PRESENT-DAY JAPAN is a paper-and-pulp industry country, in that it ranks second in the world (after the United States) in the amount of paper it produces, and third in the world (after the United States and Canada) in the amount of wood pulp it produces. As is widely known, washi (Japanese paper) has been produced in Japan from the country's mediaeval period, and the process was being refined and developed as a household industry in farming and mountain villages up to around the 1920s. Because of difficulties of an industrial technology nature and the scarcity of raw materials, however, modern mass production of washi proved very difficult, and the characteristics of the washi product made the paper unsuitable for Western letterpress printing or for writing on with an ordinary pen. It is for these reasons that entrepreneurs, led mostly by private-sector businessmen, had already started grappling with the problem of producing Western paper in the 1870s.
A study of the figures (after subtracting what was exported) for total amounts of paper produced by enterprises that were members of the Japanese Paper Mills Association (later the Japan Paper Association), established in 1880 as a group representing businesses in that industry, shows that the rate of self-sufficiency in Western paper had already reached an average of 62% in the 1880s, an average of 68% in the 1890s and 1900s, an average of 87% in the 1910s, an average of 89% in the 1920s, and in the first three years of the 1930s, before the most powerful enterprise, Ōji Paper Company, Ltd, would unite in 1933 with its two main rivals, Fuji Paper Company, Ltd and Karafuto Kōgyō Company, Ltd, to become a giant monopolistic enterprise controlling over 80% of Western paper production, the average reached 91%.\footnote{Kiyofusa Narita, \textit{Nippon shigyo sōran} [Compendium of the Japanese paper industry], Ōji Paper Company, 1937 ed., supplementary statistics, pp. 6–17.}

This sort of production of Western paper not only required large amounts of capital investment in plant and equipment right from the start for things like paper-making machines manufactured in England, it also was one of the modern manufacturing industries that required in the manufacturing process engineering and chemical operations and treatments involving large quantities, speed, accuracy, and planning. Consequently, for operations to get started and to make progress in the industry, even allowing for differences at different periods of time, the things that were indispensable were: the formation and expansion of a market, a certain amount of capital and funds, and the ensuring of the technical capacity and management ability (and this would include ensuring capable personnel) to be able to carry out large-scale and at the same time efficient business activities. It was the entrepreneurs and enterprises that were in some way or other able to overcome the entrepreneurial and operational conditions competitively and through pioneering efforts that would go on eventually to build a niche for themselves, and a position of superiority, in the market (and this included imported paper) and in the competition that was waged in the industry.

The growth and rise to prominence before World War II of the leading enterprises of Ōji Paper Co. , Fuji Paper Co., and Karafuto
Kōgyō Co. tell a story of the effects of just such competition. These three companies, as mentioned above, were joined into a large combination of enterprises in 1933 and in so doing took over supremacy in the industry. As a result, though, after the end of World War II the General Headquarters of the Allied Forces occupying Japan dissolved this Ōji Paper Company and divided it into three separate companies: Tomakomai Paper Company, Ltd (present-day Ōji Paper Co.), Jūjō Paper Company, Ltd (present-day Nippon Paper Co.), and Honshū Paper Company, Ltd (merged with Shin Ōji Paper Co. in 1996, now part of Ōji Paper Co.).

Accordingly, in order to draw a clear picture of the historical development and transitions of the paper and pulp industry in modern Japan and the scene and meaning of the management activities in that industry carried on by way of autonomous behavior, a business history study of the growth and competitive relations of the three companies, Ōji Paper Co., Fuji Paper Co., and Karafuto Kōgyō Co., and of the factors and circumstances leading to the great combination of the three, is indispensable. In the first half of this study I shall examine and consider the entrepreneurial and operational management of these three companies, weaving together the threads of technology, the market, and the scene of competition.

I might mention that the rise of these three companies to prominence and their mutual competition went with opportunities and moves toward cooperative behavior that aimed at resisting the pressure of imports from Europe and the United States and alleviating and getting around the market risks that would result from competition among domestic enterprises. Setting in motion cartel activities aimed at an artificial regulation of market mechanisms, in particular, included in the management activities and scene of competing of these three companies a considerable number of common interests for them within the domestic industry. The great combination of the three also must be understood in the context of this grappling with, and participation in, cartel activities. And so in the second half of this study I shall examine and shed light on such things as the circumstances, meaning, and effectiveness of cooperative activities revolving principally around these three companies in the Japan Paper Association and Kyōdō Yōshi
Company, which functioned as the representative cartel organizations in the domestic industry prior to the war. Using this as a screen, as it were, I shall then project upon it and consider from many different angles the actual state of enterprise competition. By superimposing business history studies of the management activities and competitive relationships of these three leading companies and the cooperative activities that took place within the industry, it will become possible to obtain a systematic, three-dimensional understanding and grasp of the historical development and transitions of the paper and pulp industry in modern Japan and, I believe, make a major contribution to clarifying the true picture of business history in modern and contemporary Japan, including the period after World War II.2

THE MANAGEMENT AND GROWTH OF ŌJI PAPER COMPANY

Ōji Paper Company was established in Tokyo in 1872 under the name Shōshi Kaisha. Under the leadership of Eiichi Shibusawa, a high-ranking official in the Ministry of Finance who would later play a prominent role as a private sector entrepreneur in the development of Japan’s modern businesses, the Mitsuis and other wealthy merchants provided the funding, and the company was founded as a private sector enterprise in a form very similar to that of a joint-stock company, the first of its kind in Japan. Shibusawa thereafter resigned his government post and took part in running the company in the role of its top management.

Even with the benefit of guidance from Western technicians in the early years, operations in the Shōshi Kaisha mill in Tokyo did

2 Most of the historical source materials on management that I used for this study belong to the Paper Museum in Tokyo. In my search for and reading of those materials I was greatly assisted by members of the museum staff. Also, I benefited from the willing cooperation in the form of verbal history from persons formerly involved in the industry. To all of these I express my heartfelt gratitude. Finally, the principal foundation upon which I could put together the different pieces of this study was my most recently published work, Kindai Nihon seishigyo no kyōso to kyōchō—Ōji Seishi, Fuji Seishi, Karafuto Kōgyō no seichō to karuten katsudō no hensen [Competition and cooperation in the paper industry in modern Japan: The growth of Ōji Paper Co., Fuji Paper Co., and Karafuto Kōgyō Co. and transitions in their cartel activities], Nihon Keizai Hyōronsha, 1997.
not go smoothly, and the company was forced to endure hard times over a number of years. Bringing down production costs was the particularly pressing task to be achieved. And so in 1879, after the company was renamed Seishi Kaisha, a nephew of Shibusawa who had been assisting the Western technicians, Heizaburō Ōkawa, was sent to the United States for a little over a year.

After working in a number of paper mills and picking up techniques on his own, Ōkawa returned to Japan and was responsible for the successful production, for the first time, of pulp from rice straw; mixed with the pulp made from cotton rags that was in use till then, the company could produce a cheap, though still coarse, printing paper. The next step was taking on the introduction of a new method of making pulp from wood that had been made industrially feasible in Europe, and for this purpose a paper mill was built in 1889 in a mountainous area in Shizuoka Prefecture.

But this first outright attempt at producing wood pulp in Japan ended in failure. The sulphite wood pulp method of treating wood chemically that Ōkawa had adopted was just being put to practical use, even in Europe, and its production was still technically difficult; in addition, the pulp product was not of good quality, and it proved unfit as the raw material for the newsprint that had already become the company’s main product. On top of all this, the ground wood pulp method, which, though inferior in quality to the sulphite wood pulp method, had a higher raw material yield and entailed lower costs, had not been introduced in the beginning. As a result, Seishi Kaisha allowed Fuji Paper Company, which had followed on the tails of the commercialization of wood pulp, to rise to rapid prominence.

In 1893 Seishi Kaisha, now renamed Ōji Paper Company, finally embarked on building in the same Shizuoka Prefecture a newsprint mill that would produce and blend ground wood pulp and sulphite wood pulp. In 1989, while the mill was still being constructed, both Shibusawa and Ōkawa, who till then had been in sole charge of management, were forced to resign at the bidding of the most powerful of the shareholders, Mitsui. Thus it was that when the new mill was completed in 1899 the company had become both in fact and in name a Mitsui subsidiary. Operations were frequently interrupted, however, by things like river flooding,
with the result that the company’s business results gradually wors-
ened. Also, because the depreciation of mill assets by reason of
water damage was concealed instead of dealt with in the company’s
accounts, the company gradually fell deeper and deeper into finan-
cial difficulties. Finally, in 1902 the Mitsuis stopped providing
money from Mitsui Bank, made a shakeup of the managers it had
been seconding to the company from their ranks, and sent a new
person, Umeshirō Suzuki, to whom was entrusted the rebuilding of
the company’s management.

Besides taking such tough decisions as wiping off three-fourths
of the paid up capital and switching the debts on money borrowed
from Mitsui Bank (for which there was no hope of repayment) to
share capital, Suzuki put forward the concept of building a large
mill in Hokkaidō in order to achieve at one stroke an out-and-out
integration and mass production of wood pulp and newsprint. At
first the Mitsuis would have no part in the new mill scheme, but
later they agreed to it. But because Suzuki had deliberately provid-
ed an underestimate of the costs of the new construction, he was
removed from his post. In spite of all the obstacles, in 1910 the new
Tomakomai Mill was completed in Hokkaidō and in 1911 the
Mitsuis sent Ginjirō Fujiwara to be its new manager. From 1912 Ōji
Paper Co. once more ranked first in the country in the amount of
paper produced.

When World War I later broke out and the demand for Western
paper suddenly increased, the company pushed forward the
expansion of production by means of vertical integration from the
raw material stage by acquiring a pulp mill in Karafuto (present-
day Sakhalin) and other means. Even after the war ended the com-
pany strove to lower production costs by greater improvement of
productivity and increased production. As a result, even though it
was once again outstripped by Fuji Paper Co. from 1922 in the
amount of paper produced, it continued to rank first in profitabili-
ity and other indicators.3

3 I have written several studies on the business history of Ōji Paper Co. See “Shōshi
Kaisha sōgyōki no shikin chōtatsu” [Capital procurement during the foundation peri-
od of Shōshi Kaisha], Meiji Daigaku Daigakuin Kiyō [Memoirs of the Graduate School,
Meiji University: Business administration], vol. 10 no. 6 (1972): 103–14; Nihon ni okeru
yōshigō no kakuritsuka katei—Ōji Seishi Kaisha o chūshin ni [The development of the
I might mention in passing that Ōji Paper Co. would gradually carve out with Fuji Paper Co. oligopolistic domination in the country, the combined total domestic production of Western paper of the two of them amounting to 70% in 1920, but because they continued to compete by expanding production even after the end of World War I, they caused a chronic overproduction of paper. Pressure to import from overseas also gradually increased. For these reasons it came about that Ōji Paper Co. would take the further step of seeking a means of escape through regulation of market conditions by means of cartel activities in the industry, a step it had been toying with for a long time.

THE RISE OF FUJI PAPER COMPANY AND COMPETITION

Fuji Paper Company was established in 1887 in Shizuoka Prefecture with the aid of funding from a number of shareholders. At first the plan was to produce Western paper by using cotton rags and rice straw as raw materials, but when Jōichirō Majima was sent to Europe and the United States to purchase machinery he learned about the promising nature of wood pulp, so at his recommendation the company added to the plan the production of wood pulp. In addition to the sulphite wood pulp method, Majima at this time opted for and introduced the ground wood pulp method that had as yet not been adopted by Seishi Kaisha (later to become Ōji Paper Co.).

Thus it was that in the mill completed in 1890 it first of all began production of ground wood pulp, the first company in Japan to do this, and then the production of sulphite wood pulp. By blending these into the raw material for newsprint and a large number of other products it was able to bring down the cost of manufactured paper. As a result, as early as 1893 it was able to top Ōji Western paper manufacturing industry in Japan, with special emphasis on Ōji Paper Co.] (Master’s thesis, Graduate School of Business Administration, Meiji University), 1973; “Ōji Seishi Kaisha keieishi no kenkyū” [A study of the business history of Ōji Paper Co., Ltd], Meiji Daigaku Daigakuin Kiyo, vol. 12 no. 6 (1974): 69–81; and “Meiji chūki-Taishōki ni okeru Ōji Seishi to Fuji Seishi—kasenteki na hatten o motarashita keiei senryaku o chūshin ni” [Business strategies leading to oligopoly: A case study of Ōji Paper Co. and Fuji Paper Co.], Keieishigaku [Japan Business History Review], vol. 10 no. 3 (1976): 42–62.
Paper Co. in net profits and other results.

From as early as 1898 the company topped Ōji in the amount of paper produced, to become the top enterprise in the industry in the country. Next it planned the construction of a mill in Hokkaidō around the same time as Ōji, as a new growth strategy, and at the end of 1908 it completed the Ebetsu Mill. This mill could only produce less than half what Ōji’s Tomakomai Mill could produce, and eventually it would lose a large share of the domestic newsprint market. Also, the imposition of large-scale increased financing led to arrears in payment by shareholders, and financing took a turn for the worse. From around 1906 the worsening of business results began to be conspicuous. As a result Ichirō Murata, who had been the president of the company since 1891, resigned at the end of 1908. After his departure discord over management leadership surfaced between the management camp and the shareholders, leading to managerial turmoil.

The upshot was that in 1914 Shiro Kubota was invited from outside the company to rebuild its management. He would be greeted with the favorable conditions of World War I. The company had already been geared for a mass production system based on vertical integration from the raw material stages of paper and pulp production; even though it lagged far behind Ōji in getting a mill built in Karafuto, Kubota was responsible for its making a big gain in results during the war and for rallying to a healthy growth. But even Kubota, successful as he was, was forced to resign. There is even today a wide split among critics in their assessment of Kubota as a manager, but his activity as a rare non-shareholder salaried manager is still almost unknown. An examination of his exercise of leadership as a manager, using the records found in the Kōjōchō kaigi gijiroku [Minutes of the meetings of mill heads], reveals that from 1916 to the end of 1917 he had issued almost all of the “instructions” that often included ultimate decision-making, and his aggressive managerial intentions and participation are clear to be seen. But then at the end of 1918, apparently because there was not always a smooth seeing eye to eye between the highest management level and the technical staff, the exercise of this sort of leadership was gradually shelved, until finally control of the highest management authority went out of Kubota’s hands and into those
of Heizaburō Ōkawa.

After being driven out of Ōji Paper Co., Ōkawa had on his own established the Karafuto Kōgyō Co. (to be dealt with below) and was managing it. From 1912 he acquired shares in Fuji Paper Co., and was to participate in its management in his capacity of a powerful shareholder. Yet almost nothing is known about how he carried out his duties as concurrent president, nor about the management of Fuji Paper Co. in the period after World War I. From Shachō meireisho [Presidential order papers] we can say that he exercised leadership right down to much detail, mainly in engineering related matters; that he stubbornly pushed forward an expansion of production of newsprint and other items in which Fuji Paper Co. had conspicuously lagged far behind Ōji; and that from 1922 the company again became the largest in the country in the amount of paper produced.

But then from about this time business results stagnated and once again there appeared a worsening in the financial situation, and conflict over the exercise of managerial leadership surfaced between Ōkawa and Yōshichi Anamizu, two powerful shareholders who were in overall control of sales and finances. When, in the midst of its financial difficulties, the company began pushing ahead with the construction of a new major mill for newsprint in Karafuto in 1923, Ōkawa pushed ahead with the construction of a similar new mill for his Karafuto Kōgyō Company. As a result Anamizu seemed convinced that Ōkawa was planning on a future union of Fuji Paper Co. and Karafuto Kōgyō, and he whipped up distrust of the latter. When Anamizu died of illness in 1929, his shares were bought from his heirs by Ōji, and in this way Ōji gripped the reins of managerial authority as the largest shareholder.4

---

4 On the business history of Fuji Paper Company see the following studies by me.
"Meiji, Taishōki ni okeru Fuji Seishi Kaisha no kigyō seichō—Ōji Seishi to no hikaku ni oite" [Fuji Paper Co.'s enterprise growth during the Meiji and early Taishō periods as compared with Ōji Paper Co.], Meiji Daigaku Daigakuin Kiyo, vol. 11 no. 6 (1973): 103–21; "Business strategies leading to oligopoly," Keieishigaku vol. 10 no. 3 (1976): 42–62; "Fuji Seishi ni okeru Kubota Shirō—senmon keieisha to shite no kōdō o megutte" [Shirō Kubota in the Fuji Paper Co.: His actions and performance as a salaried
KARAFUTO KÔGYÔ JOINS THE FRAY AND CATCHES UP

Heizaburō Ōkawa, who would, as mentioned above, come to take part in the management of Fuji Paper Co., had prior to this, in 1903, established the Kyushū Paper Co., Ltd. and then subsequently, in 1913, with a view to producing sulphite wood pulp in Karafuto, the Karafuto Kōgyō Company. The mill of this latter company was completed during World War I, when the market price of pulp was skyrocketing, and the company made huge profits. Ōkawa consequently planned to have coherent integrated production, from pulp to paper, right there in Karafuto, so he had a new mill completed in 1919.

Such strategies for expanding operations with Karafuto Kōgyō as the main base were not only meant to counter Ōji Paper Co.’s pulp operations in Karafuto, but also to challenge the dominance of Ōji and Fuji in the paper industry. Moreover, as a result of his becoming involved in the management of Fuji, the percentage of the nation’s total Western paper production occupied by enterprises in which he was involved reached 45% in 1920, greater than Ōji’s 33% share.

When pulp market prices fell after the end of the war, Karafuto Kōgyō’s profit situation deteriorated. The two principal mills of the company were destroyed by fire in 1921. But because Ōkawa was convinced of the future growth of demand for pulp, he not only had the two mills rebuilt but also pushed ahead with the construction of a new pulp mill. The result was that the company ended up holding large quantities of accumulated pulp stock, so the new pulp mill was hastily converted into a paper manufacturing plant and Kyushū Paper Co. and other enterprises on the mainland were amalgamated, all with a view to strengthening the company’s competitiveness as an integrated paper and pulp enterprise.

manager], *Bunkei ronsō (Keizaigaku hen)* [Studies in the humanities: Economics], Hirosaki University, vol. 24 no. 2 (1989): 63–95; and “Ōkawa Heizaburō to Fuji Seishi—kennin yūryoku kabunushi keieisha to shite no kōdō to sokuseki” [Heizaburō Ōkawa and Fuji Paper Co.: His actions and legacies as concurrent powerful shareholder and manager], *Sōka keiei ronshū* [Sōka business history review], Sōka University, The Society of Business Administration, a special issue in commemoration of the retirement of Professor Kazuo Yamaguchi (1991), pp. 39–52.
By pushing ahead with increased production of pulp and paper even after the war, Karafuto Kōgyō strengthened its competitive standing vis-à-vis Ōji Paper Co. and Fuji Paper Co., but on the other hand its financial straits and slow start on the sales front added to its problems and deepened the poor state of its business results. As well, the plan of a combination with Fuji Paper Co. that Ōkawa was suspected of entertaining was frustrated when Ōji, as mentioned earlier, seized managerial control of that company. In 1930 Ōkawa put out discreet feelers to Ōji in regard to one big combination of all three companies, but Ōji reserved a decision. As a result Karafuto Kōgyō was put under the financial control of the Industrial Bank of Japan and other banks that it looked to for relief financing, and in the end it was forced in 1933 into taking part, with Fuji Paper Co., in a big combination of the three big companies, with Ōji Paper Co. assuming the leadership role.5

CARTEL ACTIVITIES THROUGH THE JAPAN PAPER ASSOCIATION

In order to clarify the significance and historical conditions of management in the paper and pulp industry in Japan prior to World War II it is necessary to analyze and consider cooperative efforts among domestic enterprises, including their response to pressure to import from Europe and other places. For this reason we shall begin with an examination of the cartel activities centering mostly on ordinary Western paper, as carried out through the Japan Paper Association. The forerunner of this association was the Japanese Paper Mills Association, established towards the end of 1880 as the first trade body in the area of modern mining and manufacturing industries in Japan. Against a background of domestic self-sufficiency in Western paper that had already reached the 70% level, and with reference to the existence of a paper man-

---

5 For more on the business history of Karafuto Kōgyō, see the following of my works: "Ōkawa Heizaburō to Karafuto Kōgyō no hatten" [A study of Heizaburō Ōkawa and the development of Karafuto Kōgyō], Keiei ronshu [Meiji Business Review], vol. 23 no. 3 (1976): 135-55; and "Ōkawa Heizaburō (Karafuto Kōgyō sōritsusha)—Seishō no eikō to zaset-su" [Heizaburō Ōkawa: A paper magnate’s glories and setbacks], in Nippon no kigyōka 2—Taishō hen [Japanese entrepreneurs 2: The Taishō era], ed. Tsunehiko Yui et al. (Yūhikaku, 1978), pp. 107-52.
ufacturers trade body in the United States, this association was established for the purpose of averting a fall in market prices, by means of a sales price agreement on domestically produced Western paper. However, an increase in low-price imports from England and other places forced a gradual lowering of the agreement price, and in 1883 the association was forced to abolish the agreement altogether.

I would note in passing that there is much debate about whether the Japanese Paper Mills Association was a trade union type of body or a cartel type of body. My own opinion is that, though it did not aim at a monopolistic control of the market, its actions were the first spontaneous cartel-type actions, aimed at an artificial regulation of market conditions in the mining and manufacturing sector in Japan, and so I think it is more appropriate to consider it a cartel-type body.

After the price agreement was abolished, a drop in the numbers of member enterprises and other factors led to the Japanese Paper Mills Association's being for a while no more than a friendly trade association, but in a few years there was a fresh impetus to strengthening its organization and activities. The first of the stimuli to such a move was the laying before the 1899 Imperial Diet, by a member of the Diet who was connected with the newspaper industry, of a proposal that would totally abolish import tariffs on newsprint and other items. The proposal aimed at reducing to zero an import tariff that was only approximately 1.163 yen (about a 10% ad valorem tariff) per 60 kilograms, under a unilateral conventional tariff agreement against the countries of Europe and America, but it failed to be approved and become law because time ran out and the Diet session ended. Still, among representatives of the domestic paper manufacturing industry who were involved in the campaign against the proposal, the feeble lobbying activities of the Japanese Paper Mills Association among government bodies and Diet members became very apparent. As a result, along with changing the name in 1899 to the Japan Paper Mills Union, they took steps to strengthen its organization and activities. All to no avail, because in 1906, when the government tried to raise the statutory tariff on general printing paper in the lead-up to 1911, when the agreement on tariffs would run out, the newspaper industry
demanded a large drop in import tariffs on newsprint, and their voices were so powerful they succeeded in getting the tariffs lowered to one yen.

This revealed the weakness of their political campaigning once again, so the paper and pulp industry representatives changed the name of Japan Paper Mills Union to Japan Paper Association and strove to make the body stronger, but it still could not oppose the powerful political force of the newspaper industry in the latter's role as an organ of public opinion. Again on the occasion of the revision of tariffs in 1910, despite the government's earlier unofficial decision to double the import tariff on newsprint, the opposition in newspaperdom was so great that this idea was set aside in the government's final draft bill, which was then approved in the Diet and made into law. This led the Japan Paper Association to carry out another organizational reform in 1913, raising another notch the guidance and administration system by centering it around consultation among the few leading enterprises, and eventually laying the organizational and functional groundwork for recommencing cartel activities during World War I.

The domestic paper manufacturers were unable to carry out more than a minimum of artificial regulation of the domestic market. Part of the reason was the existence of pressure to import, concomitant upon the reduction in import tariffs. But when World War I broke out, the drop in imports from overseas enabled the Japan Paper Association to raise the shipping price of paper by means of a price agreement—a move that greatly overheated the market.

When the war finally ended, market prices that had been skyrocketing fell drastically, and an oversupply surfaced in the market. Thereupon the Japan Paper Association in 1920 assessed the standard production capacities of each of the companies in regard to printing paper and other items, and on the basis of its assessment it ordered a joint reduction of 20% in the production of printing paper by all member enterprises, across the board. This agreement on joint reduction of production, the first of its kind, had a considerable effect on the recovery of the market, principally because demand still continued unabated for a while. With its purpose fulfilled, in 1922 the agreement was shelved, and the Association
once again took steps towards raising market prices through a price agreement.

Once entered into, this agreement also did not last; in 1926 it broke down when Fuji Paper Co. and other companies constructed new mills and once again overproduction surfaced. The Japan Paper Association stepped in again, imposing a second joint reduction of production. This time it was a graduated rate of reduction, corresponding to the amount of standard production capacity of each of the member companies in regard to printing and other paper, so that Fuji Paper Co. would reduce by 16%, Ōji Paper Co. and Karafuto Kōgyō by 12%, and so on. Later it imposed a further across-the-board cut of 5% on all companies. In spite of this, the paper companies continued to push ahead with the construction of new mills and to increase their productivity, so the result was that this second joint reduction of production did not have the same effectiveness as the first one, and it was suspended at the end of 1928.

Early in the new year, however, a third joint reduction of production was carried out. This was prompted by the acquisition of capital control over Fuji Paper Co. by Ōji Paper Co., mentioned earlier in this study. On the basis of a newly assessed standard production capacity at each company, the Japan Paper Association once again imposed a mandatory production reduction of 10% on each company across the board; it also recommended an additional 10% voluntary reduction, and a mandatory 20% reduction of production on newly installed papermaking machines. Since this did not have the desired effect of eliminating overproduction, the Association soon raised the mandatory production reduction level for the largest enterprises to 25%. When the Japanese government pushed through a lifting of the gold embargo in 1930 and market conditions deteriorated even more, the Association sealed off all its members' stock in excess of two months' worth of "actual production quantity" (a company's standard capacity minus the joint production reduction amount). It exercised joint control over these for two years, and halted shipments. Later the production reduction was unified to a mandatory 35% on all members across the board, and price agreements were revived.

In spite of all the Association's efforts, it did not succeed in eliminating overproduction, so, to increase its efforts in regard to joint
production reduction and the sealing off of inventories, in 1931 it returned to a graduated rate of reduction. Towards the end of that year the rate imposed on Ôji and Fuji was 55% each, and on KARAFUTO 51%. It also counted one month’s worth of each company’s inventory as 108% of that company’s “actual production quantity” and sealed off all of the rest of its inventory. Despite all this, there were limits to the extent it could help the market recover and to the amount of regulation it could impose. As a result, the management at Ôji started thinking that a high rate of reduced production would instead raise the costs of paper production, while the joint control of inventories was open to many abuses as far as product strategies were concerned, so the time was ripe for examining the advantages of a large enterprise combination with Fuji and Karafuto, and for committing the company to that course of action.

To assess the cartel effectiveness of the Japan Paper Association, one might think of using as the criteria upon which to base one’s judgement trends in prices (if one is judging it as a price cartel) or trends in production amounts (if one is judging it as a production limiting cartel), but, since these alone are insufficient, trends in long-term profits are often taken up. The study by Norio Tominaga deals with this last criterion. In this study Tominaga examines whether or not there exist significant differences in the degree of participation by, and the profitability of, industries that formed cartels in Japan between the two world wars, as compared with those industries that did not form cartels, with fluctuations in demand also taken into account. As regards the degree of participation in such cartels, no noticeable difference between the two types of industries was found. As regards profitability, the author judges the size of cartel effectiveness from the difference between the average profitability of 41 different industries over three periods between 1926 and 1936, and the profitability amended and estimated on the basis of demand increase factors, and concludes that the cartel effectiveness in the paper manufacturing industry was considerable in the period from 1926 to 1929, second to that of the cotton spinning industry, second to that of the grain hulling and flour milling

---

6 Norio Tominaga, “Ryōtaisenkanki no karuteru katsudō to sono kōka” [Cartel activities between the two world wars, and their effectiveness], Shakaikeizaishigaku [Socioeconomic history], Socioeconomic History Society, vol. 47 no. 5 (1982): 66–91.
industry in the period from 1930 to 1931, and again second to that of the cotton spinning industry in the period from 1933 to 1936.

The problem is that this study looked at the cartel effectiveness of all the industries as a whole and neither looked at the Japan Paper Association in particular nor looked concretely at cause and effect relationships as they have to do with actual cartel activities, so that it completely left out of consideration the effects of the improvements in productivity that were so notable around that time.

Consequently, if one looks only at the cartel effectiveness of the Japan Paper Association, it becomes clear that it was only after 1930 that it had any trump card sort of significance as a market condition strategy. The principal cause of skyrocketing market prices during World War I was to be found in the sudden jump in demand. Its cartel activities after the war, on the contrary, were of a different dimension altogether, in that they aimed at restoring health to market conditions that were deteriorating, but because the leading paper manufacturers were continuing to expand production, the Association’s effectiveness was still limited to a great extent.

After the lifting of the gold embargo, however, demand fell very low, and rationalization of production peaked, so that each of the enterprises involved looked upon cartel activities as the trump card they needed as a countermeasure against recession. Thus it was that around the end of 1931 things came to such a pass that printing paper was widely reputed to be “completely regulated.” However, the series of cartel activities did not succeed in radically relaxing competitive relations between one member enterprise and another, and it made the leading enterprises become aware of the long-term costs of competitive pressure and cooperation. It was for this reason, when earnings took another turn for the worse from 1930 on, that Oji Paper Co. came to contemplate the combination of the three largest paper manufacturers as a more potent means of regulating the market.7

7 I have published the following studies on the activities of the Japan Paper Association: “Seishijo Rengōkai no setsuritsu to kakaku kyōtei—Nihon ni okeru karuteruteki katsudō no kōshi” [The establishment of the Japanese Paper Mills Association and price agreements: The beginning of cartel-type activities in Japan], Bunkei ronsō (Keizai gaku hen), vol. 15 nos. 2/3 (1980): 41–71; “Daiichiji taisenki zen no Nihon Seishi Rengōkai—kindai Nihon seishigyo ni okeru dōgyōsha dantai no soshiki to kinō no hensen” [Japan Paper Association before World War I: Changes in organization and
CARTEL ACTIVITIES THROUGH KYÔDÔ YÔSHI COMPANY

We may next examine the joint sales activities of Kyôdô Yôshi Company, activities that represented cooperative actions among the enterprises in connection with newsprint, which was the principal product and market area of the leading paper manufacturing enterprises.

It seems that newsprint had already become the principal product of the leading paper manufacturers when the Japanese Paper Mills Association carried out its first price agreement around the end of 1880. Sales of this product were at first made direct to the newspaper publishers, but eventually it took place via agent merchants who specialized in dealing in Western paper, first mainly by sales on consignment, then mostly by special-contract agency sales. The newspaper publishers, however, right from the beginning also used imported paper and, except for the periods of the Sino-Japanese and Russo-Japanese wars, generally maintained a buyers' dominance over the domestic paper manufacturers. This was behind the establishment in 1901, through the joint funding of Ôji, Fuji, and other paper companies, of Kyôdô Yôshi Company (Unlimited Liability) to act as their newsprint joint sales organization and thus counter the unfavorable situation.

At first Kyôdô Yôshi bought up all the newsprint produced by each of the paper manufacturers that funded the company then sold it to special contract seller merchants at a fixed joint sales quotation, who in turn sold the newsprint to newspaper companies. Later, from 1908 it began to buy up the amount of newsprint from each manufacturer that represented the standard production capacity that had been previously assessed for each manufacturer, and then from 1912 it switched again to sales on consignment from each of the paper manufacturers.

It seems, however, that these joint sales of newsprint by the company did not produce any immediate conspicuous effects in regard
to market regulation. Each of the paper manufacturers continued to compete with one another in trying to make sales to the biggest newspapers. And the low import tariffs mentioned earlier also greatly limited the joint sales activities of the company. It should be pointed out that by around 1910 newsprint represented over one-third of the Western paper that was produced in Japan, and after World War I for a time, albeit a short time, it represented over one-half, but domestic newspaper companies made skillful use of the fact that they were able to have access to imported paper as a bargaining tool to obtain discounts on the Kyōdō Yōshi quotation price.

As a result, even during World War I, when it was a seller's market for newsprint, the company set aside its joint sales quotations until the end of 1916, among other reasons out of regard for the bargaining power and political power of the leading newspapers, and it even held later price rises to around half of what the market really called for. So if the purpose of the company as a joint sales cartel was to raise prices above actual market forces, it can be said to have had no notable effects to speak of.

The company's normal procedure was that it would take into its warehouses newsprint consigned to it for joint sales by each of the paper manufacturers that were funding the company; when newspapers ordered a certain brand it would sell it to a special-contract seller merchant at the fixed agreement quotation for a note receivable with a 45-day limit payable by the end of the month, subtract a handling charge from the proceeds (in the latter half of 1925 the handling charge was an average of 1.7%), and pay the remainder to the paper manufacturer enterprises. The special-contract seller merchant, meanwhile, once it purchased newsprint from Kyōdō Yōshi in response to an order from a newspaper, would add some commission to the price and sell it to the newspaper for a note receivable with a 45-day limit payable by the 25th of the month. In the case of dealings with the leading newspapers, however, it was not unusual for the paper manufacturing enterprises to hold talks with them directly, and the special-contract merchant only had to take care of shipping the goods and collecting the money.

The company lost large quantities of consigned stock in the fires that accompanied the Great Earthquake of 1923, thereby incurring
an enormous loss. This apparently caused increased misgivings about the unlimited liability aspects of the company's status as a limited partnership, because in 1925 it relinquished its limited partnership status and started anew as a limited liability joint-stock company. It also took this opportunity to abolish the limit on the quantity of joint sales consignment that had been determined from 1908 on in accordance with the newsprint standard production capacity of the paper manufacturers and to accept consignments without any limit, but because by doing this it soon ended up with a huge stockpile of newsprint, in the following year (1926) it reestablished a limit on consignment: no more than three months' worth of joint sales newsprint. At this point Ōji Paper Co., Fuji Paper Co., and Karafuto Kōgyō, at the time the only three enterprises taking part in the joint sales program, came to a voluntary agreement, not publicly announced, to embark on joint reduction of production of newsprint. The average rate of production reduction for the three was 14.7%.

Even this measure did not succeed in eliminating the overproduction, however, so Kyōdō Yōshi's joint sales quotation was lowered even more. Nonetheless, because the deterioration in market conditions for newsprint was still moderate compared with that for general Western paper and the paper manufacturers still entertained hopes that there would be an increase in demand, they pushed ahead with things like plant expansion. Kyōdō Yōshi then introduced a new allocation system for each of the manufacturers on a pro rata scale based on the amount of sales consignment of each; this was done to deal with joint sales results and fluctuations in the amount of inventory.

This substantial strengthening of joint production reduction, combined with an improvement in demand just at that time, had a considerable effect, it seems, on eliminating overproduction. The sudden drop in market prices temporarily halted in 1927, and in the latter half of 1928 there were clear, if temporary, signs of recovery. But the negative side of the picture was that from around 1926 the use of imported paper by newspapers once again became conspicuous, and the paper manufacturers went on doing things like secretly giving the leading newspaper companies a partial rebate off the joint sales price.
Japan's lifting of the gold embargo in 1930 at former par, which put 100 yen at over 49 US dollars, was a high-yen inducing measure greatly exceeding the 38-dollar level that seemed to be the real par value. The result of this was that imports of newsprint, first from northern Europe, then from Canada, increased rapidly. Even to the present day this sudden rise in imports has been seen in Japan as dumping, but the cause of it lay in high-yen induction on the foreign exchange market through Japan's own lifting of the gold embargo at former par. So, for example, the estimated forwarding price of shipments from Canada to Japan was hardly different, when converted into dollars, from the estimated forwarding price of shipments from Canada to the United States. Still, this sudden rise in imports dealt a severe blow not only to the joint sales system of Kyōdō Yōshi but also to the business operations of all of the leading domestic manufacturers. These latter were forced to counter-attack by lowering the joint sales quotation and, in addition, occasionally by paying secret rebates that disregarded profit altogether.

It was when Oji Paper Co. had drawn up specific details of a large united enterprise with Fuji Paper Co. and Karafuto Kōgyō to cope with their problems and had made an unofficial decision to go ahead with the plan, that a new wave of dumping imports from Canada began. Because the reimposition by Japan at the end of 1931 of a gold embargo caused the Japanese yen to drop sharply from an average of slightly under 48 dollars per 100 yen in 1931 to just over 28 dollars per 100 yen in 1932, an end was forecast to the import offensive from overseas. However, at this time enterprises and mills on the Canadian Pacific coast pushed ahead with dumping exports to Japan. Still, around this time Oji Paper Co. had already concretized plans for a big combination of the three enterprises, and the international price competitiveness of its own products was gradually recovering as a result of the new weakness of the yen, so it adopted a wait-and-see attitude until the dumping calmed down as a result of a recovery in the American market from 1934.

Let us next examine the cartel effectiveness of Kyōdō Yōshi. Joint sales of newsprint was instituted for the purpose of sublating the competition among domestic paper manufacturers to sell to newspaper companies and Western paper merchants and to counter the buyers' dominance enjoyed by the newspaper compa-
nies, yet each of the paper manufacturers half openly continued to compete in selling directly to them. As a result there was hardly any visible sign of cartel effectiveness up to and including the first half of 1925. Still, the reason Kyōdō Yōshi was able to continue joint sales in spite of all this is thought to be that it was effective in at least regulating sales competition in the market on the special-contract merchants' level.

Furthermore, from 1927 Kyōdō Yōshi carried out an allocation system for the quantity of newsprint accepted on consignment from each of the paper manufacturers. The result of this was that voluntary joint production reduction went ahead and an artificial stabilization, even though temporary, of market conditions was realized by easing overproduction. Still, even this cartel effect would prove powerless against the import offensive from overseas countries after Japan lifted the gold embargo, and the scheme to unite the three leading paper manufacturers took on concrete form.

If we compare the effectiveness of the cartel activities of Japan Paper Association and Kyōdō Yōshi, we find that, during the period after World War I, when cartel regulation became an important managerial prerequisite as far as the domestic paper manufacturing industry was concerned, there were signs of cartel effectiveness in the two big product and market areas of general printing paper and newsprint, first on the part of the Japan Paper Association, then by Kyōdō Yōshi, and then once again by the Japan Paper Association. And the manufacturers that were most deeply connected with these cartel activities and most profited, even if only in the short term, by the restriction of competition and regulation of the market, were the three companies of Ōji Paper Co., Fuji Paper Co., and Karafuto Kōgyō Co. Accordingly, this means that these cartel activities had, even as they contained within themselves one limitation of cooperation (the setting aside till a future time of long-term competitive relations among the participating enterprises), a great deal to do with the oligopolistic domination of the industry by these three companies and the later formation by them of the large enterprise combination.8

8 I have published the following studies on the activities of Kyōdō Yōshi: “Senzenki Nihon ni okeru shinbun yōshi kyōhan karuteru no tenkai—Kyōdō Yōshi Kaisha no katsudō ni tsuite” [The development of newsprint joint sales cartels in prewar Japan: The
CONCLUSION

Ōji Paper Co. and Fuji Paper Co. paid close attention not only to overseas technological trends and trends in imports from overseas but also to each other's strategies and actions, and they often imitated each other and followed in each other's footsteps. Even so, differences in autonomous individuality and timing in their decision-making and actions, as well as differences in environmental conditions, naturally sometimes caused big differences in the superior or inferior position one or the other enjoyed in their mutual competition and opposition. The changes made on the management level also exerted a great influence on each one's decision-making and manner of doing things.

From the 1910s Karafuto Kōgyō entered into a competitive relationship with Ōji and Fuji—even though manifesting a somewhat obvious inferiority, formed with them a sort of three-sided oligopolistic competitive relationship, and later was part of an alliance relationship with Fuji when Heizaburō Ōkawa concurrently held the post of president. Yet eventually Karafuto would become financially exhausted, and Ōji would succeed in gaining capital control of Fuji, so that the result would be a temporary conclusion to the competitive relationship among the three companies.

Now, the growth and rise to prominence of these three companies led to opportunities for cooperative action, and moves in that...
direction, for the purpose of countering the pressures of imports from overseas and alleviating and even eliminating market risks on the domestic scene. The concrete manifestations of this were the cartel activities of the Japan Paper Association and Kyōdō Yōshi. As a result, after World War I there were signs of cartel effectiveness, albeit short-term, in the limitation of competition and the regulation of market conditions. Nevertheless, these cooperative activities only kept the relationships of competition and rivalry among the three under long-term wraps, and even regulation of market conditions did not always match its earliest results, thanks to such factors as import paper offensives. When the relationships of competition and rivalry of these three companies presented aspects of a war of attrition despite the fact that those relationships were gradually showing quite clearly where dominance lay, these relationships led to frustration of the interests of their cooperative actions. Because each of the three companies was convinced of the long-term expansion of the market, they finally aimed at arriving at a decisive conclusion to their competitive relationships by means of an expansion of production.

The historical end result of these oligopolistic relationship of competition and rivalry and cooperative actions was not the weeding out of one or other of the three enterprises but the choice of an enterprise combination based on the consent of all the parties. In other words, what was finally to be chosen in the historical competitive and cooperative actions carried out around the three leading companies in modern Japan's paper and pulp industry was nothing other than the formation of the (Greater) Ōji Paper Company, Ltd.