The Market for Children: Evidence from Early Modern Japan

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Using a data set of about 1,000 Japanese contracts, I study the relationships among urban labor markets, peasant employment contracts, and parental control over work-age children. From 1600 to the mid-18th century, the use of contracts for the sale, pledge, or long-term employment of children fell drastically. The reason apparently lies in the development of a large nonagricultural labor market. Because this market (with its informal, at-will contractual terms) made it profitable for so many children to abscond, it threatened any property right that parents may once have had in their children's work. And absent that property right, most employers no longer offered long-term contracts on attractive terms. By making it profitable for dissatisfied children to abscond, this new labor market also reduced the control that parents had over their children. Indirectly to be sure, it shaped relations within the family and constrained domestic exploitation as well.

1. Introduction

As Thomas Hardy told it in 1886, Michael Henchard sold her in a tavern at a wayside fair. He was poor, drunk, unhappy, and unhappily married. He owned her. "I don't see why men who have got wives and don't want 'em, shouldn't get rid of 'em as these gipsy fellows do their old horses," he explained (Hardy, 1920: vol. 1, 8). If a passing sailor wanted her, well, for five guineas he could have her.¹

¹ I received helpful suggestions from Gary Becker, Frank Bennett, Philip Brown, Stanley Engerman, Harry First, Mark Fischer, David D. Friedman, Lawrence Friedman, David Galenson, Clayton Gillette, Farley Grubb, Richard Helmholz, David Howell, Daniel Kleman, John Langbein, Gary Leupp, Fred McChesney, Curtis Milhaupt, Geoffrey Miller, Hiroyoshi Noto, Eric Rasmussen, Frances Rosenbluth, Arthur Rotzert, Richard Ross, Alan Schwartz, David Skeel, Robert Smith, Hiroo Sono, Kathryn Spier, Anne Walthall, James W. White, John Wiley, Oliver Williamson, Ken Yamada, Stephen Yeazell, two anonymous referees, and participants in workshops at UCLA, the University of Chicago, Princeton University, and the University of Virginia. I received generous financial help from the Lynde and Harry Bradley Foundation and The Sarah Scaife Foundation.

¹ Note that according to modern scholars (e.g., E. P. Thompson, 1991; R. M. L. Thompson, 1988: 91), the women “sold” in Britain probably often left their husbands because they hated them. They agreed to the deal as their best alternative in a world without ready divorce, and often arranged to be “bought” by their lovers.

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From time to time, scholars have told similar tales of Tokugawa (1600–1868) Japan. The late Takeyoshi Kawashima, probably the best-known legal sociologist in Japan, claimed Tokugawa men routinely sold their wives and children or rented them long-term. It was endemic to the brutality of Asiatic patriarchal feudalism, he explained (Kawashima, 1950). During the early Tokugawa period, echoes historian Mikiso Hane, “peasants frequently sold their family members into temporary servitude,” but, he notes, “In reality, this resulted in permanent enslavement, because the contract could not be dissolved until the debt was repaid, and this the impoverished peasants could seldom do. . . . [I]ndentured servants [had] terms of service [that] might run from ten years to a lifetime” (1972: 170–71).

One might have thought the sold children would resist. According to many scholars, though, out of ideological conformity or cultural docility, the children eventually complied. Living as they did within a hierarchical or familistic world, they thought working in a place like a brothel for the sake of the family “a supreme example of filial self-sacrifice” (Hendry, 1986: 21). Within the household, such scholars continue, the male members dominated the female. The elder members dominated the younger. And because of the ideology “in the air,” the female and younger members usually did as they were told. For the good of the house, for greed, or perhaps from sheer folly, fathers worked the other members on the farm, rented them under long-term contracts, and sold them into slavery.

Unfortunately, these discussions miss the way markets shape family relations. The issue touches both on Oliver Williamson’s (1985) work on the relation between external markets and internal hierarchies, and on Gary Becker’s (1991: 14) analysis of how “bargaining within marriages takes place in the shadow of competition in marriage markets.” In the article that follows, I explore these theoretical issues with empirics from Tokugawa Japan.

I first reconstruct the contractual arrangements themselves (Section 2). Second, I show that by the mid-18th century, sales contracts, pledge contracts, and long-term indenture contracts had largely disappeared (Section 3). I argue that the reason for the disappearance lies in the growing market for nonagricultural labor. By making it possible and profitable for workers to abscend, this market apparently destroyed the ability of workers and their parents to transfer long-term “property rights” in a worker’s labor.

Third, I explore the apparent absence of any contracts for infants (Section 4). Peasants did not use contracts to sell them, I suggest, because infants in early modern Japan (like infants elsewhere for much of history) fetched a market price close to zero. I conclude by exploring the way the nonagricultural labor market increasingly prevented parents from controlling their work-age children (Section 5).

2. The Contracts
I base this study on 1,016 contracts found in 63 sources. These contracts represent all contracts or records of contracts (i) that I could find in published sources, (ii) that were written between 1601 and 1860, (iii) that dealt with the
sale or rental of humans, and (iv) that concerned periods of at least six months.² Several basic qualifications are in order. First, for reasons that will become clear, I would have preferred to measure the accessibility of urban centers from the place of contracting. Unfortunately, that much specificity proved unworkable. Note, though, (a) that the places of contracting remained predominantly rural throughout the period, and (b) that, for better or for worse, they included a wide variety of domains across the country. Second, I would have preferred to know the age of the worker involved. Unfortunately again, most sources do not include that information.

Last, these 1,016 contracts, enumerated in Table 1, obviously represent a small sample of all employment contracts actually written. That sampling, however, was not done by me. It was done by the vagaries of floods, fires, worms, and the historians and archivists upon whose efforts I have relied. To be sure, these processes introduce potential biases. When they do, I address them in the course of the analysis.³

2.1 Indentures

The contracts in this data set took one of four forms: indentures, pledges, sales, and adoptions. In most of these contracts, the principal parties were the employer E and the head H of worker W's household (generally W's father). The reason is straightforward: Tokugawa law (based as it was on neo-Confucian patriarchal premises) and custom dictated that arrangement, and local authorities often required parties to clear the contract with them at the outset.⁴

Under a typical indenture contract, W promised to work for a given term, H guaranteed W's performance, and employer E paid the promised cash wages at the outset.⁵ This timing presents a puzzle, for the parties had strong incentives to have E pay the cash wages at the end. Between the workers and the employers, the workers were the more mobile and numerous. Necessarily, they were the less constrained by reputational sanctions; necessarily, they were more likely

² In some cases only partial records of the contracts were available. Where critical aspects of the contracts are missing, I exclude them from the set. A list of the sources used is available from the author. For translations of several of the contracts, see Ramseyer (1994).

³ One of the clearest cases of bias caused by academic fashions derives from the recent fascination with prostitution. Because of this interest, several studies have uncovered relatively large numbers of prostitution contracts (e.g., Usami, 1986, 1993). Since very peculiar considerations drive the terms of these contracts (discussed at length in Ramseyer, 1991), I have in places explicitly distinguished prostitution from nonprostitution contracts.

⁴ See Miyamoto (1948: 112). Under the federal legal system in effect, the law of the Tokugawa shogunate applied only to the Tokugawa domains—land producing about one quarter of the country's total crops. Yet Tokugawa law generally served as the model elsewhere. See also Ishii (1948: 395; 1964: 161–62); Maiki (1977: 175); Murao (1977: 48–50; 185, 220); Yoshida (1977: 53–55).

Table 1. Pledge, Indenture and Sales Contracts in Tokugawa Japan

<table>
<thead>
<tr>
<th>Date</th>
<th>Pledge</th>
<th>Indenture</th>
<th>Sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1601-1620</td>
<td>8 (47)</td>
<td>0 (0)</td>
<td>9 (53)</td>
</tr>
<tr>
<td>1621-1640</td>
<td>6 (60)</td>
<td>3 (25)</td>
<td>3 (25)</td>
</tr>
<tr>
<td>1641-1660</td>
<td>32 (67)</td>
<td>6 (13)</td>
<td>10 (20)</td>
</tr>
<tr>
<td>1661-1680</td>
<td>24 (52)</td>
<td>14 (30)</td>
<td>8 (18)</td>
</tr>
<tr>
<td>1681-1700</td>
<td>9 (43)</td>
<td>8 (39)</td>
<td>4 (19)</td>
</tr>
<tr>
<td>1701-1720</td>
<td>14 (27)</td>
<td>38 (73)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>1721-1740</td>
<td>4 (10)</td>
<td>35 (83)</td>
<td>3 (7)</td>
</tr>
<tr>
<td>1741-1760</td>
<td>16 (1)</td>
<td>95 (99)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>1761-1780</td>
<td>4 (9)</td>
<td>43 (91)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>1781-1800</td>
<td>0 (0)</td>
<td>165 (100)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>1801-1820</td>
<td>2 (1)</td>
<td>135 (96)</td>
<td>3 (3)</td>
</tr>
<tr>
<td>1821-1840</td>
<td>1 (1)</td>
<td>95 (97)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>1841-1860</td>
<td>5 (2)</td>
<td>217 (94)</td>
<td>10 (4)</td>
</tr>
</tbody>
</table>

Notes: Pledge contracts are contracts that could function as disguised sales: contracts where the borrower pledged to transfer a human should the borrower default on the loan, but where the pledged human did not work for the lender in the interim; and contracts where the borrower pledged a human to work for the lender during the term of the loan, but where that labor did not reduce the principal amount of the loan.

Indenture contracts are employment contracts for specified lengths of time; and contracts denominated as pledges where the labor of the pledged human reduced the principal amount of the loan.

Sales contracts are contracts denominated as sales, and adoptions in which the transferor received compensation.

Only contracts for terms of six months or longer are included.

Sources: List available from the author.

to abscond than the employers were to refuse the promised wages. All else equal, therefore, most parties should have negotiated contracts in which the workers worked first and the employer paid last. And indeed, in the West most indentured workers (other than those indentured for transatlantic carriage) did perform first (Grubb, 1992b).

In the longer-term (six- to eight-year) contracts that the peasants negotiated at the start of the Tokugawa period, the reason for the odd timing seems straightforward: cash-constrained peasant parents apparently coupled loans with their children’s labor contracts. Nonetheless, with the far more common short-term contracts (the one- or two-year arrangements), the puzzle remains: in these, too, E almost always paid the cash wages in advance. Granted, perhaps all peasants wanted loans, even if only of one or two years. Yet Western peasants were presumably cash-constrained too. Notwithstanding, unlike Japanese peasants, they almost always received their cash wages at the end of the year. Some reason for the difference thus seems appropriate.

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6. In some cases, the long terms may have reflected investments specific to the employment relationship, as discussed in note 23, infra. Those investments, however, would explain only the length of the contract—not the payment of all cash wages at the start of the term.
The explanation for the apparently perverse timing in Japan probably lies in the way the Tokugawa government limited access to courts. In order to make litigation practice consistent with its official neo-Confucian hierarchical premises, the government generally let employers sue their workers but banned workers from suing their employers. If W absconded, E thus could sue and—depending on the quality of the guarantees—recover. If W worked for a promised period and E refused to pay, W had no legal recourse. Faced with these legal asymmetries ex post, the parties negotiated compensating asymmetries ex ante: effectively, they required E to post a large bond with H (or W).

2.2 Pledges

The second most common contracts were pledges. Some pledges were disguised sales. For example, H might borrow money from E and pledge family member W as security. If H defaulted, E obtained W as a hereditary servant. Alternatively, H might send W to work for E during the term of the loan, and apply W's services against the interest. In these cases, if W's work did not reduce the outstanding principal, W ended the loan term no freer than when he started.

Peasants probably negotiated sales as pledges to circumvent Tokugawa law. Several times during the 17th and 18th centuries, the government banned the sale of humans. Apparently, however, it continued to enforce security interests in human labor. Hence, if H wanted to sell W to E, H borrowed from E an amount equal to the sale price, gave E a security interest in W, and defaulted.

Other pledges were disguised indentures. Under these arrangements, H sent W to work for E during the term of the loan, but W generated a net return for E that exceeded market interest on E's loan to H. As a result, W reduced (often to zero) the amount due at the end of the term. If H did not have the funds to repay any residual principal, H could then do one of two things: (a) H could renew the contract with E and have W work longer to reduce further the amount outstanding, or (b) H could borrow the amount still payable to E from third party T, and pledge W to T.

As with sales, peasants probably also negotiated indentures in pledge form to avoid Tokugawa regulatory restrictions. During the 17th century, the Tokugawa government limited the indenture contracts that workers and employers could use. Several times, for example, it banned them from contracting for periods of more than 10 years—before permanently repealing that ban in 1698. Workers who wanted longer terms could thus disguise their contracts as se-

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7. For a discussion of these legal provisions, see Henderson (1974: 70–75); Ishii (1961: 189); Kaneda (1927: 1325); Maki (1970: 462; 1977: 57).

8. The edicts are detailed in Maki (1970: chap. 1 sec. 3). The government also banned the sale of rice paddies, and peasants circumvented the ban with mortgage arrangements similar to the schemes described here.

9. Initially, the ban was on contracts of more than three years (Maki, 1970: chap. 1, sec. 3). Within Edo (Tokyo), the government during the early part of the Tokugawa period also banned indentures of less than one year, but Maki argues that the ban applied primarily to samurai (1970: 69–70; 1977: 82–83). See generally Yoshida (1977: 57–66).
cured loans. Moreover, in several domains the local government capped the wages that private-sector employers could pay (Nakabe, 1974: 106–7; Yoshida, 1977: 188–93). In the labor market, these governments (and the samurai they employed) competed against private employers for hired servants. Gradually, that competition raised market wages. In response to the competition, some domainal governments capped wages. In response to those caps, some private employers probably disguised the wages they paid as loans.

2.3 Sales and Adoptions

Of two other contractual arrangements, the records disclose a smaller number. Both sales and adoptions were transfers in perpetuity. Under one scheme, H straightforwardly sold W to F. Under the other, F “adopted” W from H.
<table>
<thead>
<tr>
<th>Date</th>
<th>Male (M)</th>
<th>Female (F)</th>
<th>Mean Contract Length in Years (n)</th>
<th>Part B Number of Sales and Pledges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sales</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M</td>
</tr>
<tr>
<td>1601-1620</td>
<td>*</td>
<td>*</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1621-1640</td>
<td>*</td>
<td>8.4 (5)</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1641-1660</td>
<td>6.7 (23)</td>
<td>*</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1661-1680</td>
<td>7.7 (25)</td>
<td>8.2 (9)</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1681-1700</td>
<td>*</td>
<td>6.2 (10)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1701-1720</td>
<td>5.1 (21)</td>
<td>4.5 (30)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1721-1740</td>
<td>3.9 (24)</td>
<td>4.0 (14)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>1741-1760</td>
<td>1.9 (66)</td>
<td>1.5 (28)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1761-1780</td>
<td>2.9 (42)</td>
<td>3.8 (6)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1781-1800</td>
<td>2.1 (122)</td>
<td>2.6 (29)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1801-1820</td>
<td>1.6 (99)</td>
<td>1.0 (24)</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>1821-1840</td>
<td>2.0 (68)</td>
<td>1.8 (14)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>1841-1860</td>
<td>3.1 (58)</td>
<td>3.4 (77)</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

a. Sales and pledges are as defined in Table 1.
b. The mean length is for all contracts in Table 1 that specify a term; contractual terms were rounded to nearest year before being aggregated. Male contracts exclude contracts for prostitution.

* Four or fewer observations.

Sources: See Table 1.

(Hayami and Miyamoto, 1988: 44), and the urban centers captured much of that growth. Many peasants flocked to the largest of the cities, and by the mid-18th
and excitement of the bustling amusement and business centers," writes anthropologist Robert Smith, the cities "provided a large measure of anonymity" (1963: 417). "Although people in the castle towns register on the city records," complained political theorist Oggy Sorai in 1722, "they can freely leave their establishment or switch to another. Because they came to the city from elsewhere, they have no relatives around and no one knows their history" (15). Indeed, by the mid-19th century, a quarter to a third of all Edo residents had been born elsewhere (Hayami, 1992: 255).

For both men and women, mobility was a fact of life. In one province in the 18th century, reports historian Mark Fruin, towns and villages "recorded migration-related population changes of as much as 20 percent in one year" (1973: 3). Demographer Akira Hayami (1992: 101) notes a similar phenomenon: during the latter half of the Tokugawa period, half of the men and 62 percent of the women left the village he studied for a job at least once during their life. Of those who left, only 44 percent of the men and 55 percent of the women ever returned.12

3.1.2 Agricultural Labor Contracts. For the Japanese men and women bound for life or at least for many years, the urban labor markets promised new gains to absconding.13 Because of the economics of agricultural labor contracting, at the outset of the Tokugawa period these workers would have found it hard to find work if they absconded. The landlords on large farms needed nonfamily workers only during peak seasons. To obtain that peak-season help, the landlords faced a choice. They could either (i) hire help on the spot market at high wages during times of peak demand, or (ii) hire workers on contracts that extended beyond those peak months and pay them their total product over the contractual term.

To avoid holdups, most Japanese landlords chose contracts at least a year long. Given the limited transportation facilities, they hired their help in small (and necessarily "lumpy") labor markets. Like landlords in many other agricultural societies, if they sought help only when their crops stood ripe and the frost was but a few days away, they ran tremendous risks.14 Because everyone needed to harvest their crops at the same time, they could easily fail to find help. If they failed, they lost their crops. Even if they found someone, the worker (depending on the availability of other help) could potentially extract wages that captured much of the employer's revenue for the year. To avoid these bargaining problems, they hired help during slack seasons on contracts of at

12. Although legislation often purported to ban migration, most such decrees were highly porous. See Fruin (1973: 14; 1980); Hayami (1971: 67, note 2); Hayami and Uchida (1971); Murao (1977: 124–25).
13. On the use of the risk of absconding to explain the decline of bound labor in other societies, see Barzel (1989: 83–84); see also Bloch (1975: chap. 2), discussing risk in the Middle Ages.
least a year. Perhaps to split the risks of year-to-year crop fluctuations with their workers, they (like farm workers in the West; see Grubb, 1992b) generally negotiated the contracts in the spring before either party knew whether that year's harvest would be fat or lean.

Because employees could not sue a defaulting employer (see Section 2.1), landlords who negotiated annual contracts had to pay their employees their cash wages at the outset. This, coupled with the necessarily uncertain character of contractual guarantees from poor peasants, meant they would generally hire only those workers whom they could effectively force to work. Absent that coercive power, workers had an incentive to collect room and board and wages during the slack seasons and then quit.

Now consider a simple example. Suppose peasant father F sold his 17-year-old son S to wealthy landlord E. Suppose too that all jobs in the areas to which S could realistically escape were agricultural. In such a world, if S tried to escape, he would have had a very hard time locating anyone willing to hire him. No new employer would advance him a year's wages without guarantors. Yet because he had already left his father and guarantor liable on his labor contract once, no one would likely guarantee his work. Being a demonstrably bad risk, he would have found work only if he could locate a rare farmer who needed extra help by the day.

Suppose, by contrast, that S worked in an area with a large nonagricultural labor force. S would then have had a greater incentive to abscond. As industrial and commercial work is seldom seasonal, employers can dispense with advance wage payments, guarantees, and formal long-term contracts. Instead, they can hire workers on at-will contracts. S might still suffer a handicap on the market. After all, by absconding (or by refusing to divulge his past) he necessarily signals some unreliability. Depending on how easily his potential employer can monitor his work, however, that employer might yet find it profitable to hire him.

Because F had guaranteed his performance to E, S would still impose a large loss on F by absconding. To date, most scholars have assumed that ideology or religion prevented children like S from absconding—that ideology and religion induced them to sacrifice their personal welfare for the sake of the family. Yet perhaps more skepticism is in order. F did, after all, sell S into slavery. By all logic, S ought to care less about F than most sons care about most fathers.

15. Because few spot-market jobs were available, earlier runaways would have had trouble finding work. As a result, it was less important in early Tokugawa Japan than in some other societies that potential employers maintain a cartel against hiring runaways (see Engerman, 1994; Blech, 1975: 52).

16. By the end of the Tokugawa period, transportation improvements would have reduced the earlier hold-up problems by letting both workers and employers compete in a larger labor market. As a result, even spot-market agricultural contracts would have become more feasible.

17. Or, if for official reasons they chose to sign the standard indenture contract, the employer and employee could agree to name fake guarantors, parties, etc.—a phenomenon noted by Ogyu Sorai at the time (1722: 15). On the use of short-term contracts in the cities, see Saito (1987: chap. 2), who notes differences between Osaka and Edo.
Indeed, notwithstanding any ideology or religion, many peasant children faced with the new nonagricultural jobs in the cities and towns did escape and leave their parents liable on their contracts. By the middle of the Tokugawa period, workers fleeing their contracts crowded the cities (Murao, 1977: 124–25). Court documents detail their exploits, village registries record their absence, and absconding prostitutes became the theater's stock in trade. Contemporary philosopher Ogyu Sorai spoke for many aristocrats when he complained that "indentured servants now often steal and abscond. Loyal ones have grown rare" (1722: 14). Those who absconded were not just peasants: in a single year in 18th century Edo, samurai employers filed 600 complaints against their absconded valets, and from 1837 to 1867, 44 (13 percent) of the employees of one prominent Edo dry goods store absconded (Leupp, 1992: 86–88).

Runaways pose a problem for bound labor contracts in any society, of course, but the ethnic homogeneity in Japan compounded the problem. Compare it to the antebellum United States. American slaves could not easily abscond, for they were a different race from most freemen (e.g., Engerman, 1973: 61; Hicks, 1969: 133; Barzel, 1989: 83). The indentured servants from Europe were the same race, but often could not speak English. Moreover, they worked under short enough contracts that many were probably free before they did learn the language: four-year contracts during the 17th and 18th centuries, and two-year contracts by 1821. Because they often received large "freedom dues" at the end of their contract, even in the 18th century workers effectively repaid a past debt only during the first two years of their service (Grubb, 1992a: 171, 180–81; 1994a: 4, 10; 1994b).

Given the Japanese homogeneity, by the mid-18th century the increasing risk that a worker might abscond radically changed agricultural contracting practices. Suppose employer E bought 17-year-old daughter D from her father F. To the extent that D could credibly threaten to escape, E would have needed regularly to pay D herself a large portion of the wage she could earn elsewhere if she left. E would have needed to pay her this wage whether or not she already had paid F for D. That purchase price was sunk, and largely irrelevant to whether D would stay.

Necessarily, however, when E must pay D directly a large portion of the wage she could earn elsewhere, he will pay F less for D ex ante. More precisely, when E buys D, he will pay F D's present-valued lifetime productivity, less the present-value of all payments he expects to pay D directly. If he must pay D her potential wage elsewhere, he will pay F only D's lifetime earnings less that wage elsewhere. Effectively, the nonagricultural labor market will drive the price of children down, potentially to levels approaching zero.

Suppose now that parents vary in their willingness to sell children (e.g., that they vary in their affection or in the value they obtain from using their children at home). If so, then some parents necessarily will have a higher reservation

price for their children than others. As the market price for children falls, more and more parents will withhold them from the market. Effectively, therefore, the sale of children may have disappeared in Tokugawa Japan because (i) the urban labor market prevented parents from transferring an enforceable property right in their offspring, and (ii) that inability to transfer an enforceable right reduced the price of children to levels at which almost no parents were willing to part with them.

3.1.3 Hereditary Servants. This logic may explain a further curiosity in Tokugawa history: during that period, hereditary servants disappeared (Fruin, 1973: 34; Maki, 1970: 98–100; Nakabe, 1974: 104). Where such hereditary servants had been common in 1600, by the 18th century they had all but vanished from most communities. “The number of temporary servants has recently jumped,” Ogyu Sorai observed in 1722 (30). “Hereditary servants have vanished from the samurai houses. Even in the rural farm houses, few remain.” Unless owners encouraged their hereditary servants not to reproduce—a thesis no one has argued⁴—that such a decline necessarily implies that owners freed them on a wide scale. That they would do so presents a puzzle: people rarely discard valuable assets, and slaves in most societies are significant capital assets.

Perhaps, however, by the middle of the 18th century Japanese hereditary servants were no longer very valuable. If they could credibly threaten to abscond, they could successfully demand a large portion of their wage elsewhere. If they did, their value as capital assets would have fallen substantially. Paying slaves is not uncommon. To motivate them, owners in many societies have paid them substantial wages (Fogel and Engerman, 1974: 239; Barzel, 1989: 79–81). The more readily a slave can run away, however, the higher the wage an owner will need to pay to induce the slave to stay and work. In Tokugawa Japan, that dynamic would simultaneously have caused two phenomena: it would have lowered the value of hereditary servants as capital assets, and raised the wealth of those servants themselves. Inevitably, it would have increased the frequency with which owners and hereditary servants found manumission mutually beneficial.²⁰

3.2 Contractual Length

The mean terms of indenture and pledge contracts, shown in Table 2, start at six to eight years but decline steadily to one or two years by the end of the 18th century. The phenomenon applies to both sexes: by the 19th century, only prostitution and apprenticeships—both relatively unusual arrangements—

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⁴ Although if slaves were less valuable one would expect owners to work less hard to encourage them to reproduce—a point consistent with the argument here.

²⁰ Note that manumission need not explicitly take the form of a cash-for-freedom deal: “if you pay me X, you can go free.” Instead, it can (and in Japan apparently often did) take the form of an implicit understanding that accomplished the same result: “if you work faithfully for me for Y years, I will help you set up a modest household of your own.”
Table 3. Mean Age of Male Workers, by Length of Contract

<table>
<thead>
<tr>
<th>Contractual Term</th>
<th>1601–1680</th>
<th>1681–1760</th>
<th>1761–1840</th>
</tr>
</thead>
<tbody>
<tr>
<td>x ≤ 2 yrs</td>
<td>*</td>
<td>29.7 (6)</td>
<td>29.4 (43)</td>
</tr>
<tr>
<td>3 ≤ x ≤ 5 yrs</td>
<td>28.5 (11)</td>
<td>*</td>
<td>20.8 (16)</td>
</tr>
<tr>
<td>x ≥ 6 yrs</td>
<td>19.1 (16)</td>
<td>12.0 (6)</td>
<td>12.7 (6)</td>
</tr>
</tbody>
</table>

Notes: Ages are as noted in the contracts (contracts not giving the worker's age are excluded). By custom, a newborn baby was considered one year old, and gained a year each New Year's Day. Prostitution contracts are excluded. Female contracts are excluded because of small numbers. Term lengths are as defined for Table 2.

* = Fewer observations.

Sources: See Table 1

involved long-term contracts.21 Men and women did not now work outside the home for total periods that were progressively shorter. Instead, where earlier they had worked under a series of fewer but longer contracts, increasingly they worked under a greater number of successive shorter-term contracts.

Apparently, the mean contractual term declined for the same reason that sales disappeared: once a market in nonagricultural labor developed, workers became a bad credit risk. The more profitably workers could escape, the more reluctant landlords were to advance to them or their parents several years' wages except in highly discounted form. At those discount rates, most parents and workers preferred to eliminate much of the runaway risk by negotiating one-year contracts instead. Accordingly, employers hired workers for the shortest term possible, given the technological constraints of agriculture.

Evidence consistent with this hypothesis appears in the age of the workers hired for long-term contracts: over the course of the period, not only did the mean length of all contracts fall to one or two years, but the mean age of the workers hired for the longest-term contracts fell to ages 12 or 13 (see Table 3). All else equal, if workers generally became bad risks for long terms, employers would hire them for such terms only (i) when the efficiency reasons for the terms (e.g., the need to pay for any training received) were greatest, (ii) when the adverse-selection problems were least, and (iii) when the employees found it hardest to escape. All factors tend to point toward children at the start of their careers: ages 12 or 13.

First, these younger workers had less training, and took longer to pay for any training they received.22 Employers who hired such workers often needed to


22. These children hired under long-term contracts were at the beginning of their careers. In general, peasant children left home for work in their early teens, returned in their mid- to late 20s, and then married (Hayami and Uchida, 1971: 232–33, 238–39). For other data showing that the
train them extensively before they became productive. If they invested substantial time in that training, however, they were less likely to recoup the room and board they provided unless they kept the children for several years. Without long-term contracts, 12-year-olds thus were likely to obtain training only if their parents subsidized their employment. By contrast, older children could pay for any training they received more quickly, and were more likely to already have the requisite training anyway. 23

Second, the youngest children presented the smallest adverse-selection problems. Parents (and the child himself or herself) had relatively imperfect information about how productive an 11-year-old might be; about an 18-year-old who had worked at home for several years, they had far better information. Potential employers, however, often had coarse information about both children. As a result, parents (and the child) had an incentive either to keep high-quality older children at home or to rent them under a succession of single-year contracts. If they offered an 18-year-old child under a 10-year contract, employers necessarily had reason to suspect that the child was relatively less productive.

Third, the youngest workers were less able to abscond successfully, for they were less likely to have the “street smarts” necessary to succeed on their own. 24 Even an employer who could not stop a 20-year-old from escaping might yet be able to keep a 12-year-old. For all these reasons, therefore, peasants stopped negotiating long-term contracts for the older workers. Instead, they primarily used them only for the younger children—only those who needed several years to pay for the training they received, who presented smaller adverse-selection problems, and who could not easily escape. 25

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23. Note that the education could (though did not necessarily) involve relationship-specific investments—a factor that contributes to the use of long-term contracts (see Crocker and Masten, 1988; Joskow, 1985, 1987; Williamson, 1979).

24. Intuitively, one also might have thought that female children would find it harder to survive on the street than would males. In fact, however, other historical records indicate that female workers did regularly abscond, and Table 2 shows no real differences in sex in the willingness of the parties involved to negotiate longer-term contracts.

25. One could ask whether the decline in contractual length might not reflect different survival rates for long- and short-term contracts over time, rather than any difference in the contracts actually negotiated. After all, families might have preserved long-term contracts more carefully than short-term contracts. A longer contract did represent a larger cash investment.

Suppose, however, that the decline in mean contractual length did merely reflect differential survival rates. If there were no difference in the mean of the contracts actually negotiated, then one would still expect to see significantly more long-term contracts from the last decades of the Tokugawa period than from the first—if only (i) because the population more than doubled (and thus more contracts of all kinds were negotiated) and (ii) because a higher percentage of contracts of all kinds were likely to survive from 1860 than from 1601. Notwithstanding, my data set contains no evidence of that phenomenon: 37 long-term (six or more years) nonprostitution contracts survive from 1601–1680, 28 from 1681–1760, and 32 from 1761–1860.
3.3 Alternatives

3.3.1 Ideological Change. Consider now three alternative hypotheses about the disappearance of sales contracts and the decline in the mean length of indentures and pledges. First, some observers (e.g., Ishio, 1975: 437–61) invoke Henry Maine’s (1906: 173–74) famous transition from status to contract. In the 17th century, the rich preferred hired help for whom that function was their fixed status. As time passed, they learned to think contractually and began renting their help instead. Even the perceptive historian Thomas C. Smith (1959: 116) advances ideological change to explain the shortening of contractual terms in Japan: “This drastic shortening of the employment period,” he writes, “reflects the fact that labor was being slowly lifted out of the context of the social group and recognized as having an economic value independent of social relations.” Unfortunately, describing a shift does not explain it, and “explaining” an economic shift by positing an ideological shift is usually less an explanation than a description.

3.3.2 Rising Incomes. Alternatively, perhaps peasants abandoned sales and long-term contracts because their incomes increased. During the Tokugawa period, average peasant incomes did rise (Hanley and Yamamura, 1977). If peasants in 1600 sold their children out of desperation, then an increase in income should have caused a decrease in sales. Promising as the hypothesis may seem, two factors militate against it.

First, higher incomes do not explain why existing hereditary servants disappeared. The full puzzle, recall, is not just why peasants stopped negotiating sales contracts. It is also why existing hereditary servants disappeared, and the rising-incomes hypothesis does not answer that question. By contrast, the hypothesis above suggests that the urban labor market facilitated manumission by simultaneously raising servant wealth and lowering servant value.

Second, because peasant incomes continued to vary over a broad range during the period, some peasants remained desperately poor. Necessarily, therefore, even if an increase in peasant incomes might have reduced sales contracts, it should not have eliminated them. According to Table 1, though, sales all but disappeared by the mid-18th century. Even from the desperate years of the Temmei famine (1782–1787) when 130,000 to 200,000 people died, no sales or pledges survive. By contrast, the hypothesis above predicts that sales and pledges would largely disappear. If peasants everywhere were by the mid-18th century within a few days’ walk of a modest urban center, then anyone who

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26. Alternatively, one could try to explain the contractual shifts by positing the development of financial innovations that enabled landless peasants to obtain credit without using human mortgages. The explanation does not work: although the sophistication of rural financial markets did increase during this time, even by the late 19th century landless peasants still had access to little credit.

27. On famine mortality, see Kokushi (1988). For the five years preceding the famine years the mean length of the contracts with stated terms (22 contracts) was 3.6 years; for the famine years and the five succeeding years, the mean length (89 contracts) was 2.9 years. During and immediately after the famine, in other words, the length of the contracts negotiated fell. Note, of course, that during famines the demand for agricultural laborers would probably decline.
bought a 16-year-old or rented one long-term risked losing the child to the city. Unable to distinguish the likeliest runaways in advance except by age, employers were apt to demand an extremely high discount rate before agreeing to long-term arrangements for any but the youngest adolescents.

3.3.3 Technological Change. Alternatively, perhaps peasants abandoned sales and multiyear contracts because changes in agricultural technology reduced the variance to agricultural yields. Suppose, for instance, that they had earlier negotiated the longer-term contracts (whether sales or multiyear indentures) to mitigate the risks associated with year-to-year variations in the harvest. If new agricultural technology decreased these fluctuations, then the later peasants should have negotiated long-term contracts less frequently than the earlier. Unfortunately, this hypothesis too leaves two gaps.

First, like the rising-incomes hypothesis, technological change does not explain why existing slaves disappeared. Although it explains why peasants negotiated fewer longer-term contracts, it does not explain why the existing hereditary servants vanished. Second, the hypothesis does not explain the contracts the peasants actually negotiated. In negotiating contracts where the employer paid several years’ wages in advance, early Tokugawa peasants created enormous moral hazard (runaway) problems. Had they wanted primarily to reduce the risk from harvest fluctuations, these problems were entirely unnecessary. To avoid the harvest fluctuation risk, the peasants could simply have negotiated multiyear employment contracts but transferred each year’s cash wages separately at the start of each year. That they did not negotiate such contracts suggests, therefore, that they were addressing something else entirely.

4. Infants

In 1978, Elisabeth Landes and Richard Posner proposed a radical experiment in American adoption practice: allow adoption agencies to pass a portion of the adoption fee onto the birth mother, even when the amount exceeds her maintenance and medical expenses. Doing so would reduce, they argued, many of the more egregiously inefficient aspects of modern adoption. Curiously, however, apparently none of the contracts in Table 1 involves a newborn—virtually no evidence of Landes–Posner contracts survives.28 To be sure, many of the Table 1 contracts do not give the age of the child transferred. When they do, though, the child is never a newborn. Again, two explanations suggest themselves.

First, the phenomenon could reflect data bias rather than the underlying market. Perhaps peasants did transfer newborns for cash but left no contractual evidence of their deals.29 Although the data set itself does not disprove this hypothesis, two considerations militate against it. First, I know of no allusions

28. Ishii (1978: 556) does include an 1812 contract for the sale (denominated an adoption) of a two-year-old boy.

29. T. C. Smith (1977: 68) notes that adoptions recorded in village registries were almost exclusively of males over age 12; in his study, Fruin (1973: 155) finds no adoptees under age 15.
to such transactions either in contemporary literary accounts or in the Marxist histories that try so hard to show the destitution to which Tokugawa peasants fell. Extant accounts instead detail the ways peasants abandoned their babies while others rescued them—transfers at a price of zero. Second, Table 1 suggests that peasants eagerly documented the ways they sold or rented older children. If they transferred infants for cash too, all else equal one might expect some of the contracts to survive. Apparently, none do.

Instead, perhaps peasants negotiated no baby-sale contracts because the market price of babies approached zero. Even in the antebellum South in the U.S., newborn slaves had a market value of only four percent of their peak adult price (Fogel and Engerman, 1992: 472, note 9). Given the apparent low sales price of Japanese adults by the mid-18th century (see Section 3.2), perhaps infants just fetched an extremely low price. Recall, in this regard, that Tokugawa peasants had neither effective birth control nor safe abortion technology. Birth control involved little more than abstinence, and most abortions involved either toxic drugs or dangerous mechanical ploys (Sakurai, 1993; Shitanaka, 1959/60: 210). Faced with these choices, many peasants—according to demographic studies—killed their babies instead (T. C. Smith, 1977: 83–85; Mosk, 1978, 1979).

That peasants routinely killed “surplus” babies (both girls and boys) itself implies that infants commanded a market price near zero. All else equal, one might ask, why kill your baby if you can sell it for cash? Or why pay much for your neighbor’s baby (except to insure adequate prenatal care) if you can find an abandoned one for free? Perhaps, therefore, peasants seldom sold babies because babies had little market value; they seldom negotiated elaborate contracts for babies because the low economic value of the asset transferred did not justify the transactions costs of contractual draftsmanship.30

If infants in Japan did have a zero market price, the recent proposals to allow adoptive parents to pay birth mothers may be largely artifacts of modern birth control, abortion technology, and information about prenatal care. Babies may indeed warrant nontrivial positive payments where professional couples defer childbirth until their mid-30s, where parents who do not want children use the pill, where inadvertently pregnant mothers safely and cheaply abort in the first trimester, and where adoptive parents realize the importance of prenatal care. Landes and Posner advanced their proposal in such a world—but for most of history the world has been very different. In Tokugawa Japan, couples married in their 20s and practiced little effective birth control. Rather than abort, they often brought their children to term, and killed or abandoned those born at inconvenient times or those of inconvenient sex.

30. Because the adoptive father could register the baby as his own, even without a sales contract he could still protect his “title” to the newborn.
5. Labor Markets and Family Norms

Indirectly, to be sure, the analysis above (in Section 3) also suggests that most scholars of Tokugawa Japan have exaggerated the power parents had over their work-age children. To date, most have assumed that the real parties to these contracts were the employers and the heads of the workers' households—generally the fathers. The fathers decided which children would work where for how long. They negotiated the contracts and they kept the money.

Fundamentally, though, who signed these contracts tells us nothing about who negotiated them and who kept the money. Tokugawa law and custom required the parties to draft labor contracts as though the household head negotiated the terms and pocketed the money (Ishii, 1961: 181; Miyamoto, 1948: 112). The parties largely complied, and included appropriate contractual recitals.

5.1 Parental Control

Granted, in some cases the parents did control the transaction. In the sale contracts, for example, they probably negotiated the deal and took the money. So too in the indentures for six-year-old children. But contracts involving very young children were always rare, and by the middle of the Tokugawa period sales contracts had virtually disappeared. Most contracts instead concerned indentured arrangements for teenagers and workers in their 20s. The important questions concern these.

Indirectly, but necessarily, the analysis above implies that by the mid-18th century many of the workers in these run-of-the-mill contracts exercised significant control over their own lives. Recall first that sales and long-term contracts seem to have disappeared because the growing market in nonagricultural labor destroyed employer E's ability to enforce his property right in worker S's labor. Because E no longer could readily prevent S from absconding, he refused to advance S's father F several years' cash wages except at an unacceptably (to F or S) high discount rate. Accordingly, E, F, and S negotiated contracts for the minimum technologically feasible unit. With agricultural contracts, that unit was one year.

Consider how Tables 1 and 2 would look if father F in 1750 could still have prevented his son S from absconding. If F had had that power—either by force or by normative authority—he would have been able to continue to persuade E to accept sales and long-term indenture arrangements. Presumably, if some parents wanted to trade their children's long-term service for cash advances in 1650, some still wanted to do so in 1750. Yet if F in 1750 could still control S, then E would not have much feared that S would abscond. Similarly, if S in 1750 were not so heartless as to abscond and leave F liable for several years' cash wages, then E would not have feared that S would abscond. Instead, in either case E could have relied on S to stay. Accordingly, if some parents wanted to sell their children long-term, E could safely have bought the children. Notwithstanding, by 1750, all parties—E, F, and S—abandoned such contracts.

Hence the necessary conclusion, indirect as it may be: by the middle of the 18th century, parents could no longer reliably control their sons and daughters.
Perhaps precisely because a father’s real control had grown so attenuated, the parties themselves often came to ignore his role. Noted Ogyu Sorai in 1722 (15): “the household heads they recite in the contracts often have no address. In fact, they often are merely fictitious names.”

5.2 Parental Expropriation

The proposition that many children by 1750 kept much of the cash they earned (or gave it to their parents with the implicit understanding that they received it back with interest when they established their own household) again follows—indirectly but necessarily—from this logic. If by the mid-18th century son S could profitably abscond, father F generally had to let S keep much of the money. Otherwise, S often would abscond. Recall that the fathers were liable on their sons’ contracts. Even when absconding left their families liable for several years’ cash wages, many children willingly ran to the city. Tables 1 and 2 thus imply that S often did as F said only if F made it worth his while. Unless S found it worthwhile not to leave home, and even if leaving home left F liable on the contract, S left. If B had to pay S the wage S could earn elsewhere to keep him, so did F.

In effect, a father who expropriated the money his children earned substantially raised the risk that they would abscond, even when they worked under a succession of one-year contracts. Necessarily, in deciding whether to abscond, S weighed the extra wages he could earn at a new job against the risk of punishment he incurred by absconding and the social dislocation he suffered. To explore the implications of this calculus for whether F could keep the cash S earned, assume S earned market cash wages of 4 ryo a year. Suppose first that S kept any cash he earned. If he absconded from a one-year contract, he could expect to gain at most 4 ryo: he could pocket the 4 ryo he received in advance from his rural employer E₁, and earn an extra 4 ryo from urban employer E₂ under an at-will contract. If he instead absconded from a 10-year contract he could expect (at a 10 percent discount rate) gains of up to 27 ryo: he could pocket the 27 ryo E₁ paid him up front, and over time earn extra cash wages under an at-will contract from E₂ with a present value of 27 ryo. Effectively, through absconding he increased his net cash income by up to 27 ryo. Unless the expected costs to absconding were much higher under 10-year contracts than 1-year contracts,³¹ he would have had a substantially greater incentive to abscond under a 10-year contract.

Suppose now that S worked for E₁ under a succession of one-year contracts, but that F kept all cash wages S earned and that S expected this to continue for the next 10 years. If S stayed with E₁, he earned cash wages of zero, for F levied an annual income tax of 100 percent. If he absconded, he earned cash wages from E₂ with a present value of 27 ryo. Effectively, and precisely because of F’s expropriative conduct, S had the same incentive to abscond as he would have.

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³¹. Presumably they were somewhat higher, since E would invest more resources in searching for workers who absconded with 27 ryo than for workers who absconded with 4 ryo.
had if he were working under a 10-year contract: by absconding, he increased his net cash income by up to 27 ryo.

5.3 Ideology

But early modern peasants were not like this, readers will protest. Such an a-historical and a-ideological approach misses the way Tokugawa peasants saw the world. Integrated into family networks, they would not have found it profitable to abscond. Trapped by cultural notions of filial piety, most would not even have tried. The poor, as F. Scott Fitzgerald once almost put it, are different from you and me.

Apparently not so. That norms and ideology tightly bound peasants to their family is a claim that Tables 1 and 2 (and the large anecdotal evidence of absconded servants) potentially contradict. Once a market for nonagricultural labor developed, E no longer advanced several years’ wages. Notwithstanding any familistic ideology, E apparently could no longer trust his workers to stay. Notwithstanding any norms of filial piety, many sons and daughters apparently ignored their parents and pursued their selfish interests instead. Yes, the poor are different from you and me, as Ernest Hemingway once almost replied to Fitzgerald. They have less money.

At least as important as the fact that many of the peasants did abscond is the fact that many of the rest could credibly threaten to abscond. For if peasants could credibly threaten to leave, then in equilibrium relatively few would. In equilibrium, most sons and daughters would stay in their jobs. They would stay because their parents (a) knew they could profitably leave, (b) knew that they might indeed leave if the parents did not let them keep most of the money they earned, and (c) therefore let them keep that money. Indirectly, to be sure, Tables 1 and 2 testify to the probable establishment by the middle of the Tokugawa period of precisely that equilibrium.

6. Conclusions

From the 17th century to the 19th, Japanese parents, children, and employers radically changed the labor contracts they negotiated. In the early 17th century, some parents still sold their children into hereditary servitude. Within a century, they had stopped, and employers who had owned such hereditary servants had freed them. In the early 17th century, some parents still rented their children under multiyear indenture contracts. Within a century, they had stopped this too.

Japanese parents, children, and employers changed the contracts they negotiated, I argue, because of changes in the labor market they faced. By the mid-18th century, workers could readily negotiate at-will contracts in towns and cities. Because they could now dispense with contracts, advance payments, and guarantors, they could profitably abscond. Because they could abscond—because their threat of postcontractual opportunism was credible—employers and parents no longer bought and sold them outright or rented them under long-term contracts. And for exactly the same reason, by the mid-18th century many work-age children probably chose the jobs they took, kept much of the cash they earned, and generally ran their own lives.
In the end, the labor market itself shaped the internal organization of the family. By the mid-18th century, many peasant children who found themselves in circumstances not to their liking absconded. Many more did not abscond, but even they may have used the threat of absconding to their private advantage. The point follows from the contracts themselves: by the mid-18th century, employers, parents, and children negotiated contracts that seemed to reflect an awareness that an exploited child could readily leave. In effect, the external labor market shaped the internal dynamics of the family. Scholars have detailed how competitive markets mitigate exploitation within firms. According to the data from Japan, they mitigate it within the family as well.

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