# THE EFFICIENCY OF THE LEGAL SYSTEM VERSUS THE INCOME TAX IN REDISTRIBUTING INCOME

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# The Efficiency of the Legal System versus the Income Tax in Redistributing Income

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#### Abstract

Should legal rules be chosen only on the basis of their efficiency or also on the basis of their distributional effects? This article demonstrates that redistribution accomplished through legal rules is systematically less efficient than redistribution accomplished through the income tax system -- even though the latter distorts incentives to work. In particular, a regime with an inefficient legal rule can be replaced by a regime with an efficient legal rule and a modified income tax system designed so that every person is made better off.

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In economic analysis of law, normative judgments about legal rules are usually based on their efficiency, regardless of their effects on the distribution of income. As a consequence, the economic approach is often criticized. Such criticism would obviously lack force if the income tax system -- understood here to include transfer payments -- could be used freely to achieve any desired distribution of income. But income taxes and transfer payments distort incentives to work, limiting the degree to which it is socially desirable to employ the income tax system to redistribute income. The question therefore arises whether legal rules should be used to take up some of the slack and promote distributional objectives, even if at a sacrifice to efficiency.

In this article, we develop the argument that redistribution through legal rules offers no advantage over redistribution through the income tax system and is generally worse. The reason, in essence, is that using legal rules to redistribute income distorts work incentives fully as much as does the income tax system -- because the distortion is caused by the redistribution itself -- while also creating inefficiencies in the activities regulated by the legal rules.<sup>2</sup>

To illustrate our argument, suppose that high-income individuals are subject to an income tax of 30% and that further redistribution to the poor would, in principle, be desirable. Would we want to adopt an inefficient legal rule because it redistributes an additional 1% of income from high earners to the poor? Under such a regime, high-earning individuals would surrender 31% of each additional dollar of income: 30% would go to the tax

 $<sup>^{1}</sup>$  For purposes of this article, the term "legal rules" will refer to rules other than those that define the income tax and welfare system.

The first model establishing this point is in Steven Shavell, A Note on Efficiency vs. Distributional Equity in Legal Rulemaking: Should Distributional Equity Matter Given Optimal Income Taxation?, 71 Am. Econ. Rev. 414 (1981). A related argument is made in A. Hylland and Richard M. Zeckhauser, Distributional Objectives Should Affect Taxes but not Program Choice or Design, 81 Scand. J. Econ. 264 (1979). It does not appear, however, that the point is understood in legal academia. For example, Jennifer H. Arlen, Should Defendants' Wealth Matter?, 21 J. Legal Stud. 413 (1992), does not take into account the existence of the income tax system in arguing that legal rules should reflect parties' wealth. We discuss her article in note 16.

authority, and 1% would be taken by the legal system. Observe, however, that high-earning individuals would be in the same position -- and would be induced to work the same amount -- if instead their income tax rate simply were raised to 31%. The added tax revenue could be given to the poor, as under the inefficient legal rule. Redistribution using the 31% income tax thus differs in only one respect: because redistribution is accomplished in the presence of an efficient legal rule rather than an inefficient rule, resources would, by definition, be saved. This savings means that all individuals could be made better off (for example, by reducing taxes and increasing payments to the poor).

In section 1, we explain this argument in some detail. (A formal proof is given in an appendix.) In section 2, we discuss redistribution through excise taxes rather than the income tax, the general role of legal rules in redistribution, and when if ever legal rules should take into account parties' wealth; in section 3, we conclude.

# 1. Analysis

We provide here an informal demonstration of our result: Given any regime with an inefficient legal rule (notably, one intended to help achieve a redistributive goal), there exists an alternative regime with an efficient legal rule and a modified income tax system in which all individuals are better off. For concreteness, we will use a specific example in our analysis, but it will be clear that our argument does not depend on the particulars of the example.<sup>3</sup>

Suppose that individuals engage in an activity that may cause accidents, the likelihood of which may be reduced by the exercise of care. It is a familiar result that the strict liability rule -- under which individuals pay for the harm they cause -- leads to efficient behavior. Suppose that each individual's total accident costs under this rule, denoted â, are \$1000. These include the cost of taking care, harm suffered, damages paid, and

<sup>&</sup>lt;sup>3</sup> For generalization and discussion of qualifications, see the appendix.

damages received. (Note that under strict liability with damages equal to harm, the harm suffered is exactly offset by damages received.)

Compare this efficient legal rule to an inefficient one that redistributes income from higher to lower income individuals. (Redistribution might be accomplished, for example, by making damages higher when the injurer is wealthy and lower when the injurer is poor. Such a redistributive legal rule would be inefficient: it would induce the wealthy to take more care than is efficient and the poor to take less care.) Let us denote the net accident costs -- the cost of taking care, harm suffered, damages paid, and damages received -- individuals bear under this new rule by a(y); that is, an individual's accident costs are a function of his income, y. In particular, suppose that the poorest (with income of \$0) benefit by \$500, the richest (with income of \$100,000) lose by \$1000, with a linear relationship in between. Figure 1 depicts accident costs under this inefficient rule and also under the efficient strict liability rule.

#### [FIGURE 1]

Thus, the inefficient legal rule, relative to the efficient rule, redistributes from those with incomes over \$33,333 to those with lower incomes.

To complete the description of the regime with the inefficient rule, assume that the income tax rate is 20% and each individual receives a \$2000 transfer payment. Thus, individuals earning less than \$10,000 receive transfers (those earning no income receive \$2000); individuals earning above \$10,000 make net payments. This tax system is illustrated by the solid line in Figure 2.

<sup>&</sup>lt;sup>4</sup> This may be familiar to some readers as a negative income tax. It also is analogous to a conventional income tax combined with a welfare system.

#### [FIGURE 2]

In Figure 2, we also show a dashed line for t + a, which is an individual's total payments made under the tax system and on account of accidents in the regime with the inefficient legal rule. It is this combination that determines an individual's level of welfare and work incentives. With regard to the latter, we emphasize that when an individual of income y contemplates earning additional income by working harder, his net marginal payment equals the sum of his marginal tax payment and the marginal cost on account of accidents.<sup>5</sup>

Having now described the regime under the inefficient legal rule, we will demonstrate that all individuals can be made better off in a regime with the efficient legal rule and an altered income tax system. Consider the modified income tax depicted in Figure 3.

### [FIGURE 3]

The solid line, t + a, which represents individual's total payments under the regime with the inefficient legal rule, is copied from Figure 2. The dashed line, which represents the new income tax,  $\hat{t}$ , is obtained by subtracting  $\hat{a}$  (which, recall, equals \$1000 for all income levels) from the line t + a.

Individuals' behavior and welfare under the efficient legal rule combined with the new income tax can now be described. The net effect of the tax and accident costs are given by the sum  $\hat{t} + \hat{a}$ . But, by construction, this

#### [FIGURE FN]

The schedule  $\hat{t}(y)$  is steeper than t(y) -- that is, more progressive -- by precisely the amount by which a(y) is steeper  $\hat{a}$ , as depicted in Figure 1.

<sup>&</sup>lt;sup>5</sup> Of course, the extent to which individuals accurately perceive both their marginal tax rate and the amount implicitly taxed by the legal system is an empirical question. We think it plausible that if the legal system indeed redistributed a significant amount of income, individuals would be aware of this (and to the extent they misestimated the extent of redistribution, there is no particular reason to assume that their guesses would be too low rather than too high).

 $<sup>^{\</sup>rm 6}$  One can directly compare the two tax regimes, as illustrated in the following Figure.

expression is identical to t+a for any income level. (After all,  $\hat{t}$  is constructed by subtracting  $\hat{a}$  from t+a. When  $\hat{a}$  is added back, one has t+a.) Thus, individuals who earn the same income, y, under each regime have the same level of welfare under each regime. Moreover, each individual (whatever his ability) will choose to earn the same income under each regime since the incentives are the same: a marginal dollar earned results in the same incremental costs (taxes plus accident costs) under each regime.

Although under each regime work effort and an individuals' after-tax welfare is the same, the state collects more tax revenue in the new regime because it involves a more efficient legal rule. To see why this must be true, we first compare total available resources in each regime. Because individuals' work effort is unaffected, total earnings are the same. But the inefficient rule by definition wastes resources relative to the efficient rule, so the new regime involves greater total resources. Yet the new income tax leaves individuals with the same income as in the initial regime. Thus, it must be that the new tax collects all the resources saved by the efficient legal rule. Indeed, the new tax was constructed precisely to produce this result.

The conclusion, therefore, is that moving to the efficient legal rule with an appropriate change in the income tax leaves all individuals equally well off but leaves the government with a surplus. With this additional revenue, the government can make each individual better off -- for example, by lowering taxes by a fixed amount for each individual or spending the funds on a public good that benefits everyone.

#### 2. Discussion

(a) The income tax, excise taxes, and legal rules as redistributive devices. The preceding argument demonstrates that more efficient

<sup>&</sup>lt;sup>7</sup> To illustrate, consider the case in which individuals' income is uniformly distributed over the range from \$0 to \$100,000. It is straightforward to calculate that the per capita cost of the inefficient legal rule is \$250, that per capita revenue under the original income tax, t, is \$8000, and per capita revenue under the modified income tax, t, is \$8250, indicating indeed that the modified tax collects greater revenue by an amount just equaling the resources wasted by the inefficient legal rule.

redistribution can be accomplished using an income tax rather than inefficient legal rules. Similar reasoning applies when only an excise tax on the relevant activity is available. Suppose, for example, that there is an inefficient legal rule that requires excessive care by owners of yachts. Moreover, assume that this rule has desirable distributive features, because yacht owners are usually wealthier than those injured by yachts. The inefficiency caused by this rule will have three components: excessive care is itself more costly than the harm prevented; yachting is made more expensive, which distorts choices about yachting; and income buys less for the rich, which distorts their labor-leisure choices.

Consider now the alternative of using an efficient legal rule combined with an excise tax on yachting in an appropriate amount, the proceeds to be distributed to low-income individuals (perhaps to the victims of yachting accidents). The latter two distortions, concerning the amount of yachting and labor-leisure decisions, would be unaffected: the rich pay more on account of the tax rather than on account of bearing higher accident costs (the sum of prevention costs and expected liability payments). But the first inefficiency, excessive care, would be avoided. Thus, the excise tax would allow more efficient redistribution than the legal rule. An inefficient legal rule is more analogous to a rule that destroys a portion of items purchased or activities pursued by the rich rather than simply taxing them.

Observe, however, that an excise tax is a less efficient means of redistribution than the income tax, because the excise tax distorts the amount of yachting while the income tax does not. 9 Thus, if one wishes to

Analogous to the effects of excise taxes are subsidies for particular purchases -- thus, the familiar argument that in-kind welfare assistance (e.g., free housing rather than cash of equal market value) is inefficient because it distorts choices such as that between housing and food purchases, in addition to creating potential work disincentives for the poor that would result from cash assistance as well. While one might justify in-kind welfare programs on other grounds -- for example, that we paternalistically wish to force the poor to spend on food and housing -- it is hard to apply such arguments in the context of redistribution through legal rules. (We would not channel redistribution through a tort rule because we wished the poor to be in more accidents caused by the rich.)

 $<sup>^9</sup>$  An excise tax would be superior if the amount of yachting were excessive, as it might be under a negligence rule. See Steven Shavell, Strict Liability versus Negligence, 9 J. Leg. Stud. 1 (1980).

redistribute income, the most efficient choice typically will be the income tax, the second choice an excise tax (as with luxury taxes), and the worst alternative would be an inefficient legal rule with desirable distributive consequences.

(b) Factors bearing on redistribution through legal rules. In this article, we have emphasized the point that redistribution through legal rules is less efficient than redistribution through the income tax. Other, more familiar considerations of feasibility and accuracy favor redistribution through the income tax system. 10 Specifically, the income tax system (including transfer programs) can be used to redistribute from all the rich to all the poor, 11 whereas legal rules have substantially less redistributive potential. When parties are in a contractual relationship, it is well understood that redistribution may not be accomplished because prices will adjust to reflect the expected cost of legal rules. 12 Moreover, when redistribution is possible, it tends to be limited to those few who become parties to lawsuits. And even then, redistribution may be haphazard. (A proplaintiff rule may be redistributive if plaintiffs, on average, are poorer than defendants, but unless this is uniformly true the redistribution will be in the wrong direction in some cases. 13) This latter problem can be avoided only if one makes the legal rule depend directly on the parties' income, which few have proposed. 14 Further, if one is prepared to go that far, it becomes

 $<sup>^{10}\,</sup>$  See, e.g., A. Mitchell Polinsky, An Introduction to Law and Economics 124-27 (2d ed. 1989).

Many exceptions, such as adjustments for numbers of dependents, are by choice, presumably reflecting aspects of distributional policy. Others, as those that result from tax evasion and welfare fraud, may be addressed in many ways (higher enforcement, augmenting income taxes with luxury taxes); it would be surprising if courts could more accurately determine true income in, say, private tort disputes than in tax evasion or welfare fraud enforcement proceedings.

They can redistribute if prices are also regulated, but then the price regulation itself may be used to accomplish redistribution among such parties.

<sup>&</sup>lt;sup>13</sup> Even when a typical party appears to be rich, the redistributive effect may be more limited. For example, when corporations pay more for injuries to third parties caused by their manufacturing, consumer prices, wages, and so on will be affected.

<sup>&</sup>lt;sup>14</sup> Jennifer Arlen's argument, see *supra* note 2, is an exception.

hard to understand why one would administer redistribution in such an ad hoc and inefficient manner rather than through the income tax system.

An argument sometimes offered in favor of redistribution through legal rules is that the tax system falls short of optimal redistributive taxation -- perhaps because of the balance of political power in the legislature -- so that courts should take up the task themselves. This argument raises questions about the function of courts in a democracy. In any case, we observe that it seems unlikely that courts can accomplish significant redistribution through the legal system without attracting the attention of legislators. Also, much legal reform presently under consideration, such as tort reform, is in the jurisdiction of legislatures.

These points, combined with the efficiency argument of this article, suggest that normative economic analysis of legal rules should be concerned primarily with efficiency rather than distribution. Nonetheless, analyzing distribution may be important, as those formulating tax policy need to be aware of any significant distributive effects of legal rules that would not otherwise be apparent, as from studying information on the distribution of income. Distributive effects, of course, are identified by economic analysis that examines the costs and benefits of legal rules -- the same sort of analysis used to determine which rules are efficient.

(c) When should legal rules take account of parties' wealth? We have argued that it is inefficient for legal rules to take into account parties' wealth in order to serve distributive objectives. We now consider whether there are other reasons for legal rules to depend on parties' wealth.

Because lawsuits often arise from risky behavior, legal rules may affect the allocation of risk. Moreover, it is often speculated that the poor are more risk-averse than the rich. As a result, considerations of efficiency in risk allocation might appear to justify taking wealth into account when fashioning legal rules. For example, injurers who are poor might be assessed lower damages on this account, the law's generosity providing implicit partial insurance. Yet, if insurance is otherwise available, optimal damages should not be adjusted for risk aversion. Explicit insurance provides the optimal

degree of risk mitigation, and providing full damages is necessary in order that potential injurers and their insurers take full account of the harm that might be caused. Thus, any adjustment in legal rules on account of parties' risk aversion -- as indicated by the parties' wealth -- would be premised on a failure in the insurance markets. 16

Nevertheless, damages often should reflect the victim's income; when an injury involves lost future earnings, the level of the earnings indicates the extent of economic loss. 17 In addition, the standard of care sometimes should depend on parties' income. To illustrate, suppose that a precaution that reduces expected accident costs by \$15 takes an hour of effort. This precaution would be efficient for individuals who can otherwise earn only \$10 an hour but not for those whose opportunity cost is \$20 an hour. 18

 $<sup>^{15}</sup>$  This is demonstrated in Steven Shavell, On Liability and Insurance, 13 Bell J. Econ. 120 (1982).

Jennifer Arlen, supra note 2, argues that, when parties' are risk-averse, their wealth should affect the level of liability -- even in the presence of complete insurance. Her result derives from the assumption that the rich value wealth less at the margin than the poor (this assumption is formally equivalent to the assumption that individuals are risk-averse). Therefore, social welfare is advanced by using the legal system to transfer wealth from the rich to the poor. In her model, this is accomplished indirectly by imposing higher liability on the rich, inducing them to take additional care so that they will injure the poor less often. She does not appear to recognize that what explains this result is the desirability of redistribution. (Indeed, had she included the damages injurers pay and victims receive in their expected utility when analyzing the social optimum, see id. at 421-22, it would have become transparent that the redistribution of wealth is what enhances welfare in her model. In particular, the socially ideal outcome would involve damages that have the effect of equalizing wealth between parties; for example, a rich victim would surrender wealth to a poor injurer.) It is obvious that any such arguments that involve use of the legal system to redistribute wealth rest entirely on the assumption that there is no alternative means of redistribution, notably the income tax system.

The argument assumes that injurers have some advance knowledge of the economic loss they might cause. If they knew only average losses for all victims, a rule providing that damages equal average harm would be equally efficient. See Louis Kaplow and Steven Shavell, Accuracy in the Assessment of Damages, National Bureau of Economic Research Working Paper No. 4287 (1993).

An implicit assumption in this argument is that it is not possible simply to hire someone else to undertake the precaution. Also, note that under a rule of strict liability, damages should equal \$15, rather than assessing higher damages on the rich in order to induce them to take the same care that others take.

## 3. Conclusion

Redistribution is accomplished more efficiently by using the income tax system, even when redistributive taxes distort behavior, rather than by using legal rules. Redistribution through legal rules causes the same inefficiency as taxes with regard to the labor-leisure choice: the distortion is caused by the redistribution itself and is not particular to the mechanism by which it is accomplished. And when redistribution involves choosing less efficient legal rules, additional costs are incurred. This argument, along with others that are more familiar, suggests that is it is appropriate for economic analysis to focus primarily on efficiency rather than distribution in offering normative judgments.

### Appendix

The model parallels the illustration in section 1. Individuals exercise care x and cause accidents with probability p(x), with p' < 0, p'' > 0. Each accident causes harm of h, which is born equally by all individuals. <sup>19</sup> Individuals differ in their ability  $\alpha$  to earn income y through labor effort  $\ell$ , where  $y(\alpha) = \alpha \ell$  and  $\alpha$  is distributed uniformly on the interval [0,1]. Individuals who cause accidents pay damages of d. The income tax schedule is t(y).

We begin with an inefficient legal rule in which damages are  $d(y_I, y_V)$ , where  $y_I$  is the injurer's income and  $y_V$  is the victim's income. (Allowing damages to depend on parties' income makes redistribution possible.) Each individual chooses labor effort,  $\ell$ , and care, x, to maximize expected utility, which is

(1) EU = y - 
$$\ell$$
 - t(y) - x -  $\overline{p}h$  - p(x)  $\int_{0}^{1} d(y,y_{V}(\alpha))d\alpha + \int_{0}^{1} p(x(y_{I}(\alpha)))d(y_{I}(\alpha),y)d\alpha$ ,

where, recall,  $y = \alpha \ell$ . The first four terms on the right side are income, work effort, income tax payments, and care. Next, utility is reduced by the expected harm a person suffers,  $\overline{p}h$  (where  $\overline{p}$  is the average probability that others will cause a person harm). The final two terms represent payments made and received under the legal rule. Payments are made when a person causes an accident, which has probability p(x); damages, in turn, depend on a person's own income, y (when one is the injurer), and each possible victim's income  $(y_{\overline{v}}(\alpha))$  is the income earned by the type of individual who has ability  $\alpha$  -- the integral measures the total over all possible victims. Payments are

The harm could be borne by each individual with equal probability, so the expected harm is the same for all individuals, or each individual could bear an equal fraction of the harm caused by each accident, as with pollution.

 $<sup>\</sup>frac{1}{p} = \int_{0}^{\infty} p(x(y(\alpha))) d\alpha.$ 

received when one is injured; each type of individual causes an accident with probability  $p(x(y_I(\alpha)))$  and pays damages reflecting his income -- the integral takes the sum over all types who might injure one.<sup>21</sup>

We now compare this regime to one with an efficient legal rule and a modified income tax system. The efficient rule is  $\hat{d} = h$ ; as is well known, under strict liability when injurers pay damages equal to harm caused, all costs are internalized so actors are induced to take the level of care that minimizes the sum of the cost of care and expected harm. We denote this efficient level of care as  $\hat{x}$  and observe that it is independent of one's income level. It will be useful to denote the inefficiency caused by the damages rule  $d(y_1,y_v)$  by

(2) 
$$\pi = \int_{0}^{1} \{ [x(y(\alpha)) + p(x(y(\alpha)))h] - [x + p(x)h] \} d\alpha.$$

Because the damage rule d is inefficient,  $\pi$  is positive. (The integrand is positive whenever  $x(y(\alpha))$  is unequal to efficient care  $\hat{x}$ .<sup>22</sup>)

In the regime with the efficient damage rule  $\dot{d}=h$ , let the modified income tax be

$$(3) \quad \hat{\mathsf{t}}(y) = \mathsf{t}(y) + \left[ \mathsf{x}(y) + \overline{p}\mathsf{h} + \mathsf{p}(\mathsf{x}(y)) \int\limits_{0}^{1} \mathsf{d}(y, y_{\mathsf{V}}(\alpha)) \mathsf{d}\alpha - \int\limits_{0}^{1} \mathsf{p}(\mathsf{x}(y_{\mathsf{I}}(\alpha))) \mathsf{d}(y_{\mathsf{I}}(\alpha), y) \mathsf{d}\alpha \right] \\ - \left[ \hat{\mathsf{x}} + \mathsf{p}(\hat{\mathsf{x}}) \mathsf{h} \right].$$

Note that, as in section 1, the new income tax,  $\hat{\tau}(y)$ , is constructed by beginning with the initial income tax,  $\tau(y)$ , adding total accident costs under the initial, inefficient regime and subtracting total accident costs under the efficient regime. The former total (under the inefficient rule) is the first term in large brackets: the cost of care, harm suffered, and expected damage payments, minus expected damage awards received. The latter (under the

 $<sup>^{21}\,</sup>$  These final four terms together correspond to the expression a(y) in the notation in section 2.

In particular, whenever the damage rule d results in an expected payment exceeding h (as it would when injurers are relatively wealthy, if the rule is redistributive in a manner that favors the poor), injurers will take excessive care. Similarly, when the damage rule d results in an expected payment less than h (as when injurers are relatively poor), injurers will take too little

efficient rule) is the second term in large brackets: the cost of care and expected damage payments (harm suffered is precisely offset by expected damage awards received). As a result of the first adjustment, the new income tax changes with income in exactly the way that accident-related costs did under the inefficient liability rule. (Thus, if higher-income individuals paid more in damages, now they pay more in taxes instead.)

We now can demonstrate that individuals will be exactly as well off under the new tax  $\hat{\tau}(y)$  and the efficient legal rule as they were under the initial income tax and the inefficient rule. Recall that, under the efficient legal rule, all individuals (regardless of income) choose the same level of care,  $\hat{x}$ . Also, as just noted, expected harm suffered is just offset by expected damage awards received because damages equal harm. Hence, in the new regime, individuals choose labor effort  $\ell$  to maximize expected utility, which is (4)  $\hat{EU} = y - \ell - \hat{\tau}(y) - \hat{x} - p(\hat{x})h$ .

If one uses (3) to substitute for  $\hat{t}(y)$  in (4), and compares the result to (1), the expression for expected utility in the initial regime, it is apparent that, for any income level y,

(5) 
$$\hat{EU} = EU$$
.

Because expected utility is the same for any level of labor effort,  $\ell$ , individuals of any given ability will choose the same labor effort under both regimes. This, in turn, implies that their welfare will be identical under both regimes.

Finally, we show that tax revenues are greater under the modified income tax. in particular,

(6) 
$$\int_{0}^{1} \hat{t}(y(\alpha)) d\alpha = \int_{0}^{1} t(y(\alpha)) d\alpha + \pi.$$

This follows directly from the definitions of  $\hat{t}(y)$  in (3) and  $\pi$  in (2). After all,  $\hat{t}(y)$  is constructed to equal t(y), plus the total accident costs under the inefficient rule minus the total accident costs under the efficient rule. And  $\pi$  is defined to equal just this difference in accident costs. (The only

difference between the bracketed expressions in (3) and the right side of (2) is that the former includes terms for damages individuals pay and receive. But when one integrates over all individuals, the total of damages paid and received are equal, so these components are precisely offsetting.)

One can define a new tax by  $\hat{\tau}(y) - \pi$ . (That is, the savings in accident costs are uniformly rebated, in a lump-sum manner, to the entire population.) Under this tax, labor effort will be unchanged (since the tax differs from  $\hat{\tau}(y)$  by a constant), so revenues will now be the same as under the initial tax,  $\tau(y)$ . And each individual is better off by  $\tau$ .

Remarks: (a) Generality of the result. -- It should be apparent that the result does not depend on the nature of the activity (e.g., one could incorporate victim care), the form of the legal rule, the income tax system, 23 or the distribution of ability. The result might appear to depend on the separability of the utility function (which implies risk neutrality and that care is independent of ability). The major effect of relaxing such assumptions would be to make determination of the efficient legal rule more complicated. It would remain true, however, that if the redistribution accomplished through an inefficient legal rule were instead achieved through a modification of the tax system, resources would be saved and all individuals could be made better off.

(b) Qualifications and relationship between our result and those in

literature on optimal taxation. -- Our result is analogous to results in the

literature on optimal taxation showing in simple cases that, in the presence

of an optimal income tax, specific commodity excises are inefficient.<sup>24</sup>

(Recall the discussion of excise taxes.) This conclusion does not hold

For convenience, we examine the distribution of income with an income tax as the primary redistributive tool. In a dynamic analysis, one might wish to distinguish the distribution of consumption or wealth from the distribution of income (and consider consumption or wealth taxes in addition to an income tax), which would raise the issue of distorting savings. One can think of the labor-leisure distortion as exemplifying any distortion that results from a general redistributive tax.

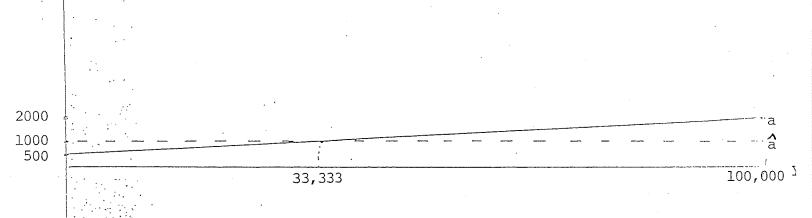
For a useful survey of the literature and discussion of the ideas presented in this remark, see Joseph E. Stiglitz, Pareto Efficient and Optimal Taxation and the New New Welfare Economics, in Alan J. Auerbach and Martin Feldstein, eds., 2 Handbook of Public Economics 991, 1023-27 (1987).

generally, because it may be that taxes or subsidies on particular commodities would have indirect effects that reduce the distortion of an income tax. In particular, by taxing complements to leisure and subsidizing substitutes, one can reduce the labor-leisure distortion and thereby improve welfare by more than the inefficiency resulting from some distortion in purchases of the taxed or subsidized commodities.

Analogously, if there were legal disputes involving activities that were strong complements or substitutes with leisure, one might select rules that provided additional penalties or subsidies relative to what an efficient rule would involve. (As the excise tax discussion suggests, however, this would be sensible only if taxes or subsidies on the activities themselves are infeasible.) Such taxes and subsidies, however, are not conventionally redistributive: whether something should be taxed or subsidized depends on how it affects the labor-leisure choice, not on whether it is consumed disproportionately by the rich. Thus, while a complete and sophisticated analysis does not demonstrate that it could never be efficient to change legal rules from what narrowly seems to be the most efficient ones, there is no general argument for adjustments of a conventionally redistributive type. 25

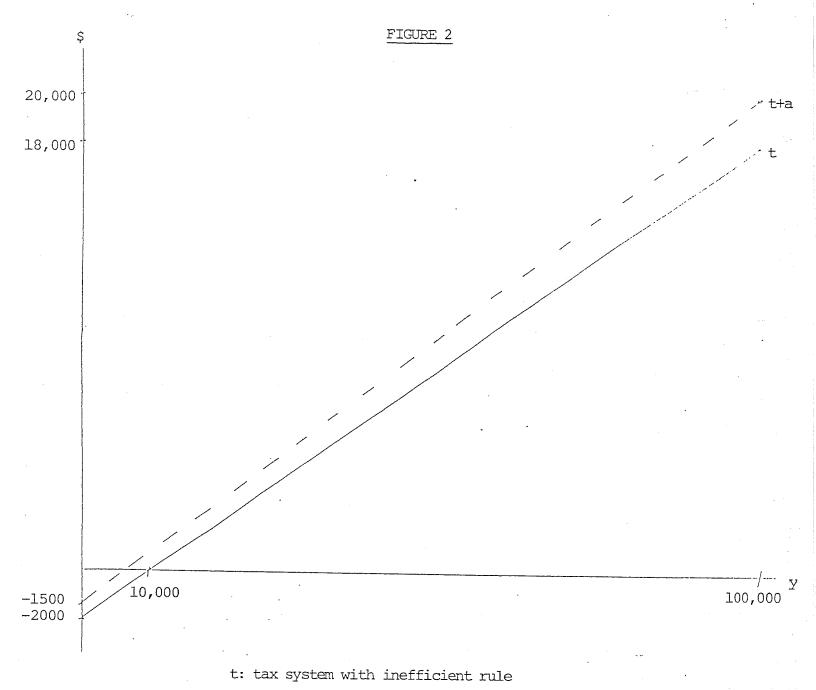
One can imagine other, subtle qualifications. For example, activities leading to lawsuits might implicitly reveal information about individuals' underlying abilities. (Perhaps some differences in ability are reflected in different tastes that affect activity choices.) While it would be optimal to take such information into account, it would remain true that it would be best to incorporate such differences in taxes (as in a tax on the activity for which high-ability individuals have a stronger taste) than in legal rules.





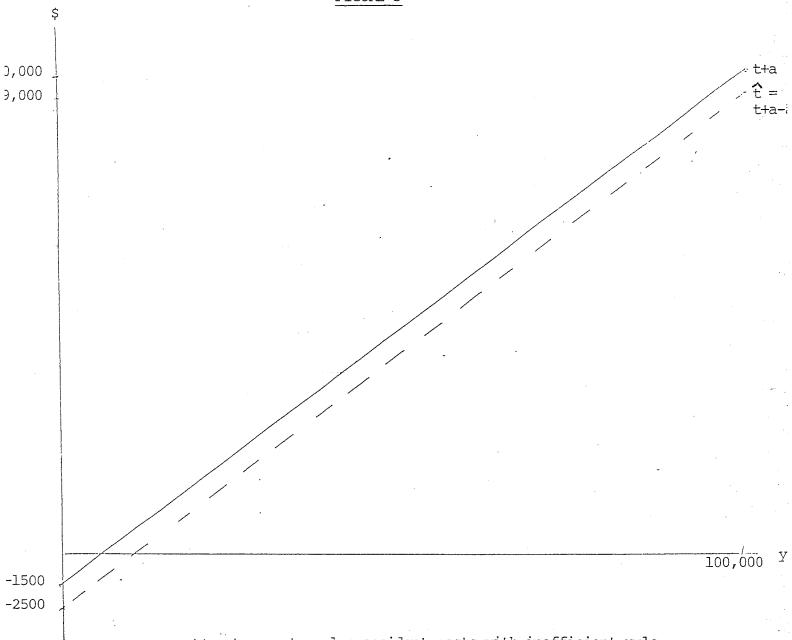
a: accident costs under inefficient rule

à: accident costs under efficient rule



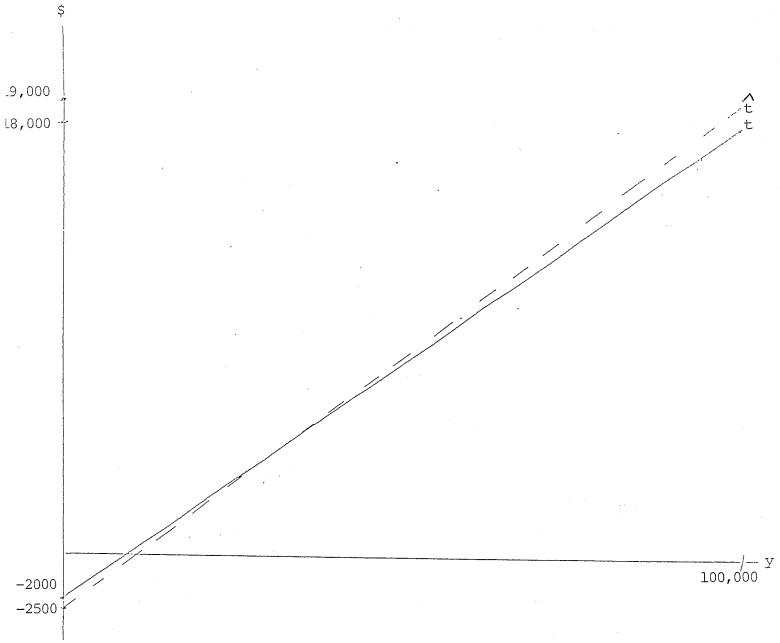
t+a: tax system plus accident costs with inefficient rule





t+a: tax system plus accident costs with inefficient rule  $\hat{t} = t+a-\hat{a}$ : modified income tax (for use with efficient rule)





t: tax system with inefficient rule

 $\hat{\textbf{t}}$ : tax system with efficient rule