>19.</td>
<td>New York &amp; Penn</td>
<td>113,796</td>
<td>1.33%</td>
<td>70.36%</td>
</tr>
<tr>
<td>20.</td>
<td>Union Camp</td>
<td>113,714</td>
<td>1.32%</td>
<td>71.68%</td>
</tr>
</tbody>
</table>


Concentration and forward integration in the fine and printing industry was evident, but government and industry disagreed about how to interpret the trend. Fine and printing paper firms claimed that forward integration into marketing and distribution was a condition of survival, and was dictated by change in demand structure. Such phenomena as the diffusion of office copy equipment changed the way people and organizations consumed paper, the firms argued, and they must adapt to this. Government argued that acquisition of marketing arms by leading fine and printing paper firms created a “chain reaction effect” in the industry, and “clearly, there is substantial self-perpetuating trend in the paper industry of paper merchant acquisitions by paper mills. Kimberly-Clark was a participant in the trend.”

*U.S. v. Kimberly-Clark* centered on the issue of under what circumstances such forward integration could be ruled illegal. After extensive acquisitions, the five largest manufacturers of fine and printing paper controlled merchant houses with combined sales about $441 million in 1963, roughly 12 per cent of the total annual paper merchant sales. Industry statistics did not support claims of growing concentration in the fine and printing paper industry, however, and instead documented a rather steady industry structure. Between 1961 and 1971, the four largest paper firms held a steady market share of about 27 percent, while the top eight firms held a 44 percent share throughout the period. Managers of the paper firms argued that government did not

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30 *United States v. Kimberly-Clark Corporation.*
understand industry dynamics. Without acquisitions, managers reasoned, the leading firms would have lost their market share, and long-term competitive advantages.\textsuperscript{31}

Kimberly-Clark’s recent experience illustrated the managers’ point. In 1960, the company had lost a bidding contest for Carpenter Paper Company to Champion Paper. When Kimberly-Clark’s Western sales manager, H.P. Westler, subsequently learned that an investment bank had recommended that BMT merge with a larger paper manufacturer, he warned top management of problems if the merchant house were acquired by a competitor. The trend toward vertical integration was pronounced in the Western markets, where the four leading paper merchants were controlled by pulp and paper firms. \textsuperscript{32}

Details of the changing competitive environment and merger wave, however, played in hands of the government. Statutes and court interpretations under the Celler-Kefauver Act did not consider the reasons motivating vertical mergers, such as the protection of existing distribution channels or the defensive acquisition of distribution to protect manufacturing capabilities, but instead focused exclusively on the effects of mergers upon industry-wide competitive structure. The seminal case of \textit{U.S. v. E. I. du Pont de Nemours}, for instance, had established that if a company acquired power to control significant channels of distribution, it violated the Celler-Kefauver Act “whether or not actual restraints, or the substantial lessening of competition, have occurred or are intended.”\textsuperscript{33} In \textit{U.S. v. Pennzoil Co.}, the courts had established that

\begin{itemize}
\item \textsuperscript{32} Zellerbach had been controlled by Crown Zellerbach for many years, whereas Carpenter Paper Company, Butler Paper Company, and BMT had been acquired by Champion, Nekoosa-Edwards, and K-C, respectively. The Noland paper Company in Los Angeles had been acquired by Mead, and Potlatch Forests had acquired the Wilson-Rich Papers Company in San Francisco, Columbia Paper Company that operated in Los Angeles and San Diego, and the Grand Canyon Paper Company of Phoenix. \textit{United States v. Kimberly-Clark Corporation}.
\item \textsuperscript{33} \textit{United States v. E. I. du Pont de Nemours}, 353 U.S. 586, 589.
\end{itemize}
“the government’s burden is not to show that competition will be lessened by the acquisition, but only that it may tend to be lessened.”

Kimberly-Clark’s post-merger behavior did little to allay the fears of government officials or its competitors. Between 1961 and 1963, Kimberly-Clark sales through BMT increased from $1.4 million to almost $3.8 million. The merchant house was integrated tightly into its new parent, and it was made into major distribution network for Kimberly-Clark papers. BMT began to carry several new types and grades of Kimberly-Clark papers, such as envelopes and sanitary paper products, which it had not represented previously. Competing firms saw their sales through BMT decline rapidly. A representative of Consolidated Papers told the court that his sales shrank from one million dollars in 1961 to $300,000 by 1964.

When the court declared Kimberly-Clark’s acquisition of BMT illegal under the revised Section 7 of the Clayton Act, it emphasized “(1) the nature and purpose of the acquisition, (2) the post-acquisition behavior on the market, and (3) the definite trend toward integration in which K-C was a deliberate and significant participant.” The decision represented the most thorough review of the conditions under which paper firms could integrate forward into distribution and established clear guidelines for future judicial interpretations. “Unless this acquisition is undone,” the court concluded, “Kimberly-Clark and its competitors will have a green light to proceed with further acquisitions.”

34 United States v. Pennzoil Co., 252 F. Supp. 92, 971 (W.D. 1965). Enforcement of the Celler-Kefauver Act relied often on the fact that the Act defined potential injury to competition as a violation, and did not require a demonstration of real injury. For example, the Federal Trade Commission had argued in FTC v. Consolidated Foods, 380 U.S. 592, 599, 14 L. Ed 2d 95, 85 S. Ct. 1220 (1965): “If reciprocal buying creates for Gentry a protected market, which others cannot penetrate despite of superiority of price, quality, or service, competition is lessened whether or not Gentry can expand its market share.”
While *United States v. Kimberly-Clark* was the single most important case to forge segment-specific standards for pulp and paper under the Celler-Kefauver Act, it was not a unique case. Because the expansion and diversification strategy of all leading pulp and paper firms was punctuated by mergers and acquisitions, many other firms tiptoed around similar legal issues as Kimberly-Clark. Indeed, several identical cases against fine and printing paper firms were pending even as the Kimberly-Clark case reached its conclusion.

In 1966, the court established antimerger standards in a case against the fifth largest U.S. paper company, West Virginia Pulp and Paper Company (hereafter Westvaco). Westvaco had followed a program of regional expansion and product diversification parallel to that of Kimberly-Clark. The exhaustive merger and acquisition policy had transformed the East Coast company, which had traditionally produced bleached and unbleached kraft papers and boards and fine and printing papers, into a national, multi-product paper firm. The most notable of Westvaco’s acquisitions occurred in 1953, when it absorbed Hinde & Dauch Paper Company, then the world’s largest producer of corrugated paper products. Smaller but similar acquisitions followed, and Westvaco’s annual sales increased from $95.5 million in 1950 to $233 million in 1959.  

In 1960, company’s exhaustive acquisition policy was stymied when antitrust officials challenged its merger with the United States Envelope Company, which dominated one quarter of a market for envelopes valued at $250 million annually. An eventual court order restrained Westvaco from supplying any paper to its new envelope division, thereby eliminating the benefits of vertical merger. Prior to the

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38 For the Westvaco expansion, see: David C. Smith, *Papermaking*, 552; Toivanen, *Learning and Corporate Strategy*, 283-5
merger, the court observed, U.S. Envelope had purchased paper for its converting operations from some fifty different paper firms.\(^{39}\)

The experiences of Westvaco and Kimberly-Clark illustrate how the Celler-Kefauver Act came to constrain the ability of large pulp and paper firms to diversify across product categories and extend their geographical scope. The rulings against the firms were based on perceived injury to competition that occurred when a large pulp and paper enterprise acquired a smaller regional or specialized paper converting firm. Westvaco and Kimberly-Clark possessed advantageous economies of scale in the production of pulp and paper, and sought to feed their enormous production through the acquired firms. Such vertical integration removed or diminished a market composed of suppliers of paper. The Westvaco and Kimberly-Clark cases clearly informed the industry that the Department of Justice would look dimly upon such developments.

Such rigid antimerger standards constrained the ability of pulp and paper managers to respond to dynamic forces of industrial change, such as technological innovation, change in demand structure, and the heightened importance of distribution networks. Following the Kimberly-Clark ruling, antitrust enforcement in the pulp and paper industry acquired a highly segment-specific character, further demonstrating the centrality of the case.

**Antimerger policy in the fine and printing paper industry, 1967-1977**

Landmark, segment-specific cases during the 1950s and 1960s, while limited in number, solidified the institutional incentive structures that operated upon all pulp and paper firms. As one of the fastest growing industry segments, the fine and printing

\(^{39}\) *United States. v. West Virginia Pulp and Paper Company*, 60 Civ. 3324 (1964, 1966);
paper segment inevitably felt the effects. Resolution of the Kimberly-Clark case prompted Champion Papers and Mead Corporation to settle pending antimerger cases that challenged their acquisition of large marketing arms in this branch of the trade. The defendants in *U.S v. Champion* and *U.S. v. Mead* accepted consent decrees in 1968 and 1970, respectively. Champion agreed to partially divest its acquired fine and printing paper merchant houses and to reduce the annual sales volume of its marketing arms from $150 million to $100 million. For its part, Mead agreed to reduce its control of acquired fine and printing paper merchant houses from their combined annual sales volume of $180 million to roughly $110 million. Champion and Mead were permitted to retain some control of their Western and Mid-Western merchant houses because they demonstrated a need to protect distribution within established markets. This concession by government constituted an important fine-tuning of policy that exerted significant influence upon subsequent antimerger cases involving fine and printing paper.\(^{40}\)

Together, the Kimberly-Clark, Mead, and Champion antimerger cases defined the political economy and competitive structure for the industry. The only subsequent case of note to depart from the doctrines established in these cases occurred in 1977, when Pennsylvania Hammermill successfully challenged a Department of Justice order to divest itself of merchant houses it had acquired years before.\(^{41}\) Hammermill, the sixth largest U.S. fine and print paper firm, had acquired Western Newspaper Association in 1961 and Carter Rice Storrs and Bement, Inc. five years later. These merchant houses had combined annual sales volume of approximately $100 million in the South, Mid-West, Middle-Atlantic, and New England. Hammermill argued that the Mead and Champion consent degrees established the extent a paper firm could


\(^{41}\) *Unites States v. Hammermill Paper Co.*
control captive markets. In addition, the company countered monopoly allegations of
government by demonstrating that it had not fully integrated the merchant houses but
instead operated them credibly as independent firms.\textsuperscript{42}

The post-merger behavior of Hammermill constituted an important factor in the
case. Government alleged that Hammermill’s move would foreclose competition
among fine and printing paper firms. The court concluded that the likelihood of
foreclosure was diminished by low barriers of entry into the paper merchant house
business. Between 1963 and 1967, the number of merchant outlets had in fact
increased from 882 to 933. Hammermill, moreover, accounted for just five percent of
annual national sales of fine and printing paper, its most important line of business.\textsuperscript{43}
Hammermill’s ability to integrate forward depended also on the fact that sales through
paper merchants had actually declined significantly. At the end of World War II,
nearly 60 percent of total paper sales were carried through merchant houses. By 1972,
following a six-year burst during which three fine and print paper mills acquired six
paper merchant houses, this share had declined to 40 percent. Thus, competition in the
market for fine papers would persist even if Hammermill had a significant presence
among merchants.

While the courts ruled in favor of Hammermill, the case hardly signaled a
dramatic departure from established constraints on vertical integration. Hammermill’s
acquisition of its marketing arms fell somewhere between a true forward integration
and a simple sales contract. Its carefully crafted agreements exemplified how
managers carefully designed strategic acquisitions in the context of political economy
and were prepared to walk the fine line of antimerger policy. Even if Hammermill did
prove successful in its efforts to defend its acquisitions of merchant houses, moreover,

\textsuperscript{42} United States v. Hammermill Paper Co.
\textsuperscript{43} United States v. Hammermill Paper Co.

By the time the Hammermill case reached this outcome, concerns about mergers no longer dominated the paper industry. During the decade between \textit{U.S. v. Kimberly-Clark} and \textit{U.S. v. Hammermill Paper}, the competitive structure of the fine and printing paper industry had undergone thorough transformation. New departures in corporate strategy and a shift in the focus of antitrust enforcement signaled the change. Perhaps most illuminating of the new conditions was the announcement of Kimberly-Clark in 1976 that it would exit the fine and printing paper industry because of deplorable conditions in the trade. Although firms continued to disappear in the industry through mergers and acquisitions, such episodes seldom raised alarms about market concentration or prompted legal challenges. Instead, during the 1970s the industry was increasingly suspected, and in some cases found guilty, of unfair trade practices and price fixing.

\textbf{Cartels and trade practice cases in the fine and printing paper industry}

Since passage of the Celler-Kefauver Act, government had consistently aimed its antitrust enforcement at arresting concentration and sustaining competitive markets. During the 1970s, this sustained antimerger policy intervention in the fine and printing paper industry was followed by a wave of cartel and unfair trade allegations. A new spate of antitrust cases suggested that fine and printing firms could potentially circumvent earlier antitrust policy through coercive business practices, mainly tying practices. The declining importance of antimerger policy and increasing role of cartel

allegations highlighted the changing competitive structure of the fine and printing paper industry.

In *Unijax Inc. v. Champion International*, a Southeastern paper merchant firm alleged that Champion had attempted to coerce it from carrying the papers of Champion’s competitors. Although the court held the allegations unfounded after a successful appeal by Champion, the case hinted at widespread foreclosure and tying practices. In 1978, the Department of Justice charged sixteen firms that controlled almost 60 percent of the fine paper market with violation of antitrust laws.

Government alleged a “nationwide horizontal conspiracy at the mill level to fix the price of fine paper and [sic] to eliminate inter- and intra-brand competition among their wholesaler customers.” Evidence detailed price fixing and other illegal tactics intended to reduce competition in the industry between 1965 and 1977.

Although grounded in allegations of price fixing and unfair trade practices, *In Re “Fine Paper” Antitrust Litigation* was a direct continuation of government’s earlier antimerger efforts in the fine and printing paper industry. Government alleged that defendants had employed “threats and other concerted actions against merchant houses to secure adherence to an aggregation of trade restraints designed to minimize price discounting and otherwise minimize intrabrand competition between mill owned and independent merchant houses.” The charges suggested that leading fine and printing paper firms had continued to pursue forward integration into distribution even after unfavorable rulings in *U.S. v. Kimberly-Clark* and similar cases. Government alleged

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that paper firms fixed the prices at which merchant houses sold paper, and that non-conforming merchant houses were systemically eliminated as competitors.49

“Fine Paper” Antitrust developed into a vast case through which private parties sought damages from the defendants totaling in excess of 100 000 ????,

according to one method of calculation. Most states were included, as were a great number of school districts that obtained their paper from the defendants. The case generated legions of bad publicity for the paper industry, and some of the leading firms, St. Regis Paper Company, International Paper Company, Potlach Corporation, Union Camp Corporation, Weyerhaeuser Company, and Boise Cascade Corporation, decided to settle. These companies alone accounted for some 38 per cent of U.S. fine paper sales and comprised damage claims totaling nearly $30 million. Eventually most other defendants settled the case as well, with the last company to do so being Champion Paper, which reached agreement during the first day of trial on September 22, 1980. The settlements totaled, including legal costs, almost $51 million.50

The price-fixing case solidified the competitive environment of the fine and printing paper industry. The most notable subsequent antitrust case in the industry was a minor one from 1982 in which Hammermill attempted to relax modestly the 1977 consent order. Hammermill claimed it had been unable to penetrate the fast-growing market for small copier paper composed of small customers, and asked for permission to impose customer restrictions on its dealers. The move, reasoned the company, would increase competition at the industry level. The FTC allowed the company to

impose customer restrictions on its dealers as long as doing so would not unreasonably restrain competition.\textsuperscript{51}

The antitrust experience of the fine and printing paper industry between 1950 and 1990 offers an example of the extent to which government policy shaped the competitive structure of particular segments of the pulp and paper industry. Industry’s rapid forward integration into distribution was stymied by rigid government standards established in \textit{U.S. v. Kimberly-Clark}. The essential structure of the industry remained relatively stable in the wake of this seminal 1967 case. Though it is beyond the scope of this article to establish definitively whether such stability resulted from antimerger intervention or as a result of competitive forces, it is noteworthy that collusion was indisputably an important element in what even a casual observer must have recognized as an elusive pursuit of industrial stability. The sequence of antitrust enforcement in the industry suggests that managers continued to struggle with dynamic forces of industrial change. From the vantage point of theory, it is plausible to argue that under such circumstances managers were inclined to resort to collusion when political economy prohibited alternative organizational arrangements, most notably by restraining merger activity.

\textbf{Antitrust in the paper container industry, 1950-1970}

The antitrust experience of the fine paper sector between 1950 and 1990 was not unique to that segment of the paper industry. Perhaps the most notable analogy was offered by the paper container industry.

Rivalry between incumbent leaders and new entrants characterized the dynamics of the paper container industry following World War II. Producers of

folding and corrugated paper cartons had experienced annual growth in demand of approximately 12% during the war mobilization years, and growth continued at a 5% annual rate through the 1950s. These growth rates made the supply of paperboard from mills to paper converting factories an increasingly important issue, and, in part, prompted a merger wave after the World War II demobilization.\textsuperscript{52}

Concentration was most evident in the corrugated paper container industry, where thirteen combinations during the 1950's reduced over fifty leading specialized corrugated paper container firms to fifteen national, vertically integrated companies. Vertical integration characterized seven of these mergers. Another four involved horizontal mergers among converters, and in two cases a manufacturer of metal and glass containers diversified into paper containers. The resultant fifteen industry leaders dominated U.S. markets, with annual sales of $2.7 billion. These firms had similar organizational capabilities and overlapping geographical operations.\textsuperscript{53}

Despite the number of mergers in the paper container sector during the 1950s, antitrust officials intervened with only one, Union Bag & Paper Corporation’s acquisition of the Hankins Container Company. In 1955, the FTC included this horizontal combination among its most important merger cases, arguing that the resulting conglomerate monopolized production, sale, and distribution of container board east of the Mississippi.\textsuperscript{54}

Though perhaps the world’s largest specialized paper container firm, Union Bag operated only one large vertically integrated pulp, paper, and converting mill, located in Savannah, Georgia. Consequently, it had trouble meeting the increasing

\textsuperscript{52} Daly, \textit{The Corrugated Container Industry}, 74-75.

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demand for paper containers. Major competitors, such as Mead Corporation, Container Corporation, International Paper, and Hinde and Dauch Paper Company, expanded their nationwide market presence. Each emphasized mergers that secured material supply within their firms. Union’s chief competitor, Hinde and Dauch, merged with West Virginia Pulp and Paper Company in 1953. The vertical merger marked the entry of West Virginia into the paper container industry and solved Hinde and Dauch’s difficulties in securing linerboard supply for its converting operations.\textsuperscript{55}

Concerns over paper supply prompted Union Bag to invest over $50 million between 1951 and 1955 to increase daily capacity of its Savanna mill production capacity to 1,800 tons of paper and board. By 1956, daily output topped 2,000 tons. In a continued effort to secure paper supply for converting plants, that same year Union acquired Camp Manufacturing Company, a fully integrated producer of bleached and unbleached sulphate pulp, paper, and board. Union Bag-Camp Paper Company planned to increase Camp’s Savannah mill production capacity from 375 daily tons to 600 by 1959. Following that merger, Union-Camp also acquired five additional firms in different segments of the paper industry. Perhaps not surprisingly, the FTC opened an antimerger investigation in 1960.\textsuperscript{56}

The Union-Camp investigation was part of a larger FTC effort to maintain competitive structure in the paper container industry and to arrest unfolding trends toward market concentration and vertical integration. In 1956, the commission had opened an investigation into whether St. Regis Paper Company’s aggressive acquisition strategy had substantially reduced competition in corrugated paper containers. St. Regis had become one of the leading U.S. pulp and paper firms. In

\textsuperscript{55} Smith, \textit{History of Papermaking}, 563-536.

1963, the FTC concluded that St. Regis was responsible for rapid horizontal concentration in the corrugated container industry and ordered it to divest seven of the corrugated container firms it had acquired. In addition, the FTC stipulated that during the next ten years the company needed prior FTC approval for acquisition of any company engaged in paperboard or paper container production.\textsuperscript{57}

FTC intervention also influenced other firms seeking a piece of the booming container business. Industry giant International Paper Company, long shadowed by antitrust concerns, shunned acquisitions and instead built new container plants. Other policy interventions were more visible. In 1965, the FTC issued final orders of divestiture in proceedings challenging acquisitions of producers of corrugated containers by Mead, Union Bag-Camp Paper, and Inland Container Corporation. Inland accepted a consent degree in 1966, as did all the firms eventually, and proceeded with divestitures.\textsuperscript{58}

Government’s antimerger intervention in the paper container industry between 1950 and 1970 echoed industry dynamics and policy goals familiar from the fine and printing paper industry. Large-scale pulp and paper enterprises attempted to integrate forward into paper container operations, while government intended to maintain competitive markets between paper suppliers and container converters. Duplicating the sequence of antitrust enforcement in the fine and printing paper industry, this sustained antimerger intervention in the paper container industry was followed by extensive price fixing allegations in the 1970’s.


This aspect of the container industry’s dynamics first came to light in 1967, when the Justice Department charged corrugated paper manufacturers in the Southeast with price fixing. The national industry concentrated in the Southeast, where production of paper board had increased from 9 billion square feet in 1955 to almost 16 billion by 1963. In 1955, 30 firms operated 49 plants producing identical product in the Southeast. In 1963, 51 firms operated 98 plants. Despite the proliferation of firms and facilities, however, output had grown increasingly concentrated. The 16 firms charged with antitrust violations accounted for over 90% of productive capacity. The six largest firms accounted for over 60% of the total. Eight of the defendants had entered the corrugated paper industry in the Southeast between 1956 and 1959. 59

Lower courts dismissed allegations of violation of Section 1 of the Sherman Act, but Assistant Attorney General Edwin Zimmerman managed to obtain a guilty verdict from the Supreme Court in 1969. The decision strictly prohibited any sharing of price information between the defendants and required them to provide access necessary for government to monitor compliance. 60

For a while, the industry appeared to have stabilized, until a flurry of antitrust charges beginning in 1976 revealed a highly contentious industry. That year alone, more than fifty civil antitrust suits were filed after the Justice Department indicted 23 folding carton firms and 47 individuals for violation of antitrust laws. Plaintiffs included over 35,000 purchasers of folding cartons who alleged nationwide price fixing between 1960 and 1974. Defendants included the leading U.S. pulp and paper firms, such as Container Corporation, St. Regis, Mead, International Paper, Champion, Westvaco, Weyerhaeuser, Georgia Pacific, and Union Camp. The case was settled for approximately $200 million, a record settlement in the history of U.S. antitrust at that time.

time. Evidence presented in the case helped government to win another industry wide price fixing case, *U.S. v. Alton Box Board Co. et al*, in 1979. Together, these cases imposed costly fines and settlements on the industry. In addition, courts ordered the firms to comply with strict competitive rules, such as a 25-year prohibition from refraining to submit a bid for any sale of folding cartons and other detailed prohibitions of collusive trade practices. 61

These cases centered on allegations of price fixing and trade practices, but they addressed powerful dynamics of vertical and horizontal integration. The original count against folding carton firms alleged that vertically integrated folding carton firms restricted supply of paperboard to independent folding carton plants. Though this was dropped from the complaint, 62 similar allegations surfaced in 1978, when *Franklin Container Corporation et al v. International Paper Company et al* alleged that vertically integrated corrugated box firms attempted to wipe out independent firms by maintaining artificially low prices in boxes. 63 The plaintiffs detailed five acts of conspiratorial activity that revolved around the competitive structure of the corrugated paper container industry: one, the acquisition of independent corrugated box manufacturers and construction of box plant by paperboard manufacturers; two, vertically integrated corrugated firms charged more for paperboard when selling to independent box makers than when transferring material within the firm; three, “fixing the price of corrugated boxes at artificially low levels;” four, “reciprocal arrangements among the defendants, such as exchange of kraft liner board throughout the U.S. without regard to differences in cost of production and without charge of freight,

handling, or other necessary costs;” and five, production of misleading industry and price statistics with the intention to distort prices.

The court dismissed the allegations of Franklin Container v. International Paper, but the vertically integrated corrugated container firms became target of yet another antitrust case in 1978. Consumers of corrugated boxes filed antitrust suit alleging conspiracy aimed at maintaining artificially high prices, and demanded triple damages under the law. The case involved more than 200,000 plaintiffs according to one estimate. Government also joined the plaintiffs, and alleged price fixing between 1960 and 1975.

The case illustrated the powerful role played by large-scale pulp and paper enterprises in restructuring the organization of the industry. Defendants accounted for only 5% of the some 800 firms manufacturing corrugated containers in the U.S, yet they generated some 72% of the annual dollar volume of sales. The majority of plaintiffs were likewise major pulp and paper companies owning several corrugated plants throughout the U.S. As the case proceeded and again generated bad publicity, defendants agreed to settle the charges. Corrugated Container Antitrust Litigation again broke the record for highest dollar value antitrust settlement in U.S. history, eventually reaching approximately $550 million.

The Corrugated Container Antitrust case revealed that large pulp and paper enterprises performed differently than the rest of the industry. Although the number of corrugated paper firms had increased steadily between 1960 and 1975 (see Table 5 and Table 6), the leading firms had been able to increase their market share during the 1970s. Vertical integration between large-scale pulp and paper firms and paper

64 Franklin Container Corporation et al v. International Paper Company et al. (1978).
66 In re: Corrugated Container Antitrust Litigation 80 F.R.D. 244 (1978); In re: Corrugated Container Antitrust Litigation (CCH) P64, 114 (1981); Dill, Chesapeake, 312.
container converters mirrored the dynamics between fine and printing paper firms and merchant houses. It proved relatively easy for capital-intensive, large-scale producers to integrate forward and thereby gain control of markets, whereas the contrary – backward integration -- was an unknown phenomenon in the industry.

Table 5. Number of U.S. Corrugated paper firms

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<td>1965</td>
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<td>1970</td>
<td>679</td>
</tr>
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<td>1975</td>
<td>759</td>
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Source: *In re Corrugated Container Antitrust Litigation* (CCH) P64, 114 (1982).

These internal dynamics of industrial change became visible when government challenged in 1980 the acquisition of Menasha Corporation by Weyerhaeuser Company. Weyerhaeuser’s annual sales reached $4.5 billion in 1979. It was the largest U.S. producer of shipping containers, which totaled some 12% of its sales. Menasha was primarily a shipping container firm, with large market presence in the Mid-West and West. In the Pacific market, Menasha was the third largest producer of corrugated paper board, while Weyerhaeuser ranked seventh. The FTC estimated that the merger would “significantly increase already high levels of concentration in the West, where four-firm concentration would increase from 53.27 percent to 60.71 and eight-firm concentration from 85.39 to 91.32.”


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<tr>
<td>Weyerhaeuser</td>
<td>5.60</td>
<td>5.85</td>
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<tr>
<td>International Paper</td>
<td>5.30</td>
<td>5.93</td>
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<tr>
<td>Inland Container Corporation</td>
<td>5.05</td>
<td>5.56</td>
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A central aim of the FTC was to prevent vertically integrated firms from gaining too much market power in the U.S. shipping container market. With no practical substitutes for paper boxes, government concluded, inelastic supply of boxes would certainly increase prices. From a public policy perspective, industry concentration equated to potential price hikes in paper boxes that would be extracted from consumers. Without policy intervention, the FTC reasoned, technology and capital structure in the industry facilitated concentration.\(^68\)

Paper boxes were usually manufactured at specialized box plants, which first fluted two-ton rolls of paper, and then converted the corrugated sheets into set-up boxes. While large, vertically integrated pulp and paper firms dominated the industry, its competitive structure included an important share of independent converting firms that purchased the two-ton rolls from outside suppliers. Citing technology and capital requirements, the FTC concluded that such independent converters had practically no capabilities to integrate backward into manufacture of pulp and paper. In contrast, large-scale pulp and paper firms could easily enter converting, and gain important competitive advantages. Vertically integrated producers “had considerable flexibility in their mix of internal transfers, exchanges, and sales,” argued the FTC. “The mix can be varied as producers attempt to minimize delivered cost, and maximize profit in response to changes in the supply of or demand for medium.”\(^69\)

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\(^{68}\) Federal Trade Commission v. Weyerhaeuser Co.

\(^{69}\) Federal Trade Commission v. Weyerhaeuser Co.
The 1980’s witnessed two other major antimerger interventions in the paper container industry. In 1984, Champion International Corporation acquired St. Regis Corporation for $1.84 billion, creating the second largest U.S. pulp and paper firm. The FTC argued that the resulting firm had too much market power in selected product segments. In particular, the FTC alleged that the merger violated antitrust laws because it reduced competition in West Coast linerboard markets. The merger went through only after Champion accepted a consent decree that required it to divest itself of a linerboard mill operated by Washington-based St. Regis. In 1987, the FTC prepared to apply a preliminary injunction against the proposed $130 million acquisition of Flexible Packaging Division of Princeton Packaging by the James River Corporation. The FTC alleged that this merger of the two largest U.S. manufacturers of frozen food film would reduce competition in the manufacture and sale of frozen food film and grocery bags, and the companies abandoned the transaction.

Conclusions

Between 1950 and 1990, antitrust greatly influenced the organizational evolution of the U.S. pulp and paper industry. Government’s extensive and sustained antitrust interventions in the industry were part of a much larger political movement that attempted to reconcile free enterprise with democracy. In the case of pulp and paper, public policy emphasized the need to secure consumer welfare by preventing large mergers that potentially reduced competition and by policing trade practices deemed unfair. Antitrust officials opened several dozen investigations into the pulp


and paper industry and litigated well over fifty cases. In the process, they forced firms to alter dramatically their organizational strategy and behavior and ultimately reshaped the industry.

The antitrust experience of pulp and paper between 1950 and 1990 can be divided roughly into two stages. Between 1950 and the mid-1970s, questions of competitive structure dominated the antitrust framework. Between 1970 and mid-1980s, antitrust in pulp and paper centered on cartel and price fixing cases. With inauguration of the Reagan administration, antitrust issues calmed significantly down in the pulp and paper industry. It is beyond the scope of this report to assess if a truly novel antitrust regime took hold during the 1980s, but evidence does support this idea sufficiently to suggest further research on the issue is in order.

Between 1950 and the mid-1970s, antitrust enforcement relied mostly on the Celler-Kefauver Act, which allowed officials to cancel or prevent mergers that they thought might injure the competitive structure of a given industry. In the context of the pulp and paper industry, and indeed of the entire forest products industry, the challenged posed by the Act was to determine what constituted the relevant competitive structure. Around 1950, the pulp and paper industry was fragmented into several distinct industry segments that were typically dominated by a few specialized firms. Government chose to enforce the Celler-Kefauver Act in the context of these specialized segments, such as sanitary paper, bag paper, fine and printing paper, and many others.

Such enforcement of the Celler-Kefauer Act undermined regional and product specialization of firms while encouraging geographical expansion and diversification. Similar conclusions have been drawn by a number of scholars for the economy as a
whole. In pulp and paper, political economy facilitated thorough transformation of the industry’s organizational strategy and structure, whereby firms adopting large-scale, multi-divisional structure had the best chances to survive legal challenges in merger cases.

Government enforcement of the Celler-Kefauver Act disadvantaged pulp and paper firms whose traditional competitive strategy was based on specialization in regional markets or excellence in particular technology. When such firms faced intensifying competition after 1950, their ability to respond through mergers and acquisitions that might have protected or expanded their existing market shares was restrained by antitrust officials. Political economy either induced specialized firms to expand geographically or to diversify, or made them attractive targets of acquisition for firms looking to grow and diversify. Increased diversification and size of firms probably accelerated the diffusion of certain forms of technological knowledge and learning, and thus may have significantly influenced the course of technological innovation in the industry. Definitive assessment of this subject, however, is beyond the capacity of this study.

Numerous voluminous antimerger cases suggest a deep-seated conflict between industry dynamics and public policy. Managers of specialized firms preferred strategic acquisitions within their own industry segments, but such options were quickly constrained. Government forged harsh segment-specific antimerger standards in high profile cases against Kimberly-Clark, International Paper, and many others firms. Government-issued divestiture orders cancelled several significant mergers. More importantly, they set legal standards that other pulp and paper firms simply could not

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ignore. For this reason, the sheer number of investigations and legal cases does not reveal sufficiently the extent to which antitrust officials shaped the industry. It is obvious, however, that political economy greatly influenced incentive structures that operated upon firms and managers, and thereby induced new forms of firm behavior.

The conflict between internal industry dynamics and public policy existed, or emerged, in large measure because antitrust was implemented on a segment-specific basis. Although antimerger enforcement by the FTC and the Department of Justice was carried out in the context of a larger policy framework, its execution and effect occurred within the context of specific industries and market sectors.

The second phase of antitrust enforcement, which centered on extensive cartel and trade practice cases, was in contrast largely harmonious with the larger public policy framework. Price-fixing litigation against large sectors of the pulp and paper industry intensified the competitive environment by maintaining and securing truly functioning markets for different paper commodities. This second phase of post-World War II antitrust experience also marked the stabilization of the competitive structure of U.S. pulp and paper industry within the framework of U.S. political economy. Since the early 1980s, antitrust disputes in the industry have calmed significantly, though the threat of antitrust remains a powerful force in the industry.