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Speculations from Tax Law and Civil
Procedure

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Vertical Integration in Japan:

Speculations from Tax Law and Civil Procedure

By J. Mark Ramseyer\*

#### Abstract

Although logically attractive, the Klein-Crawford-Alchian model of vertical integration fails to explain the greater prevalence of vertical integration in the U.S. than in Japan. Neither does the cross-national difference in the tax treatment of mergers and acquisitions. Instead, the greater use of vertical integration in the U.S. more likely stems from cross-national differences in civil procedure: where strike suits by minority shareholders can often profitably be brought for their settlement value in the U.S., they are far more likely to be dismissed in Japan. Perhaps, in short, U.S. firms vertically integrate because such integration forestalls minority strike suits.

Key words: Vertical Integration in Japan

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Vertical integration is a puzzle. If a firm bought its supplies from other firms, it could exploit the high-powered incentives that market contracting gives.

Notwithstanding, many firms sacrifice that advantage, and integrate vertically with their suppliers. They do so, according to recent theory, because of the relationship-specific investments they have at stake. More specifically, they integrate vertically when their trades involve large investments that lack a shadow use, and expose them to the risk that their business partners will try to renegotiate contract terms ex post.

If the modern theory of vertical integration apparently explains the U.S. well, it stalls when it hits Japan. For by this theory, vertical integration should have proceeded much farther in Japan than it has. In contexts where theory suggests that the firms should have brought their suppliers in-house, Japanese firms continue to contract across the market.

In this short article, I explore two reasons for the different patterns of vertical integration in Japan and the U.S. I begin by outlining the puzzle (Section 1). I then ask whether the tax treatment of corporate reorganizations might explain the differences (Section 2 & Appendix). As both Japan and the U.S. liberally provide for tax-free mergers, I conclude that it does not. Finally, I speculate

on whether the ease of bringing minority shareholder suits might explain the difference (Section 3). Very tentatively, I conclude that it may.

## 1. The problem.

To scholars interested in vertical integration and the theory of the firm, Japanese firms present a puzzle. According to modern theory, firms in Japan should integrate far more extensively than they do. Consider Benjamin Klein, Robert Crawford, and Armen Alchian's classic explanation for vertical integration. By this account, vertical integration results from appropriable quasi-rents involved in the production process. 1 Suppose, for example, that in order to manufacture its products, firm A needs a machine that it cannot use elsewhere, and that benefits it only through trades with business partner B. Should A contract with B across the market, it runs large risks of opportunistic "hold-ups." Once it buys the machine, after all, B can threaten to stop trading with A. Because A cannot readily shift the machine to another use, by stopping trade B can destroy the value of the entire machine. Through that threat, in turn, it can push A to

<sup>1</sup> Klein, Crawford & Alchian (1978); see also Klein (1988);
Williamson (1979). For a survey of empirical tests of the theory, see
Joskow (1988).

change the terms of the contract to its unilateral advantage ex post.

Although firms can mitigate these risks through long-term contracts, they often find it easier to bring their business partners in house. Too often, the long-term contracts create their own set of inefficient incentives or simply cost too much to enforce in court. Rather than risk hold-ups or rely on such inefficient contracts, the firms integrate.

To motivate their theory, Klein, Crawford, and Alchian tell the story of General Motors and Fisher Body. Through the early 1910s, car makers used wooden bodies. By 1919, they had shifted to steel. To make the new bodies, they now needed expensive stamp dies. More importantly, they needed dies that were specific to particular car models. GM had been buying its bodies on the market from Fisher. So long as it could readily buy bodies from several coach makers and Fisher could readily sell its coaches to several manufacturers, the two firms could use simple contracts. Faced with large investments in stamp dies that they could use only for one purpose, they found themselves locked in an elaborate strategic game. They tried a long-term contract, but found it not worth the trouble. Rather than continue the game, by 1926 GM had bought all of Fisher Body.

Klein, Crawford and Alchian's story coheres.

Unfortunately, it misses the Japanese experience by a mile.

And it misses it in the very industry on which they based their discussion: the automobile industry. Toyota, for example, deals not with an in-house body division. Instead, it deals with an independent firm called Toyota Car Body (Toyota shatai). In Car Body, it and its affiliates own merely 53 percent. Nissan similarly buys its bodies from Nissan Car Body. In it, it and its affiliates own 48 percent. Truck maker Hino buys from Hino Car Body. Once again, it owns 43 percent (Kigyö, 1996).

This lack of vertical integration is apparently not peculiar to the automobile industry. Rather, it characterizes a wide variety of industries and results in smaller firms generally. On average, Japanese firms are smaller either than their U.S. or their European counterparts. As Yoshiro Miwa incisively put it:2

Small business occupies the dominant portion of the Japanese economy. Most Japanese firms are small, most Japanese workers are employed by small firms, and more than half of the value added in the corporate sector is produced by small firms.

Even the biggest Japanese firms are small. Toyota, again, employs fewer than a tenth the employees of General Motors, and has only half the sales. Hitachi has fewer than

<sup>&</sup>lt;sup>2</sup> Miwa (1996: 10); <u>see also, e.g.</u>, Patrick & Rohlen (1987: 335).

a third the employees of General Electric, and perhaps half the sales. Mitsubishi Chemical has a sixth the employees of Dow, and less than a third the sales (Table 1). Where American firms vertically integrate and produce in-house, Japanese firms stay small and buy from sub-contractors. Where American firms buy companies outright, Japanese firms buy fractional interests and stop. The question is why.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> This is exactly the question aptly posed by Ronald Gilson and Mark Roe (1993: 890): "The end result for the GM-Fisher Body problem was complete vertical integration, raising a serious problem for our model: why is vertical integration not a general solution for investments in relation-specific assets? Shouldn't the factors <u>always</u> choose vertical integration -- complete, not partial ownership -- as the full solution?"

Table 1:
U.S., European, and Japanese Firm Size

<u>General Motors</u>		Volkswagen	<u>Toyota</u>	
Employees	751,000	266,000	72,000	
Sales	124,705	50,290	68,375	
General Electric		Philips	<u> Hitachi</u>	
Employees	284,000	240,000	82,000	
Sales	60,236	33,282	31,337	
	Du Pont	ICI	Toray	
Employees	133,000	128,000	10,000	
Sales	38,695	23,321	4,782	
	Dow Chem.	Bayer	<u>Mitsubishi Chem.</u>	
Employees	62,000	162,000	10,000	
Sales	18,807	27,941	5,804	

Note: Sales are \$ million, in 1991.

<u>Source</u>: Yoshiro Miwa, Firms and Industrial Organization in Japan 10 (Houndsmills, U.K.: Macmillan, 1996).

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## 2. The tax hypothesis.

One explanation for the differential use of vertical integration in the U.S. and Japan goes to tax. Were one to glance at Japanese tax law, it would seem to suggest that firms cannot reorganize tax-free. As the BNA Tax Management Portfolio put it (while recognizing some exceptions) (1997: § II.B.9):

Tax-free reorganizations are not generally possible under Japanese tax law, and almost all corporate restructuring will produce taxable events in which any previously unrecognized gains on appreciated assets which are transferred from one corporate entity to another must be realized and subjected to taxation.

If U.S. firms can vertically integrate without triggering a large tax liability but Japanese firms cannot, tax law will deter some mergers in Japan that would proceed in the U.S. If so, it would seem to explain some of the relative lack of vertical integration in Japan.

In fact, the hypothesis does not work: firms can indeed merge tax-free in Japan. The steps they must take to do so are sufficiently arcane and otherwise senseless that only the well-advised will succeed (although that much probably describes the U.S. as well). Yet the basic point is crucial -- should two firms plan their affairs carefully, they will usually be able to merge without incurring a tax liability. As a result, tax law simply cannot explain the cross-national differences in vertical integration.

Unfortunately, the law itself is torturously complex; rather than interrupt the discussion with an explanation here, I have placed the discussion in the Appendix.

## 3. The litigation hypothesis.

3.1. <u>The United States.</u> -- If contractual opportunism drove GM to absorb Fisher Body, how can Toyota and Nissan profitably buy similar services from independently

organized firms? If opportunism does not plague Nissan and Toyota, why then did GM buy Fisher Body?<sup>4</sup> As a tentative explanation for these puzzles, turn to shareholder litigation. The argument proceeds in several steps.

a. The irrelevance of a merger. First, to solve the hold-up problem that Klein, Crawford and Alchian identified, a firm need not merge its business partners into itself.

Instead, it need only buy control. With a majority interest in Toyota Car Body, Toyota controls its assembler. Since Nissan Car Body and Hino Car Body are both Tokyo Stock

Exchange listed firms, by acquiring over 40 percent of their shares, Nissan and Hino effectively control them too. With that control, they can eliminate opportunistic contracting schemes as surely as if they merged the firms into themselves.

Second, if a 40 to 50 percent interest gives control, the question is why GM merged Fisher Body -- why it acquired 100 percent of the firm rather than stop with a controlling interest. By 1919, it owned 60 percent of Fisher Body (Sloan, 1963: 15). With that majority stake, it already had total control over the firm; it gained no further control over contracting policy by buying the rest

<sup>&</sup>lt;sup>4</sup> For a very different argument -- the claim that opportunism is generally a more serious problem in the West than in Japan -- see Dore (1987: 173).

of the stock. What induced it nonetheless to do so over the next few years?

Shareholder litigation. Perhaps the answer to the puzzle lies in civil procedure. More precisely, perhaps the reason U.S. firms are more likely to integrate vertically lies in the receptivity U.S. courts show to conflict of interest claims brought by minority shareholders. In the U.S., a firm that buys a controlling interest in a business partner but less than 100 percent buys a law suit. Because of their business ties, the two firms will regularly transact with each other. If they trade goods and services with a clear market value, matters stay simple. In many business contexts, however, the firms do not. Instead, they trade intermediate goods and services for which only ambiguous price signals exist. In the absence of clear price signals, though, minority shareholders will find it relatively easy to claim plausibly that the parent biased the prices to its private advantage. Expensive litigation ensues.

If shareholder suits actually corrected for fiduciary duty breaches, then majority shareholders might welcome their availability as a precommitment device. In fact, recent empirical studies find no such effect. According to Roberta Romano (1991: 84), "most shareholder suits settle,

[and] the settlements provide minimal compensation." "The principal beneficiaries of the litigation," she concludes, "appear to be attorneys, who win fee awards in 90 percent of settled suits."

c. <u>Dodge v. Ford.</u><sup>5</sup> For GM in 1919, the threat of opportunistic shareholder litigation was not an abstract concern. It was brutally concrete -- for its chief competitor had just weathered a catastrophic shareholder suit. By 1905, Henry Ford had owned 58 percent of the Ford Motor Company. From the start of the firm, the Dodge brothers Horace and John had owned a 10 percent stake. Since 1903, they had supplied parts to Ford, including engines, transmissions and axles. By the mid-1910s, they were making their own cars. They now competed directly with Ford.

In 1908, Ford had started selling the Model T. The car sold wildly, and to maintain that success Ford steadily improved the car and cut its price. By 1916, Ford sold a better version of the car it had introduced at \$850 for \$360. This was a strategy that made money, lots of it. Although founded in 1903 with \$150,000, by 1911 the firm paid "regular" dividends of \$1.2 million per year and from

<sup>&</sup>lt;sup>5</sup> <u>See generally</u> Dodge v. Ford Motor Co., 204 Mich. 459, 170 N.W. 668 (1919); Klein & Ramseyer (1994: 154-57); Nevins (1954)

1913 to 1915 paid annual "special" dividends (the categories have no legal signficance) of \$10 million or more to boot. All this was but a small fraction of its profits, and by 1916 it held over \$50 million in cash.

Ever eager to expand, Henry Ford decided to stop
paying the special dividends and invest the money in what
would eventually become his giant River Rouge plant. For
the fledgling Dodge company, his decision would make an
already effective competitor more ruthless still.
Apparently determined to cripple Ford any way they could,
the Dodge brothers sued. Henry Ford owed his minority
shareholders those special dividends, they told the judge.
In investing the money in River Rouge, he breached his
fiduciary duty to them.

By any measure of sense legal or common, the Dodge brothers had filed an abusive suit. Theirs was exactly the kind lawyers and law professors ridicule over drinks and reformers cite to justify restrictions on the plaintiffs' bar. Dividends are a discretionary affair -- and the point is as basic to corporate law as any legal rule ever was. Although the courts sometimes stop firms from paying too much in dividends, they almost never order them to pay more. All the more so when, as here, the firm has a sensible plan for what it hopes to do with the cash.

As wildly implausible as the claim was, however, the court bought it. Ford, it held, must pay the dividends. At root, Henry Ford had simply been too proud. Had he told the court he wanted to make more money, all would have been well. But instead he had to assure the world (and the court) that no robber barron was he. He was not like the Rockefellers, the Carnegies, the Mellons or the Morgans. He built fine cars, he sold them cheap, he paid his workers high wages -- and all this he did because he wanted not to do well, but to do good. All this he did out of magnanimity. The lawyer for the Dodge brothers latched onto his testimony, and convinced the judge he was using the firm as a "semi-eleemosynary institution."

The result was disastrous. In 1913, the top marginal federal tax bracket had been a mere 7 percent. By 1920, World War I had pushed it to 73 percent. In effect, through their suit the Dodge brothers forced Ford to pay massive amounts directly into the federal treasury.

GM's decision to bring Fisher Body in-house coincides with this litigation at Ford. The Michigan Supreme Court ordered Ford's dividends in 1919, and by the mid-1920s GM had decided to absorb Fisher Body. Had GM cared only about controlling opportunistic hold-ups, it could have stopped with the 60 percent it already owned in 1919. It had no need to buy the entire operation. But it did buy it, and

made Fisher Body an internal division. At least tentatively, history suggests it did so to prevent exactly the plight its chief competitor had just endured.

3.2. <u>Japan.</u> -- Japanese firms face substantially lower risks of shareholder litigation. Most basically, Japanese courts do not use juries. U.S. courts do, and the deference they show their juries increases their willingness to let implausible claims go to trial. Freed from that concern, Japanese judges apparently dismiss nuisance suits far earlier and more freely.

At least until recently, Japanese courts also imposed a variety of obstacles to derivative suits. As a result, from 1950 to 1990, shareholders filed fewer than 20 derivative suits in Japan (West, 1994: 1438). Until 1993, a claimant suing for ¥1 billion (just short of \$9 million) would have owed an upfront stamp tax (reimburseable if he won) of ¥3,117,600 (about \$27,000). Often, courts made him post security for expenses besides (<u>id.</u>: 1463-66). The result, as Mark West explained in his careful study, is that the "price of the derivative action in Japan [was] significantly higher than in the U.S." (<u>id.</u>: 1456). Only since 1993 have shareholders even begun to bring these suits.

The 1993 legal changes lowering derivative suit filing fees potentially present a test. Given the lower filing fees, shareholders may now begin to bring suits alleging fiduciary duty claims. To the extent that they bring nuisance suits, the theory presented here suggests vertical integration should increase as well; to the extent other structural obstacles continue to block shareholder actions, vertical integration patterns will stay unchanged.

## 4. Conclusions.

Vertical integration presents a puzzle. By moving transactions off the market and into the firm, it removes the disciplinary effect that market incentives provide.

Modern theory places the explanation for this move in the risks of contractual opportunism, once production involves extensive relationship-specific investments.

The theory proves too much. To reduce opportunism, one need not integrate vertically. Instead, one need only buy a controlling interest. Faced with relationship-specific investments, Japanese firms buy controlling interests -- and stop. The puzzle is not why they stop, for the theory offers no reason for them to buy more. The puzzle is why U.S. firms often proceed to buy the entire firm.

In this article, I consider two hypotheses. I first demonstrate that tax law does not explain the differences

between the U.S. and Japan, for both U.S. and Japanese law offer tax-free reorganizations. Preliminarily, I suggest instead that the differences reflect the greater ease of bringing strike suits against controlling shareholders in the U.S.

#### APPENDIX

## The Logistics Behind Tax-Free Mergers in Japan

## 1. Introduction.6

In Japan, corporate reorganizations are formally taxable affairs. Should a firm acquire a supplier, in principle the two firms and the shareholders of the merged firm will pay a tax. To the extent they do, the observation that Japanese firms remain more fragmented than U.S. firms would present no surprise. Some of the firms would be staying in their separate corporate shells because in integrating their operations they would incur a tax. In fact, however, by carefully planning the merger, Japanese firms can almost always avoid triggering most tax liability.

All this is easiest to see with an example. Suppose Acquiror K.K. wants to acquire Target K.K. Target supplies intermediate goods which Acquiror incorporates into its own products. Target began several decades ago as a family firm, but has grown rapidly. For the sake of illustration, assume the following numbers:

- o Target has a fair market value of ¥1000 million.
- o Target has stated capital of ¥50 million and retained earnings of ¥650 million, giving it a total book value of ¥700 million.

<sup>&</sup>lt;sup>6</sup> For an exceptionally clear discussion of the issues involved, see Kanda (1995); Mizuno (1997).

o Target shareholders have an aggregate adjusted basis of ¥200 million in their Target stock.

Note that Japanese law does not use a separate "earnings and profits" account for tax purposes. Instead, it uses standard accounting concepts.

Through the reorganization, Target will merge into Acquiror. Target shareholders will receive Acquiror shares worth ¥1000 million, and Target will disappear. The firms could also negotiate a consolidation in which they both disappeared and a legally distinct firm survived. Because the new firm would not inherit most of the tax attributes (e.g., net operating loss carryforwards) of the constituent firms, firms seldom have reason to choose this tactic. According to merger records, they rarely do.7

## 2. The nominal tax.

- 2.1. <u>Surviving corporation</u>. -- Consider now the tax liabilities of the surviving corporation (Acquiror, in our example), the merged corporation (Target), and the shareholders of the two corporations. The Acquiror's tax liability will generally depend on:
  - (i) the net value at which the Acquiror enters the Target's assets on its books, and

 $<sup>^{7}</sup>$  Of the 2002 mergers in 1992, only one involved a consolidation rather than a merger (Kösei, 1993: 145).

- (ii) the par value of the Acquiror stock it distributes to Target shareholders in consideration of the merger (formally -- and this is not always the same thing -- the increase in stated capital of the Acquiror plus any boot paid).
- If (i) exceeds (ii), the excess (subject to various exceptions) will be ordinary business income to the Acquiror. As such, it will be taxable at the standard corporate rate of 37.5 percent (Corporate Tax Act, § 66; CTA).<sup>8</sup> If (ii) exceeds (i), Acquiror will incur no tax liability.<sup>9</sup>
- 2.2. <u>Merged corporation</u>. -- The tax consequences to Target will depend on:
  - (x) the par value of the Acquiror stock distributed to Target shareolders in consideration of the merger, and
  - (y) Target's capital.
- If (x) exceeds (y), the excess (subject again to various exceptions) will be "liquidation income" to Target, taxable at 33 percent (CTA, § 99). If (y) exceeds (x), Target will incur no tax liability. In short, if the par value of the

 $<sup>^{8}</sup>$  Höjin zei hö [Corporate Tax Act], Law No. 34 of 1965. Note that local taxes generally piggyback on the national taxes and raise total rates beyond those given in the text.

 $<sup>^9</sup>$  CTA, § 2(s). For details of the calculation, see CTA, § 27; Höjin zei hö shikkö rei [CTA Enforcement Order], Sei 97 of 1965, at §§ 9, 26.

<sup>10</sup> CTA, §§ 111, 112, 115. See generally K.K. Maruki hyakkaten v.
Hachiöji zeimu shochö, 221 Hanrei taimuzu 199 (Tokyo D. Ct. Mar. 14,

stock Acquiror issues to pay for Target is too high, Target would seem to recognize taxable income; if it is too low, Acquiror would seem to recognize taxable income.

2.3. <u>Shareholders</u>. -- The tax treatment of Acquiror and Target shareholders is simpler to state. In general, Acquiror shareholders will have no tax liability from the merger. Target shareholders, however, will have tax consequences that once again turn on the par value of the Acquiror shares they receive.

First, if the par value of the Acquiror stock distributed exceeds the per share stated capital and capital surplus of the Target, Target shareholders will recognize the excess as a taxable deemed dividend.

Dividends deemed paid to individual shareholders are subject to withholding at 20 percent (or 35 percent in some cases). They are then generally included in the shareholder's gross income and taxed at standard graduated rates (with a credit for the withheld amount).

Second, if Target's per share stated capital and capital surplus exceeds a Target shareholder's adjusted basis, the Target shareholder will recognize the excess as taxable capital gain. Under current law, individual taxpayers will generally pay a flat 20 percent tax on this

<sup>1968), &</sup>lt;u>aff'd</u>, 56 Zeimu soshö shiryö 17 (Tokyo High Ct. Jan. 31, 1969), <u>aff'd</u>, 75 Zeimu soshö shiryö 704 (Sup. Ct. May 30, 1974).

amount (Special Tax Measures Act, § 37-10). 11 Corporate taxpayers will pay a tax on the gain at the business income rate of 37.5 percent.

## 3. The actual tax.

- 3.1. <u>Introduction</u>. -- Although by this summary Japanese mergers would appear regularly to be taxable affairs, the appearance is wrong. The devil is in the details, and by manipulating those details most merging firms can avoid almost all tax liability.
- 3.2. <u>Surviving corporation.</u> -- Recall initially that Acquiror generally recognizes taxable income on the excess of
  - (a) the value at which it enters the Target's assets on its books, <u>over</u>
  - (b) the aggregate par value of the stock it issues to Target shareholders (again, technically, the increase in stated capital of the Acquiror plus any boot paid).

This would seem to let it avoid the tax by keeping its par value sufficiently high.

Not so. Firms do not avoid the tax through high par values. The stock of most listed firms trades at 15 to 30 times par value. Sometimes it trades for as little as 6

 $<sup>^{11}</sup>$  Sozei tokubetsu sochi hö [Special Tax Measures Act], Law No. 26 of 1957.

times par, but sometimes for as much as 100 times (Table A1). Because firms will negotiate the merger price by market values, effectively Acquiror would seem to avoid the tax only if the Target's assets had a book value 1/15th or 1/30th their real value.

Firms instead avoid the merger tax through the details of the law governing the computation of taxable merger income. Through the merger, Acquiror will recognize taxable income on the difference between book and par value, but subject to three crucial deductions:12

- (x) the capital surplus it carriers over from the Target,
- (y) the retained earnings it carries over, and
- (z) any amount by which it reduces stated capital in the merger.

In effect, Acquiror can avoid all tax by carrying over
Target's capital and retained earnings accounts, and not
increasing the book value of Target's assets. In most deals
Acquiror will have no reason not to carry over those
balance sheet entries, and no reason to revalue the assets.

Take a simple example. Target has a market value of ¥1000 million, book value of ¥700 million, stated capital of ¥50 million, and retained earnings of ¥650 million. To acquire Target, Acquiror issues stock worth ¥1000 million

<sup>12</sup> CTA Enforcement Order, § 9.

with ¥40 million par, and enters the assets on its books at ¥700 million. To calculate its taxable gain, Acquiror will first subtract the ¥40 million par from the ¥700 million book value. If it continues Target's retained earnings account, it will also subtract that ¥650 million. Given that it reduced capital by ¥10 million, it will deduct that amount too. Obviously, excluding ¥650 million + ¥10 million = ¥660 million from ¥700 million - ¥40 million = ¥660 million yields a taxable gain of 0. Only if Acquiror either raises the book value of Target assets or decides not to carry over Target's balance sheet entries will it recognize any taxable gain.

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Table A1:
Stock Price as Multiple of Par Value

Highest multiple, any firm: Lowest multiple, any firm:	105.00 5.90
Mean of highest price as multiple of par, all firms:	32.04
<pre>Mean of lowest price as    multiple of par, all firms:</pre>	15.27

<u>Note:</u> Based on stock prices of random sample of 50 listed firms, 1993 through August 1996.

<u>Source:</u> Calculated on the basis of data found in **Nihon** keizai shimbun sha, ed., Nikkei kaisha jöhö -- 96 IV [Nikkei Company Data -- Fourth Quarter, 1996] (Tokyo: Nihon keizai shimbun sha, 1996).

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3.3. Merged corporation. -- Target's taxable liquidation income depends on similarly bedeviling rules. Superficially, these rules would seem to levy the liquidation tax on the difference between the par value of the Acquiror stock issued and the Target stock retired. In fact, these rules rarely create a tax on the merger either.

Formally (by CTA, § 112), Target's liquidation income is the difference between

- (a) the aggregate par value of all Acquiror stock issued to former Target shareholders, <u>and</u>
- (b) the capital, capital surplus, and retained earnings of Target.

In a suitably simple world, of course, Target's capital, capital surplus, and retained earnings will equal the net book value of its assets. Given that Acquiror's stock will usually trade at 15 to 30 times par (Table A1), it would be an odd merger indeed where aggregate par exceeded net book value.

Crucially, however, the rules further stipulate that Target may not deduct from its liquidation income the entries for capital surplus and retained earnings that Acquiror carried onto its books (CTA, § 112 (c)). Either Acquiror may deduct those accounts or Target may deduct them, in other words, but not both. Suppose Acquiror does carry over the accounts to reduce its own liability. Target

will avoid liquidation income only if Acquiror issues stock with aggregate par value no greater than the stated capital of the stock it replaces.

The stock Acquiror issues might indeed have aggregate par no greater than Target stated capital, but not necessarily. Suppose (importantly) that Target stated capital is equal to aggregate outstanding par, and that Target is worth ¥1000 million and has 1 million outstanding ¥50 par shares each worth ¥1000. If Acquiror stock is also ¥50 par, Acquiror will issue stock with aggregate par equal to the par of the Target stock it replaces only if the market value of Acquiror stock happens to be ¥1000 as well. If Acquiror stock instead trades for ¥800, Acquiror will need to give Target shareholders 1.25 million shares. doing so, it will distribute shares with aggregate par value of ¥62.5 million. If Acquiror needs to carry over Target's balance sheet entries to avoid its own tax, Target will now recognize taxable liquidation income of ¥62.5 million - ¥50 million = ¥12.5 million.

To avoid this tax, firms customarily engineer stock splits (and an accompanying increase in stated capital) before the merger. In the example above, Target could split its stock (Commercial Code, § 218). 13 In so doing, it would both lower the per share market price of the stock and

<sup>13</sup> Shöhö [Commercial Code], Law No. 48 of 1899.

raise aggregate outstanding par value; along the way, it would shift bookkeeping entries from capital surplus to stated capital.

Most straightforwardly, Target would announce a 1 to 1.25 split. It would thereby raise the number of outstanding shares to 1.25 million, and reduce the market price of the stock to ¥800. Since Target shareholders would now exchange Target stock with ¥62.5 million par value (and stated capital of at least that amount) for Acquiror stock with the same par, Target would incur no liquidation tax.

Note two potential complications. First, should a firm increase its capital account, shareholders could recognize taxable deemed dividend income (ITA, § 25(b)(ii); CTA, § 24(b)(ii)). Although in splitting its stock a firm does increase aggregate par value, it can generally do so by moving the appropriate amount from capital surplus to stated capital. Provided it has the capital surplus necessary to do this, shareholders will recognize no deemed dividend income.

Second, transitional rules in the Commercial Code enable firms to split their stock without running afoul of the minimum par value rules. According to the present Commercial Code, a firm cannot issue par stock unless each share carries a par value of at least \(\frac{1}{2}\)50,000 (Commercial Code, \(\frac{1}{2}\)218(b)). As almost all listed firms have \(\frac{1}{2}\)50 par

value stock, this rule would effectively prevent them from splitting their stock and issuing new shares. In fact, though, transitional rules in Commercial Code let firms that have outstanding shares with lower par value issue new shares at the older, lower par. 14

Aggregate data confirm this use of stock splits.

Consider the capital accounts of the constituent and surviving corporations to mergers (Table A2). To locate this data, I turned to Fair Trade Commission (FTC) records.

Although merging firms regularly report their mergers to the FTC, the FTC has often disclosed only aggregate numbers. Recently, it has begun publishing the names of the largest merging firms, but still only with data on firm size. Yet in 1968, it disclosed something very different: the stated capital of the pre- and post-merger firms for the previous five years.

According to these records, in a tenth of the mergers, the aggregate stated capital of the surviving firm exceeded the sum of the stated capital of the constituent firms; in half of the mergers aggegate capital decreased; and in 40 percent of the mergers it stayed exactly the same. If firms merged randomly, this would not happen. If we merged a random pairings of firms, stated capital would instead increase about as often as it decreased.

<sup>&</sup>lt;sup>14</sup> Law No. 74 of 1981, App. §§ 15, 16.

Consider why aggregate stated capital would increase in a merger. In a world without stock splits, it would sometimes increase if the market-price/par-value ratio of Acquiror stock were higher than that of the Target stock. There, since the firms would set the merger stock exchange ratio by market prices, the aggregate par of the Acquiror stock issued would necessarily exceed the aggregate par of the Target stock retired. If it also exceeded the Target's capital account, the surviving firm would have a capital account larger than the sum of the capital accounts of the two constituent firms. Because the par value of the Acquiror stock exceeded Target's capital account, however, Target would necessarily incur the liquidation tax described above.

If firms merged randomly, the market-price/par-value ratio of Acquiror stock should exceed the market-price/par-value ratio of Target stock as often as the latter exceeded the former. Accordingly, the capital of the surviving firm should exceed the capital of the constituent firms as often as it falls below it. The point of Table A2 is that this does not happen. Instead, because an increase in the capital accounts would signal a liquidation tax to Target, most firms facing that potential tax adjust their market-value/par-value ratios before merging.

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Table A2:
Effect of Merger on Stated Capital

	Total	<u>Capital</u>		•
	Mergers	Increase	Unchanged	<u>Decrease</u>
1963	45	17.78	28.89	53.33
1964	29	13.79	44.83	41.38
1965	14	7.14	28.57	64.29
1966	30	3.33	40.00	56.67
1967	31	9.68	54.84	35.48
Total:	149	11.41	39.60	49.99

### Notes:

<u>Total mergers:</u> All mergers from April 1, 1963 to December 31, 1967 involving stated capital of at least ¥1 billion.

<u>Capital increase:</u> Percentage of firms where stated capital of surviving corporation is larger than sum of stated capital of component corporations.

<u>Capital unchanged:</u> Percentage of firms where stated capital of surviving corporation equals sum of stated capital of component corporations.

<u>Capital decrease:</u> Percentage of firms where stated capital of surviving corporation is smaller than sum of stated capital of component corporations.

Source: Calculated from data found in Kösei torihiki iinkai, ed., Dokusen kinshi seisaku nijü nenshi [Twenty-Year History of Anti-Monopoly Policy] 604-08 (Tokyo: Ökura shö, 1968).

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3.4. <u>Shareholders of the merged corporation.</u> -- In using stock splits to equalize the market-value/par-value ratio of the merging firms, the firms also eliminate the

potential tax liability of Target shareholders. By equalizing the ratio, the firms insure that the Target shareholders receive Acquiror shares with par value equal to the par value of the Target shares retired. Necessarily, they also insure that Target shareholders incur no deemed dividend income. The only potential shareholder-level tax will thus be a capital gains tax in those -- probably rare -- cases where a shareholder has an adjusted basis in Target stock lower than his portion of Target's stated capital and capital surplus.

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