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Horizontal Equity: A Further Note

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I. INTRODUCTION

Writing some thirty years ago, I argued that "the requirements of horizontal and vertical equity are but different sides of the same coin. If there is no specified reason for discriminating among unequals, how can there be a reason for avoiding discrimination against equals?"[1] The call for horizontal equity ("HE") without a vertical equity ("VE") rule, as I argued, is at best to be seen as a protection against arbitrary discrimination, a goal which could also be met by random taxation.[2] I stayed with that view[3] until Louis Kaplow's support of a similar position[4] made me return to the issue. Perhaps a bit wiser if less clever, I then came to conclude that there was a case, after all, for recognizing HE as a distinct norm.[5] Kaplow, responding in this *Review*, rejected my case as assuming what is to be proven.[6] I am not persuaded and hence this further note.

As I suggested in my paper, a distinction need be drawn between viewing the problem in a first best setting where taxes can be arranged so as to fully comply with equity norms and situations where, due to political or other constraints, the choice is among second best solutions. The same distinction is again drawn here.

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    1. Richard A. Musgrave, The Theory of Public Finance: A Study in Public Economy 160 (1959).
    2. Id.
    3. See Richard A. Musgrave & Peggy B. Musgrave, Public Finance in Theory and Practice 216 (2d ed. 1976).
    4. Louis Kaplow, Horizontal Equity: Measures in Search of a Principle, 42 Nat'l. Tax J. 139 (1990).
    5. Richard A. Musgrave, Horizontal Equity, Once More, 43 Nat'l. Tax J., 113 (1990).
    6. Louis Kaplow, A Note On Horizontal Equity, 1 Fla. Tax Rev. 191 (1992).

II. FIRST BEST SETTING

Applied to the first best world, I grant for purposes of this commentary a setting where arrangements which satisfy VE also satisfy HE.[7] This then permits me to focus on situations of conflict which arise from political and practical constraints. Assuming first that there are no such constraints, Let L_1 and L_2 have similar low and H_1 and H_2 similar high incomes. Then if VE calls for the H group to pay twice as much as the L group, it also follows that L_1 and L_2 each will pay the same, as will H_1 and H_2. Meeting the VE rule also meets the HE rule. This much follows, but the story does not end here. While satisfying VE implies also satisfying HE, it does not follow that HE is a mere derivative of VE.

I again begin with the observation that almost everyone agrees with the HE rule, which calls for equal treatment of people in equal positions.[8] The general principle of HE is almost universally accepted. At the same time views on VE, the desirable pattern of differentiation among unequals, differ widely. X, who sees distributive justice in Lockean terms of entitlement to earnings, will view justice in taxation in benefit terms: people who value public services equally should pay a similar tax price. Y and Z, who take a utilitarian approach, will view as just that distribution of the tax burden which minimizes the aggregate welfare loss, but the shape of their subjective welfare functions will differ. Others may choose yet different criteria of fairness, such as a burden distribution which imposes a proportional loss. Given perfect implementation, all these rules involve equal treatment of equals, but the outcomes will differ.

My conclusion to be drawn from this observation is not that HE is redundant and a mere derivative of VE. Rather, the pervasiveness of the HE rule in the varying VE contexts suggests that HE is a primary principle, reflecting a basic premise of social mores—as stated in the biblical golden rule or the Kantian imperative—with which all just people will (must) agree. But having complied therewith, just individuals are then free to disagree on

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7. Departing from the well-behaved setting, conflicts may arise even with identical tastes if the feasible set is non-convex (see A.B. Atkinson and Joseph E. Stiglitz, Lectures in Public Economics, 354 (McGraw-Hill) (1990)) and more generally where tastes differ (see Martin S. Feldstein, On the Theory of Tax Reform. J. Pub. Econ. (1976) 6, 1, at 83). See also infra note 9.

8. This is not to deny that there may be a debate over the appropriate index of equality, e.g. equal income or consumption, appropriate definition of the taxable unit and so forth. These are important issues in tax practice, but a more or less satisfactory solution may be agreed upon. See Richard A. Musgrave, The Nature of Horizontal Equity and the Principle of Broad-based Taxation: A Friendly Critique. (John C. Hind ed. 1983), Taxation Issues of the 1980s, Australian Tax Research Foundation, reproduced in 1 Richard A. Musgrave, Public Finance in A Democratic Society 301 (New York Univ. Press) (1986).

the desirable pattern of VE. They are free to defend their positions when participating in the formation of a social consensus regarding VE policy. The universally accepted HE rule and the agreed upon pattern of VE differentiation are then both encompassed in the final norm, but the inputs differ.

The "practical" man or woman might argue that the decomposition of the final equity norm into its HE and VE components is of no practical concern, since both components will anyhow be encompassed in the final solution. Perhaps so from that person's perspective, but the more careful observer of social mores will find it of interest and importance to understand the distinct inputs which enter into equitable solutions. Moreover, that understanding becomes crucial when proceeding to an imperfect setting which meets the actuality of tax reform.

III. SECOND BEST SETTINGS

As Kaplow sees it, my concern with HE in that setting undermines my very case for recognizing HE as a distinct norm. HE, he argues, is achieved as a by-product of distributive theories because such theories are usually derived in a first best world. To make my case for an independent HE rule, he holds, I must offer an example where an HE violation would, under any "relevant" (meaning, I take it, first best and widely accepted) distributive theory, count as decisive against an otherwise desirable policy. He then posits a situation where redistribution from the rich to the poor would yield substantial welfare gains, even though one among many rich cannot be tagged. He concludes that under any "relevant distributive theory," including the usual utilitarian model, such an HE defect would not be permitted to reject the policy. This of course follows if the relevant norm is defined in VE terms so as to permit only the usual welfare losses to count. My contention is precisely that such a formulation is insufficient and that a more complex "meta set" (to use Stiglitz's term) is needed which allows for HE considerations.[9] To avoid misunderstanding, note that this does not mean "decomposition" of VE into two components, but the addition of an HE component to the VE norm. Once that further dimension is allowed for, Kaplow's

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9. See Joseph E. Stiglitz, Utilitarianism and Horizontal Equity: The Case for Random Taxation, J. Pub. Econ. (1982) 18 at 28, where the need for a meta principle, which transcends the welfare maximization rule, is recognized to deal with such situations. For a similar finding in the context of differences in ability and preferences, see Feldstein supra note 7, at 97, where it becomes necessary to balance "the desire for horizontal equity against the utilitarian principle of optimal taxation." Whereas these conflicts pertained to tax design without political constraints but caused by an "ill-mannered" setting, my concern is with those less lofty situations where for political or other reasons it is impossible to implement what might otherwise be optimal solutions. Nevertheless, the need for what Stiglitz calls a meta principle or what Feldstein calls a tradeoff need arises in both cases.

illustration (large VE gain, small HE loss) stacks the deck and can easily be matched by a counter illustration with opposite weights.

In order to illustrate situations where HE and VE considerations may conflict and a tradeoff is called for, I attempted in my earlier paper to construct indices, designed to measure the degree of HE and VE, and then to apply them in ranking a set of hypothetical and simplified policy choices.

RANKING OF SECOND BEST SOLUTIONS

	Initial Income	I		II		III		IV	
		Tax	Net	Tax	Net	Tax	Net	Tax	Net
1. L_1	5	0	5	1	4	0.4	4.6	0	5
2. L_2	5	0	5	1	4	1.3	3.7	0	5
3. H_1	10	4	6	3	7	2.5	7.5	3	7
4. H_2	10	4	6	3	7	3.8	6.2	5	5
5. Total	30	8	22	8	22	8.0	22.0	8	22
Indices									
6. VE	--	0		6.4		6.4		1.6	
7. HE:L	--	0		0		2.3		0	
8. HE:H	--	0		0		3.5		1.1	
9. HE:Total	--	0		0		2.3		1.6	

The above table repeats that illustration. It covers two low income and two high income individuals and compares four ways of raising the same revenue from them. Line 6 shows the resulting index of vertical equity, where the loss is measured as the ratio of excess loss to actual loss, and excess loss equals actual loss minus the lowest feasible loss.[10] Loss is computed on the assumption of marginal utility of income equal to ten for the first dollar of income and declining by ten percent for each additional dollar. To simplify, deadweight losses are disregarded. Lines 7 and 8 show the HE index for the two low- and two high-income individuals respectively, defined as the excess of the combined welfare loss over that which would result had HE been met.[11] Line 9 finally gives the combined index for both groups as a

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10. The VE index for each column is defined as $[\ \Sigma WCa - \Sigma WCm]\ /\ \Sigma WCa]$ 100, where ΣWCa is total actual welfare cost for all four taxpayers and ΣWCm is the lowest achievable level.

11. The HE index for each group of equals is given as $[\ \Sigma WCa - \Sigma WCe\ /\ \Sigma WCa]$ 100, where ΣWCa is the actual welfare cost for the group and ΣWCe is the cost which obtains with equal burden distribution among equals. The combined HE index for the column is obtained as $[[\ \Sigma WCa - \Sigma WCe]\ /\ \Sigma WCa]$ 100, where ΣWCa is the actual welfare cost for all four taxpayers and ΣWCe is their cost obtained with equal treatment of equals within each group.

weighted average for both.

Comparing arrangements III and IV shows IV to win on both grounds and is thus to be preferred. Comparing II and III, both come out equal on VE grounds, but II is superior on HE grounds. Thus outcome II is to be preferred. The situation becomes more difficult, however, when comparing II and IV, with II superior on HE and IV superior on VE grounds. Thus a scale is needed by which the two can be weighed against each other.

Kaplow raises no serious objection to this VE index, reflecting as it does the standard concept of equity, based on minimizing total welfare loss as arrived at by impartial choice from behind a veil.[12] But he offers two critiques of my HE measure. First, he suggests that by basing the HE measure on differential welfare losses, it becomes part of the welfare-based VE measure. I disagree. Measuring the burden of HE in terms of excess welfare loss need not lead to the conclusion that VE has to be defined in the usual welfare terms. The proposed HE measure may also be combined with a benefit view of VE. But Kaplow's second critique makes an important and valid point. Even if it were agreed that my HE index is reasonable when applied to a simplified illustration which allows for two income levels only, a reformulation is needed once many income levels are included. It then becomes unreasonable to limit considerations of departure from HE to individuals with identical incomes only, while disregarding the relative treatment of individuals with more or less similar incomes. This is a good point, but it does not follow that this critique of my simplified HE measure goes to "the very essence" of my HE concept. Allowance for a wider income range, to be sure, greatly complicates the task of measurement, but that does not void the distinction between the HE and VE qualities of policy outcomes. A problem does not cease to exist if there is no simple solution. Nor does it follow that allowance for HE effects over a wider income range is already reflected in VE.[13]

Finally, there remains the further question (distinct from that of how to measure departures from HE) of how to develop a "meta principle" or tradeoff scale by which the VE and HE qualities of any particular reform may

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12. My preceding paper added an alternative VE index which measured the welfare cost of various cases on the assumption that the actual amounts raised among equals were distributed equally. Musgrave, supra note 5 at 119. Kaplow objects to what looks like "decomposition" of the VE index and I am also somewhat uncomfortable with that version. My argument is better made without it and I therefore omit that version in reproducing the above table.

13. I do not claim that the HE measure proposed here is the only possible or necessarily the best one. Other indices have been suggested such as measures of dispersion in after tax positions of pretax equals or effects of tax changes on rank orders, but similar problems again arise when applying the measure over a range of more or less equal settings. See Feldstein, supra note 7, at 82-83.

be weighed against each other. To insist on the need for such a scale or meta rule, moreover, does not require me to define its shape. Setting that shape is a matter for the political process to decide, based on the public's sense of equity, including both HE, VE and their value relation. This process is similar to that by which the shape of a mutually agreed upon social welfare function (needed for implementation of VE) is arrived at.

In short, I accept Kaplow's critique of my oversimplified HE index but this, I maintain, does not invalidate my basic thesis, that HE has merit as a distinct norm, especially when it comes to ranking second best settings. Such is the case, notwithstanding the difficulties of formulating a wholly satisfactory measure of HE, or the discomfort caused by trading the determinateness of "relevant" if one-dimensional distributive theory against the complexities of a meta function.

IV. THE RELEVANCE OF REALITY

First best theory is fun, but the second best reality of real world tax reforms is not irrelevant. It is thus well to conclude with a reference to application, where the distinction between HE and VE does play a major role. The tax reform of 1986 was praised for its broadening of base while holding the overall pattern of effective rate progression unchanged. Agreement on the latter was what permitted the former. The gain from base broadening, to be sure, was not only in the improvement of horizontal equity, especially over the upper end of the scale, but also in the reduction of deadweight loss ensuing from lower marginal bracket rates. Nevertheless, changes such as the more equal treatment of capital gains (now about to be largely lost) were seen as removing a source of horizontal inequity, and they were welcomed on those grounds. Was all this a matter of conceptual confusion?