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LEGAL REQUIREMENTS THAT ARTIST RECEIVE RESALE ROYALTIES

by

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Contents

Legal Requirements that Artists Receive Resale Royalties

I. INTRODUCTION

Laws in many countries and California require that artists receive resale royalties from their works (called *droit de suite*, "the right to art proceeds," in the legal litera-ture).[1] Several times in the last few years, Congress debated such a guarantee; but, due to substantial opposition by some artists and others, Congress has not passed such a bill.[2] The Visual Artists Rights Act of 1990 (Item 74, §608), however, required that a study be conducted by the Register of Copyrights in consultation with the Chair of the National Endowment for the Arts, on the feasibility of implementing:[3]

> (A) a requirement that, after the first sale of a work of art, a royalty on any resale of the work, consisting of a percentage of the price, be paid to the author of the work; and

> (B) other possible requirements that would achieve the objective of allowing an author of a work of art to share monetarily in the enhanced value of that work.

We believe that there are two key questions such a study should answer. First, would artists or others benefit from artists receiving resale royalties? Second, should the government mandate such rights?

The answer to the second question appears simpler than the first. Suppose such a right is desirable. Why should royalties be required by law? After all, in the absence of such a law, artist and purchasers can sign a legally binding contract establishing a right to resale royalties. Indeed, some artists write complex contracts that reserve this and other future rights.

One can imagine two justifications for mandating this right. First, it might be argued that some young artists are too naive to ask for or write such legally binding

contracts so that it is better for these rights be inherent and require that the artist must affirmatively waive these rights if so desired. We discuss this issue at greater length below.

A second, and more compelling, argument is that the government can lower costs of writing and enforcing such agreements between artists and purchasers.[4] Writing and enforcing private contracts may be very expensive or difficult. How, for example, can artists know when their works are resold and the resale price? How would the original purchaser know where the artist currently lives to send the royalties?

It is possible that the government can lower the transaction costs of writing and enforcing contracts. Under the Visual Artists Rights Act of 1990, the Register of Copyrights is already required to establish a registry of artists.[5] The government could also require that the sale of all art work over a certain value be reported to the registry. At a higher cost to the government, the artists' royalties could be sent to the registry to be forwarded to the artists.

Such a system might be cumbersome and expensive, so to establish whether it is desirable would require a careful cost-benefit analysis. If resale royalties are only an issue for a handful of extremely successful artists (as de Kooning, Motherwell, and other artists argued before Congress), such a complex system would not make sense and private contracts would be more sensible. On the other hand, if many artists' works would be involved, it is conceivable that the government can, through scale economies, reduce transaction costs. A private registry would achieve the same scale economies, but it would lack the enforcement threat of the federal government.

For the remainder of this paper, we turn to the first question: who would benefit or lose from a government mandate that artists receive resale royalties? Because there is no simple, clear-cut answer to this question, we discuss the implications of such a requirement under a number of scenarios.

We start by describing a simple model of how art work is sold through dealers and the effects of a resale royalties requirement. We use that model to demonstrate why an artist might prefer a resale royalties requirement (especially one determined by contract). Then, in the next two sections, we discuss additional advantages and disadvantages of such a requirement. Finally, we discuss, in more detail, which groups stand to gain or lose.

II. ARTISTS AND DEALERS

Art is sold through dealers, at auction, and in a variety of other ways. Because of the relative importance for the works of young artists, we concentrate on sales through dealers. We first describe the relationship between artists and dealers and then build a simple model to illustrate that the artist may prefer a resale royalty requirement.[6]

The Relationship Between Artists and Dealers

Art markets are thin. It is costly for a collector to see the works of many artists. The costs would be prohibitive for many collectors if they had to identify artists and visit them individually at their studios located throughout the world. Dealers reduce collectors' information costs by exhibiting their work in galleries and broaden the scope of market by providing promotional effort. That is, dealers do much of the leg work for collectors by identifying the works of skilled artists working in certain media or

taking certain approaches, bringing these works to a central location, and then informing collectors where they are. In exchange for exhibiting and promoting their works, artists often give a particular dealer the exclusive rights to show their works.[7]

The dealer promotes the work and the artist by maintaining a gallery (show-room) staffed by knowledgeable sales people, advertising, holding receptions for collectors to meet the artist, and in other ways.

Most young artists have little capital and cannot borrow against their highly speculative future earnings due to imperfect capital markets.[8] As a result, these young artists do not have the funds to promote their own work and must rely on the promotional activities of the dealers. Moreover, to the degree that dealers exhibit the works of several artists, economies of scale are achieved so that dealers' marginal promotional costs are lower than those of artists.

Dealers and artists contract in a variety of ways. Under one type of agree-ment, the dealer buys the work from the artist for a fixed amount and then resells it, keeping any profit. A more common agreement is for the dealer to handle the work on commission, so that the dealer and the artist split the sales price. Even under such an agreement, a dealer who finds a talented artist and who plans to promote effectively that artist's work may choose to buy and hold some of the artist's works to speculate that the price for these works will rise in the future.

Artists and dealers have two objectives: they want high expected earnings and low risk. Unfortunately, selling art is a very risky business. At least partially for this reason, many risk-averse dealers prefer the commission approach where both the artist and the dealer share the risk of not selling the work or selling it at only a relatively low price.

If the dealer is not risk averse (or at least less risk averse than the artist), the alternative agreement, where the artist sells the work to the dealer, increases total revenues. The dealer bears all the risk but gains all the benefits from a higher sales price to a collector. Thus, the dealer has the incentive to optimally promote the work.[9]

In contrast, under a commission agreement, the dealer bears all the costs of promoting (because sharing these costs with young artists is infeasible) but receives only a fraction of the returns. As a result, the dealer engages in less than the optimal level of promotion, as is shown in the following model.

A resale royalties requirement affects the initial sales price of works of arts and reduces the promotional activities of dealers. To the degree that collectors speculate that these works can be resold later at a higher price, these initial buyers would not be willing to pay as high an initial price for the works if there is a resale royalties requirement and some pure speculators may not purchase at all. Similarly, if dealers are the initial purchasers, they would not be willing to spend as much promoting the art as in the absence of such a requirement, which further reduces the demand. Thus, the initial price of a work by a young artist probably falls.

A Simple Model

The following model is used to show that an artist may prefer a lower initial price and a share of the resale revenues to a higher initial price and no resale revenues. For now, we assume that there is no risk, that the artist can contract costlessly for royalties from resale, and that collectors buy and keep the works indefinitely.

An artist wants to maximize her earnings. She would incur prohibitively high transaction costs if she tried to sell the work herself directly to collectors. Instead, she sells her work to a dealer, who has lower transaction costs, and who will promote and resell the work. There is a downward sloping demand curve for this artist's work. There are many dealers competing for her work so that dealers have no monopsony power.

Dealer-Owned Gallery

The artist sells q pieces of her art works to the dealer at price w. She also receives a share, α, possibly zero, of the resale price, p.[10]

The dealer maximizes his profit,

$$\max_{p,\,s} \pi_d = (p(1 - \alpha) - w)\, q(p, s) - s, \tag{1}$$

where s, the amount of promotional effort, costs \$1 per unit; the quantity sold, $q(p, s)$ depends on the price he charges and the amount of promotional activity; and $(1 - \alpha)$ is the share of the price he keeps after paying the artist a resale royalty of αp. In this specification, promotional activities are a public good and affect all units of work produced by that artist (so an artist uses a single dealer). Assuming an interior solution, the dealer's first-order conditions are

$$(1 - \alpha)q(p, s) + (p(1 - \alpha) - w)q_p(p, s) = 0 \tag{2}$$

and

$$(p(1 - \alpha) - w)q_s(p, s) = 1. \tag{3}$$

That is, he sets his price such that marginal profit net of payments to the artist with respect to a change in price equals zero (Equation 2), and he sets his promotional activity so that the marginal profit with respect to an extra unit of promotional effort

equals the marginal cost, 1, of a unit of effort (Equation 3). Solving Equations (2) and (3), his optimal price and promotion level are functions of w and α: $p^* = p(w, \alpha)$, $s^* = s(w, \alpha)$.

If the artist is a utility maximizer, she sets w and α to maximize her utility, which is a function of her earnings and the pleasure or displeasure she receives from working. For simplicity, we assume the artist is an earnings maximizer:

$$\max_{w, \alpha} \pi_a = (w + \alpha p(w, \alpha) - c) \, q(p(w, \alpha), s(w, \alpha)), \tag{4}$$

where c is her foregone earnings (or psychic costs or benefits) of producing a work of art.

If the artist sets w and α and then the dealer picks p and s, the resulting equilibrium is not a first best for the artist because the dealer marks up the painting ($p > w$), which reduces sales (holding s constant). Were the artist not to allow the dealer a second markup, however, from Equation (3), the dealer would provide no services. Thus, the artist purposefully shares her market power with the dealer to insure he promotes her and her work.[11]

The artist's optimal α is not typically zero. The artist is generally better off if she has two instruments, w and α, rather than one, because she wants to affect both the dealer's price and his promotional activities.

Artist-Owned Gallery

If the artist owned the gallery, as a few artists do, then she could maximize her earnings.[12] There would be no need to set w or α because the only sale would be to collectors (that is, formally, the sale to a collector is no longer a resale). The artist would set p and s to maximize total profit of $\pi = (p - c)q(p, s) - s$. Promotional activity

and total profit are higher than if the decision making is decentralized (where $\pi = \pi_a + \pi_d$).

To make this example simpler still, we now assume that the demand curve is multiplicatively separable: $q(p, s) = f(p)g(s)$. One implication of this assumption is that the price is independent of promotional activity and promotional activity only affects the number of units sold. To show this result, we substitute for $q(p, s)$ in Equations (2) and (3) and divide (2) through by $g(s)$:

$$(1 - \alpha)f(p) + (p(1 - \alpha) - w)f'(p) = 0 \qquad (2')$$

$$(p(1 - \alpha) - w)f(p)g'(s) = 1. \qquad (3')$$

With this demand function, if the artist raises w or α, the dealer raises the price and reduces his promotional activities:

$$\frac{dp}{dw} = \frac{f'}{2(1 - \alpha)f' + (p(1 - \alpha) - w)f''} > 0,$$

$$\frac{ds}{dw} = \frac{g'}{(p(1 - \alpha) - w)g''} < 0,$$

$$\frac{dp}{d\alpha} = \frac{f + pf'}{2(1 - \alpha)f' + (p(1 - \alpha) - w)f''} > 0,$$

$$\frac{ds}{d\alpha} = \frac{pg'}{(p(1 - \alpha) - w)g''} < 0.$$

As a result, the quantity sold unambiguously falls.

Capital Gains

So far, we have assumed that the resale royalty is collected on the resale price. Instead, the royalty rate could be applied to only the capital gains.[13] With separable demand, the dealer's profit is:

$$\pi_d = (1 - \beta)(p - \omega)q(p, s) - s, \tag{5}$$

where β is the royalty rate on capital gains and ω is the payment per painting that the artist receives from the dealer (ω plays the same role as w in the model above).

Assuming an interior solution, the dealer's first-order conditions are

$$(1 - \beta)q(p, s) + (1 - \beta)(p - \omega)q_p(p, s) = 0 \tag{6}$$

and

$$(1 - \beta)(p - \omega)q_s(p, s) = 1. \tag{7}$$

He sets his price such that marginal profit net of payments to the artist with respect to a change in price equals zero, and he chooses s so that the marginal profit with respect to an extra unit of promotional effort equals the marginal cost of a unit of effort, 1. Solving Equations (6) and (7), his optimal price and promotion level are functions of w and α: $\hat{p} = p(w, \alpha)$, $\hat{s} = s(w, \alpha)$. The artist's profit is the same under either system.[14]

Simulations

These results are illustrated in Table 1 for the multiplicatively separable demand curve $q(p, s) = (10 - p)s^{1/4}$. The final price is the same regardless of who owns the gallery, but there is more promotional activity and higher total profit when the artist owns the gallery.

Whether the royalty is assessed on the resale price (α) or on the capital gains (β), affects the royalty rate and the payment per piece of art (w or ω). The other variables (p, s, q, and profit) are the same under both systems.

For this specific example, the optimal p is $5 + \omega/2$ for a royalty on capital gains; whereas the optimal royalty is $5 + w/(2(1 - \alpha))$ for a royalty on the resale price. That is, price is independent of β in the capital gains model, but price is not independent of α in the other model.

Thus, with the resale royalty on price, an increase in the rate, α, increases the price and decreases quantity, all else equal. Given that g(s) is concave (as it must be for the second-order condition for profit-maximization to hold), equilibrium promotional activity is greater for a given royalty rate when the royalty is on capital gains because the dealer keeps more of the marginal gain to promotion.

Where c = 0 (no cost of production), under either system, the artist prefers to rely on the resale royalties (α or β) alone and sets her initial price (w or ω) to zero. This result is not surprising, because w = 0 and a resale is assumed, so that the profit is the same regardless of whether capital gains or the resale price is used.

Although the assumption of no opportunity cost is unrealistic, it is clear that in general the artist would not set α or β equal to zero.[15] Indeed, these simulations suggest that the artist may want to set the lump-sum payment to zero or a small value and to rely on the royalty for most of her earnings. That pattern is close to what is commonly observed (though, perhaps, for other reasons): the artist receives small (perhaps studio space) or no payments, and the dealer and the artist split the revenues from the sale to collectors.

If $c = 1$, then $w = 1$ if the royalty is assessed on the capital gains and 0.25 if it is applied to the resale price; however, the other variables remain the same. Thus, in this simple example, it makes no difference as far as profit or production are concerned whether the royalty is assessed on the resale price or capital gains. Under both systems, the artist does better if she owns the gallery (ignoring any additional management fees and other problems). With vertical integration, the problem of the dealer's second markup is eliminated.

III. BENEFITS FROM REQUIRING A RESALE ROYALTY

This simple model illustrates that an artist may want resale royalties even ignoring risk elements. There are at least three additional arguments in favor of requiring a resale royalty. First, the law may help young artists avoid being victimized by sophisticated dealers (or other initial purchasers). Second, the law may encourage greater activity by older artists. Third, the requirement may facilitate pricing practices that benefit the artist.

Protecting the Artist

If there are only a few dealers who can potentially exhibit a particular artist's works, the artist may be at a disadvantage in negotiating with those dealers. That is, that dealers can "take advantage of" young artists by paying them relatively little for their works. In economics jargon, such dealers have asymmetric bargaining power or monopsony power.

Given sufficient monopsony power, under the current system, the dealer pays artists the reservation value for their works (the minimum amount an artist will accept). If the dealer is forced to guarantee royalties from resale, the dealer will want to

reduce the initial price paid for the works. However, given the dealer is already paying the bare minimum the artist will accept (and there are imperfect capital markets that prevent artists from borrowing), the dealer cannot further lower the initial price. Under these circumstances, mandating the rights to resale royalties benefits young artists by overcoming the asymmetric bargaining power they face. Of course, the requirement will only benefit artists if they cannot be forced to waive these rights by a powerful dealer. Moreover, to the degree that galleries are driven out of the market by reduced earnings, the law may exacerbate problems due to the thin market.

We presume that many sponsors of such legislation have this scenario in mind. They feel that the government needs to be paternalistic to young artists. We wonder, however, how realistic it is. It seems likely that the competition by galleries for young artists is strong enough that dealers have little, if any, monopsony power. We believe the next two arguments probably have more merit.

Durability Effects

Established artists may be motivated to work harder later in their careers by a resale royalty requirement. Older artists who improve their reputations increase both the price of their current works and the royalties from the resale of their earlier works. With a resale royalties requirement, artists benefit more from an increased reputation. That is, the externalities from reputation are partially internalized if the artist shares in the resale revenues. The larger an artist's share of the resale price, the greater the incentive the artist has to put effort into producing more or better quality works or engaging in other activities that increase the artist's reputation.[16]

An analogous argument is made in the Coase Conjecture.[17] Coase argued that current and future production by a durable goods monopolist are substitutes that compete with each other if resales are possible.[18] As a result, the monopolist can obtain higher current prices (and present discounted earnings) if it can convince potential purchasers that it will not produce close substitutes in the future. That is, it would not be surprising if the price of paintings of a famous artist, such as Picasso, increased upon his or her death.

The analogy of the standard durable goods analysis to the art market is imperfect, however, because an artist's later works are not a perfect substitute for earlier works and because later works may increase the value of earlier works (by enhancing the artist's reputation). Later work may affect the artist's reputation either through increased quantity or increased quality. For example, by producing a few, very-high quality paintings in later years, prices of both new and old art works may increase.

A resale royalty introduces "friction" into the second-hand market, reducing the number of resales. Earlier works are less likely to compete with later works, hence the artist has less of an incentive to restrict production. Thus, a resale tax or royalty has an effect analogous to a decrease in durability in reducing the durability externality problem.

Alternative Pricing Practices

A resale royalties requirement may lead to pricing practices that increase artists' earnings, much in the manner of agricultural marketing orders, which allow farmers to price discriminate to increase profit. Suppose, for example, that an artist could earn more by charging a high price in New York City and a low price in Kansas

City for a given work (e. g., numbered lithographs). Currently, there is nothing to prevent someone from buying at the low price in Kansas City and undercutting the artist in New York City. To the degree that an artist is important enough to make such arbitrage worthwhile, the artist is prevented from price discriminating, which decreases revenues. Similarly, artists have a limited incentive to store their own works in order to price discriminate over time (selling a given lithograph at a low price when the artist is young and at a higher price later).[19]

A resale royalties requirement facilitates price discrimination over time or space because it reduces the incentive to resell works. An arbitrager (speculator), who in the absence of a requirement keeps all the returns from a resale, must share some of the revenues with the artist. As a result, under a resale royalty requirement, initial purchasers are less likely to resell in the future. Thus, a larger fraction of buyers consists of collectors who will keep the works indefinitely (and a smaller fraction consists of speculators).

That is, in some sense, this requirement works for the wrong reason. The artist may earn relatively little in the way of resale royalties because few works are resold. Nonetheless, the artist gains by being able to charge more for paintings later in life. Because collectors do not resell earlier works, the artist's later works face less competition for current dollars from the artist's earlier works.

IV. THE DRAWBACKS OF RESALE ROYALTY REQUIREMENTS

Artists and others might not want a resale royalties requirement for at least three reasons. First, such a requirement shifts risks toward artists. Second, and probably more important, it may have adverse effects on promotional activities by dealers, which will harm young artists. Third, it may dissuade some potential artists

from entering this line of work. If artists can easily waive the rights to future royalties, however, they need not suffer these harms even if a law creates rights to resale royalties.

Risk Bearing

The maximum price the initial purchaser would be willing to pay is lower if, because of a contract or government requirement, he must pay the artist a royalty from a resale. That is, the initial price is lowered to reflect the reduced potential capital gains. Because there is uncertainty about the future value of any work of art, both the artist and the initial purchaser share that risk under a resale royalty requirement. Where the artist does not share in future proceeds, the initial purchaser bears all the risks.

It is reasonable to assume that wealthier individuals and those who are better able to diversify risks are the ones who are most willing to bear risk.[20] Typically, young artists are less wealthy and less able to diversify than are purchasers. After all, collectors, speculators, and dealers may purchase the works of many young artists and will see their holdings increase in wealth if only some of these works eventually become very valuable. In contrast, each artist's future royalties depend on the future value of only his or her own works.

Thus, if an artist were given the choice between receiving more initially or receiving less initially but with the potentiality of more later, the artist might, quite rationally and reasonably, opt for the former choice. That is, being ill-suited to bear risks, the artist may want a certain return now, even if it has a lower expected value than the alternative.

Promotion

A more telling argument concerns the effects of such a requirement on promotional activities. The formal model in Section I shows that resale royalties are likely to decrease the equilibrium amount of promotion undertaken by a dealer. If a dealer extensively promotes an artist's works, the expected initial and future prices of that artist's works rises. Under the current system, the gallery chooses the level of its promotional activities to maximize the present discounted value of its current and future earnings without worrying about sharing future gains with the artist. A positive resale royalty rate is analogous to a tax on the gallery in its role as a speculator. Because the gallery now bears all the costs of promotion and receives only a fraction of the returns, it engages in less promotion.

In our model, the artist faces a tradeoff from a higher royalty rate: the reduced promotional effort by the dealer may offset the increased royalty earnings. There is an optimal royalty rate that is probably nonzero. An artist that can set the royalty rate is able to maximize her earnings. If the government sets the royalty rate and there are high costs to renegotiating that rate, the rate probably will not be set optimally for most artists. If it is set too high, too little promotion will take place.

Consider now a different model of how the artist and the dealer interact. Instead of the artist setting a price and a royalty rate, the artist and the dealer could play a cooperative (e. g., Nash) game where the artist sells the works to the dealer who then promotes them (at lower cost than the artist can) and resells them. The artist and the dealer bargain over how much the artist receives, which depends on the expected resale price. Suppose the price the collectors pay depends on promotion, but, otherwise, they will buy as much as the artist can produce at that price.

Given the artist's inherent ability, the surplus the artist and the dealer share depends on the dealer's efforts. If the dealer gets all of the marginal revenues (the artist receives a lump sum payment rather than a fraction of the resale price), the dealer engages in the efficient level of promotional effort. The law, if it changes this splitting rule, may lead to inefficient production of effort. That is, if the artist receives α share of the resale price, the dealer only receives $(1 - \alpha)$ of the revenues but incurs all the promotional costs. Hence, as α rises, the gallery reduces its promotional efforts. If, however, only a fixed level of promotional efforts is necessary (fixed possibility frontier), the law can change the bargaining solution, thereby helping the artist and hurting the dealer.

So far in our discussion, we have concentrated on resales by galleries. If, however, collectors or museums also promote artists and their works, the same type of reasoning would apply. That is, a resale royalty requirement would reduce their promotional activities as well.

Learning by Doing and Occupational Choice

The resale royalty requirement also may reduce the quantity and quality of art for a reason related to the risk-bearing argument. Artists typically have difficulty borrowing against highly speculative future returns. If the imposition of a resale royalty requirement leads artists to receive smaller initial payments than under the current system, they may find that they cannot live on those sums in the short run.

As a result, they may switch to another occupation on a full- or part-time basis.[21] To the degree that there is learning by doing in art as in other activities (one's skill increases with experience, at least for a while), both the quantity and

quality of art work by young artists may diminish. This argument is somewhat offset by the corresponding one above that older artists have an incentive to work harder.

V. GAINERS AND LOSERS

There are five groups who stand to gain or lose from a government-mandated resale royalties requirement: artists, dealers, collectors, speculators, and taxpayers. Some individuals, notably dealers, may belong to several of these groups. Taxpayers only care to the extent that they must pay for enforcing such rules. To the extent that the other groups bear these expenses (through establishing a private system or reimbursing the government), taxpayers should be indifferent. The other groups, however, may be affected substantially if resale royalties are made mandatory. Again, if artists can waive these rights, this system may differ little from the current one.

A resale royalty requirement reduces collectors' incentives to resell works of art, which they can keep and appreciate viewing.[22] In contrast, a pure speculator who is only interested in capital gains will continue to sell any work because the speculator puts no value on keeping the work for its own sake. As a result, if such a requirement goes into effect, a larger share of art will be owned by collectors who intend to keep the works.

Initial sales prices for works by artists will be lowered for three reasons. First, initial purchase prices will be lower to compensate for the obligation to share future profits from resell. Second, dealers will promote less, which hurts present and future prices. Third, fewer speculators will buy from artists because they must share proceeds from resales with the artist, so demand for the works of artists falls.

Collectors who intend to keep the works indefinitely are not substantially affected by the resale royalties requirement so their demand is little changed. As a

result, collectors would make up a larger share of the market for young artists. Thus we would expect sophisticated collectors to benefit from the requirement because they pay lower initial prices. Less-sophisticated collectors are less likely to see the art because of reduced promotional activities (and, possibly, because there are fewer galleries).

Some young artists, who earn less in the short run as a result, may seek alternative occupations. Only those with adequate wealth and who are relatively optimistic about the future value of their works will remain. Many of those artists who remain, however, will prosper. They have an incentive to work harder later in their careers; fewer of their early works will be resold, which allows them to charge more for later works (price discriminate over time or space); and they may face competition from fewer other artists (because many dropped out at a young age).

Because the demand for works from young artists decreases, some dealers who specialize in such artists may go out of business and others will reduce their promotional activities. Initial sales prices will fall so that the gallery's share of these prices will diminish. Dealers who specialize in the works of well-established artists will be less affected and may even benefit as the value of their works increase.

VI. CONCLUSIONS

Our main conclusion is that a law in which the government guarantees artists the rights to resale royalties may have little effect if artists can waive these rights. Young artists can currently contract with purchasers to ensure resale royalties; yet, very few do so. That they do not may reflect that either they believe such compensation scheme is not desirable or that the transaction and enforcement costs are prohibitively high. If few such contracts are written because of high transaction costs, the

government or a private organization could, through taking advantage of scale economies, lower these costs and encourage such contracts.

We have noted, however, that some young artists and dealers may be harmed by a resale royalty requirement. Thus, many, if not most, young artists are likely to waive their rights. If so, the law may have very little effect except on well-established, elite artists as several artists have argued. But that is the group that least needs help in contracting.

Given that the government is already obligated to maintain a registry of artists, perhaps the best solution is for the government to help lower the transaction and enforcement costs of contracts that set resale royalty rates. For the government to actually set the rate, or even worse, to mandate a particular rate would almost certainly be harmful for many young artists.

Table 1

Equilibria With and Without Vertical Integration

	c = 0		c = 1	
	Dealer owns Gallery	Artist owns Gallery	Dealer owns Galley	Artist owns Gallery
w	0.0		0.25	
α	0.75		0.75	
ω	0.0		1	
β	0.75		0.75	
p	5	5	5.5	5.5
s	1.813	11.513	1.369	8.693
q	5.802	9.210	4.868	7.727
π_a	21.757	34.538	16.428	33.805
π_d	5.440		4.108	
$\pi = \pi_a + \pi_d$	27.197	34.538	20.537	33.805

REFERENCES AND NOTES

1. Among the countries that provide such guarantees are Algeria, Belgium, Czecho-slovakia, Chile, France, Germany, Italy, Luxembourg, Poland, Portugal, Sweden, Tunisia, Turkey, and Uruguay. In French law, this inalienable right extends over the duration of the artist's life plus fifty years (L. D. Solomon and L. V. Gill, "Federal and State Resale Royalty Legislation: What Hath Art Wrought?" (1978) 26 UCLA L. R. 322). According to Professor John Merryman, in most of these countries, artists do not actually receive resale proceeds. The exceptions are France and Germany (where the right is enforced by an agreement between the dealers' association and the principal artist' association and the proceeds go into an artists' welfare fund). The Californian law exempts transactions where the gross sales price is less than $1,000 or where the resale price of the art is less than the seller's purchase price or where the seller does not reside in California. The California law does cover private sales, unlike laws in many other countries. The "inalienable" rights in the California statute may only be waived where the artist obtains a greater percentage by private, written agreement. At least initially, enforcement problems led to no payments under the California law (*ibid.*).

2. A. Parachini, "Artists' Rights Bill Awaiting Bush's Signature," *Los Angeles Times*, 6 November 6, 1990, p. F3: "(T)he resale royalty provisions prompted opposition even among some artists. Two years ago, when Congress was considering an earlier . . . bill, 40 artists — including Wilem de Kooning, Sam Francis, Robert Motherwell, Frank Stella and Roy Lichtenstein — opposed the provision, arguing that the resale royalty issue was an elitist provision whose enactment might make it even harder for unknown artists to attract the interest of collectors."

3. In conducting the study, they were to consult with "appropriate departments and agencies of the United States, foreign governments, and groups involved in the creation, exhibition, dissemination, and preservation of works of art, including artists, art dealers, collectors of fine art, and curators of art museums." They were to report to the Congress no later than 18 months after the act was enacted, December 1, 1990.

4. The Artist's Reserved Rights Transfer and Sales Agreement was published in New York by dealer Seth Siegelaub and attorney Robert Projansky in 1971 (J. H. Merryman and A. E. Elsen, *Law, Ethics and the Visual Arts*, University of Pennsylvania Press (1987)). It provides a 15 percent royalty on the appreciated value (see Solomon and Gill, *supra*, note 1, on the difficulties of enforcing this contract). Two other, "more moderate and realistic form contracts" (Merryman and Elsen, p. 230) were proposed by attorney Charles Jurrist and sculptor Ed Kienholz. None of these contracts, are widely used because of enforcement problems (Merryman and Elsen).

5. Under Public Law 101-650 (approved December 1, 1990), the works of artists, photographers, sculptors and printmakers are protected against unauthorized mutilation and change. Those rules are similar to existing statutes in 11 states, including California and New York, and many European countries, which recognize intellectual property rights (Parachini, *supra*, note 2). The Act requires the Registrar of Copyrights to establish a national directory in which artists can register their current address so that the owner of a building who proposes removing or destroying that art work can contact them for permission.

6. Earlier articles are discussed in J. L. Solow, "An Economic Analysis of the *Droit de Suite*," University of Iowa Working Paper, 1992, and Merryman and Elsen, *supra* note 4. In the legal literature, Merryman and Elsen; M. E. Price, "Government Policy and

Economic Security for Artists: The Case of the *Droit de Suite*," (1968) 77 Yale L. J. 1333; and Solomon and Gill, *supra*, note 1, discuss these issues. M. Asimow, "Economic Aspects of the *Droit de Suite*," in *Legal Rights of the Artist*, ed., Melville Nimmer, National Endowment on the Arts and Humanities (1971) makes an analogy to an excise tax. S. Rottenberg, "The Remuneration of Artists," *Frontiers of Economics* (1975) concludes that such law would have a differential effect on artists. Similarly, S. Landsburg, *Price Theory and Applications*, The Dryden Press (1989) argues that the resale royalty transfers income from less successful to more successful artists (see, however, Solow's critique of this argument). B. W. Bolch, W. W. Damon, and C. E. Hinshaw, "An Economic Analysis of the California Art Royalty Statute," (1978) 10 Connecticut L. R. 689 and "Visual Artists' Rights Act of 1987: A Case of Misguided Legislation," (1988) 8 Cato J. 8 71 consider whether an artist will hold work for future sales or sell to an investor now.

7. G. Glueck, "Art World's Free Agents Are on the Move," *New York Times* 14 January 1991, pp. B1 and B4 reports that even relatively successful and established artists switch dealers, at least in part, because of a belief that the new dealer has superior skills in promotion or setting prices.

8. R. K. Filer, "The 'Starving Artist' — Myth or Reality? Earnings of Artists in the United States," (1986) 94 J. Political Econ. 56, finds that the average artist (who tend to be younger than other workers) earns 10 percent less per year than other workers. This difference shrinks over an artist's lifetime due to a steeper than typical age/earnings profile. As a result, artists earn only 2.9 percent less than others over their working lives.

9. In principle, a dealer could agree to buy all works an artist will supply at a fixed

fee. Such a scheme leads to a moral hazard problem where the artist does not have an incentive to supply uniformly high-quality works.

10. We ignore the possibility that the art is resold by the collectors because the effects of further royalties only reinforces the results illustrated by this simple model.

11. This story is analogous to that in the share cropping-landowner or the exclusive dealership/resale price maintenance/Fair Trade analyses. To encourage promotional activity, the artist transfers monopoly power to a single dealer. Similarly, more successful artists may limit the number of dealers who carry their works so that each dealer has an incentive to promote locally. See L. G. Telser, "Why Should Manufacturers Want Fair Trade?" (1960) 3 J. Law and Econ. 86, on the analysis of resale price maintenance under Fair Trade Laws and D. W. Carlton and J. M. Perloff, *Modern Industrial Organization*. Scott, Foresman/Little, Brown (1990, Ch. 16) for a discussion of the other models.

12. The artist could also achieve the first-best outcome in two other ways. First, if the artist could observe the dealer's promotional expenditures, she could extract all but ε profits by setting the royalty on profits and obtain the first-best equilibrium. It is extremely unlikely, however, that an artist could observe profits. Second, if the artist had additional instruments of control over the dealer (e. g., the artist could control the resale price), the artist could achieve her first best. These additional types of controls have been discussed at length in the franchise literature; however, they are very unlikely here. We doubt that many (if any) dealer-artist agreements allow the artist to determine the resale price. One reason is that, in the real world, demand is random. It would be costly to write contingent contracts specifying the resale price under

various conditions (and potentially disastrous for both parties to write a noncontingent contract).

13. Solow, *supra*, note 6, observes that in the French version, the royalty is on the resale price, whereas in the Italian version, it is on the capital gains.

14. To prove that the equilibrium profits are the same under either system, it suffices to show that the two pairs of constraints (2) and (3) and (6) and (7) are satisfied by values of (α, w) and (β, ω) that give artists the same return. Suppose that (α^*, w^*) satisfies (2) and (3) and maximize the artist's profits, $(\alpha^*p^* + w^*)q^*$. If we set $\beta = \alpha^*$ and $\omega(1 - \beta) = w^*$, the dealer is induced to choose the same (p^*, q^*). With the royalty on capital gains, the artist receives $(\beta(p^* - \omega) + \omega)q^* = (\beta p^* + (1 - \beta)\omega)q^* = (\alpha p^* + w)q^*$, which are the profits when the royalty is applied to the resale price. Substituting $\beta = \alpha^*$ and $\omega(1 - \beta) = W^*$ into equations (6) and (7), we obtain,

$$(1 - \alpha^*)q + ((1 - \alpha^*)p - w^*)q_p = 0 \qquad (6')$$

$$((1 - \alpha^*)p - w^*)q_s = 1. \qquad (7')$$

Equations (6') and (7') are the same as (2) and (3).

15. Although we have not shown it formally, additional simulations suggest that for general $f(p)$, if $g(s) = s^\gamma$, α or β equals $1 - \gamma$.

16. Filer, *supra*, note 8, shows that for the first 30 years of an individual's work life, the marginal effect on earnings from an additional year of work experience is greater for artists than for other workers.

17. R. H. Coase, "Durability and Monopoly," (1972) 15 J. Law & Econ. 143. Solow, *supra*, note 6, provides a thorough and convincing analysis relating the Coase Conjecture to artists' royalties.

18. If artists were only to rent works of art and not to sell them, the Coasian externality problem is eliminated (see, e. g., J. I. Bulow, "Durable-Goods Monopolists," (1982) 90 J. Political Econ. 314 or Carlton and Perloff, *supra*, note 10). S. J. Liebowitz, "Some Puzzling Behavior by owners of Intellectual Products: An Analysis," (1987) 5 Contemporary Policy Issues 44, however, has an alternative view. Although a few rental galleries exist, they typically give renters the option to purchase and, indeed, encourage such purchases. Thus, there is little evidence that renting has eliminated the externality problem in this market.

19. Again, this argument is analogous to that of the durability literature. See also N. L. Stokey, "Intertemporal Price Discrimination," (1979) 94 Quarterly J. Econ. 355.

20. Cf. Liebowitz, *supra*, note 17, who argues that artists might want to take on risks under certain circumstances.

21. Filer, *supra*, note 8, finds, however, that artists are less likely to leave art employment than a typical worker is likely to change occupations.

22. Clearly, speculators are not the primary purchasers of art. W. J. Baumol, "Unnatural Value: or Art Investment as Floating Crap Game," (1986) 76 Amer. Econ. Rev. 10, finds (based on sales of works of major artists from 1652 to 1961) that the expected rate of return was negligible, which suggests that holding art is a consumption good. J. P. Stein, "The Monetary Appreciation of Paintings," (1977) 85 J. Political Econ. 1021, using a capital-asset pricing model concludes that if collectors value the services yielded by art work at 1.6 percent per year, paintings are "no more or less attractive

than other assets." Their yields are comparable to the going rate for other comparably risky assets. R. C. Anderson, "Paintings as an Investment," (1974) 12 Economic Inquiry 13, also finds that the rate of return on paintings are below that of common stock. B. S. Frey and W. W. Pommerehne, "Art Investment: An Empirical Inquiry," (1989) 56 Southern Econ. J. 396, argue that the average rates of return on paintings has increased to 1.6 percent (median 2.0 percent) in the most recent period (1950-1987), but is still below that of financial assets. These studies report that unusually high rates of return or unusually large losses are associated with holding paintings for short periods of time.