

Posner's Wealth Maximization for Welfare Maximization: Separating Efficiency and Equality Considerations

Yew-Kwang NG

2016

EGC Report No: 2016/11

HSS-04-86A
Tel: +65 67906073
Email: D-EGC@ntu.edu.sg



The author(s) bear sole responsibility for this paper.

Views expressed in this paper are those of the author(s) and not necessarily those of the
Economic Growth Centre, NTU.

Posner's Wealth Maximization for Welfare Maximization: Separating Efficiency and Equality Considerations

Yew-Kwang Ng

Winsemius Professor in Economics,
Nanyang Technological University,
14 Nanyang Drive, Singapore 637332.
Email: ykng@ntu.edu.sg

Acknowledgment

The author acknowledges the general research funding of Nanyang Technological University and the research assistantship of Mr. Zhang CHEN. No conflict of interest is involved.

Abstract

Posner's proposal for wealth maximization in judiciary decisions has not been widely accepted, but the influence of the economic analysis of law it propelled has increased tremendously. In the face of criticism, Posner himself has retreated into a pragmatism with wealth maximization not the only principle used. This leads to a lack of both moral justification and consistency. This paper argues that, if not used as the ultimate objective, but as an instrument for welfare maximization, wealth maximization is much more acceptable, if it is also supplemented by appropriate redistribution in the general equality policy. This is especially so as efficiency supremacy in specific issues including the judiciary (close to wealth maximization) would then make every income group better off. This is so despite the presence of disincentive effects in general redistribution. The separation of the judiciary and the legislative may then also be justified.

Keywords: Wealth maximization; efficiency; welfare; utilitarianism; judiciary.

JEL Codes: K0 Law and Economics – General; H0 Public Economics – General.

1. Introduction

Around four decades ago, eminent judge Posner (1973, 1979) pushed the interest in law and economics to a new height by proposing the use of wealth maximization in the judiciary. Posner proposed this principle both for descriptive/scientific analysis and proscriptive/normative guidance. In his own words, it ‘provides a good explanation of many common law rules and principles ... [and also is] an ethically attractive guide to social policy, especially in the common law context’ (Posner 1980, pp.243-4). The proposal led to intense discussion both on descriptive/scientific accuracy and the proscriptive/normative acceptability in the 1980’s and after (e.g. Dworkin 1980, Kronman 1980, Veljanovski 1981, Mathis 2009, Campbell 2012). Recent interest and controversies in the issue continue (e.g. Driesen 2015, Fernandes 2015, Hatzis & Mercurio 2015, Pino-Emhart 2016, Posner 2015). Despite the widespread non-acceptance of Posner’s proposal especially at the normative level, the influence of the economic analysis of law has grown spectacularly (e.g. see Hatzis & Mercurio 2015, Preface). The argument of the present paper may provide some hint on this. Moreover, under severe criticisms, Posner himself has, since as early as the mid 1980’s, retreated from wealth maximization as the single principle, into a pragmatism of admitting different considerations (‘wealth maximization as an incomplete guide’, Posner 1985, p.101; see also Mathis 2009, ch.8), if not into an ‘anti-theoretical populist’ position (Fernandes 2015, p. 210). This pragmatism is conceptually unsatisfactory as it does not provide some appropriate tradeoffs between the different considerations. In my view, some ultimate guide such as utilitarianism or its generalization (welfarism, which is utilitarianism without necessarily the maximization of the unweighted sum of net welfare; more below) is desirable, at least at the more ultimate level of the long-term choice of what rules/principle/rights to accept and impose.

The present paper argues that, if ‘wealth maximization’ is used not as the ultimate objective, but as a qualified (see Appendix A) instrument for some intrinsic objective (e.g. welfare maximization), it will be much more acceptable. Though Posner himself has also moved towards the instrumentality of wealth maximization (e.g. see Mathis 2009, Sub-section 8.4.4.3), he has provided neither the ultimate objective the instrument is clearly for, nor an adequate justification. This paper attempts to do both. Posner appears to be both rejecting and citing the support of utilitarianism. This present paper rejects his criticism of utilitarianism as valid only against a very naïve version that ignore indirect effects. Taking account of these effects, utilitarianism is

consistent with most widely accepted individual rights and constitutional provisions. Moreover, the resulting normative acceptability may then explain the descriptive accuracy as well, at least to some extent.

However, wealth maximization itself is not sufficient for welfare maximization. It has at least to be supplemented by the promotion of equality. Nevertheless, from the principle of treating a dollar as a dollar (efficiency supremacy) in specific issues (Ng 1984), the role separation between the legislative and the judiciary, as mentioned by Posner (1990, p.101f.), may be justified. Posner justifies the separation on the ground of the lack of ‘flexible instruments for redistribution’ by courts; ‘Courts can do very little to affect the distribution of wealth in a society’ (Posner 1984, p.132). The present paper goes further, arguing for refraining from redistribution even if the judiciary is capable in doing so, at least on specific issues including judiciary decisions, leaving redistribution to be done in the general equality promotion policy. The focus of the judiciary on efficiency then comes close if not exactly coinciding with Posner’s wealth maximization (Section 5 and Appendix A below). Despite the prospering of the economic analysis of law in the academia, ‘Law and Economics seems to be dying in tort law, at least as a normative principle’ (Pino-Emhart 2016, concluding paragraph). The acceptance of our argument may help to revive law and economics in this respect. Put it differently, the critics of Posner may have won the battle in this front, this paper tries to make Posner winning the war, at least in terms of wealth maximization for welfare maximization.

As pointed out by Mathis (2009, Section 8.6), Posner himself had retreated into a pragmatism of ‘rapprochement towards utilitarianism’, with ‘division of labour between the judiciary and the legislature’, and effectively using wealth maximization as a non-exclusive instrument. Thus, in a sense, the present paper is much in line with Posner’s later position. However, it provides a more consistent defence from the level of moral philosophy (intrinsic values) to that of practical policy, with deeper analysis, especially regarding the issue of equality or distribution (Section 5 below).

To focus on our main points within a paper, we largely ignore some complications like the difference between the willingness to pay and the willingness to accept (or between offer and asking prices), loss aversion, endowment effects, etc. (However, see Appendix A on these and other related complications.) For simplification, we will also largely use an a-temporal analysis except when intertemporal issues are directly discussed, thus largely ignoring such issues like the

difference between stocks and flows. Posner's failure to adequately distinguish between ex ante compensation and hypothetical compensation (Posner 1980b)¹, the 'naturalistic fallacy' (Mathis 2009, p.164) of violating Hume's law, and other methodological ambiguities that have been discussed by others (e.g. Mathis 2009, ch.8; Campbell 2012) will also largely not be covered here. Though the issues of distribution/equality and that wealth cannot be an ultimate value that are focused in this paper have also been discussed before (e.g. Dworkin 1980, Mathis 2009, ch.8), this paper pushes the discussion to a deeper and more comprehensive level to provide a more adequate basis for making wealth maximization acceptable as an instrument for welfare maximization. In particular, instead of equating wealth maximization with the acceptance of the Kaldor-Hicks criterion (Posner 1980a, p.244), we argue for wealth maximization in specific issues, showing that, when supplemented with appropriate redistribution, all income groups will be made better off. This provides a much stronger basis than the Kaldor-Hicks criterion (Section 5). Before showing this central result, we start with the very basic Section 2, partly to show the difference between wealth maximization and welfare maximization (including utilitarianism) more clearly, and partly to explain simple tools (utility possibility curves and frontiers) to help the illustration of the arguments in later sections. Readers familiar with these basic tools in economics and agree with the titles of Sections 2-4 may skim through or skip these sections and concentrate on Section 5. However, those who have time to read these preliminary sections may be able to follow the main Section 5 better.

2. Wealth Maximization Is Not Utilitarianism/Welfarism

One point of controversy is whether wealth maximization of Posner differs from Pareto efficiency (optimality) and utilitarianism/welfarism. Much confusion on this may be reduced by using a simple analytical method common in economic analysis. For simplicity, ignore complicated issues of the law and consider simple economic problems of allocation of resources and goods (subsuming services) and where every individual is concerned with only her own bundle of goods consumed (no external effects like pollution, keeping up with the Joneses, etc.). Also, start with only two individuals J and K. Abstract first from production; no resources, just

¹ The actual loss of a lottery ticket buyer may be said to be ex-ante consented to (hence compensated for in a sense) at the time of buying the ticket, but many losses of those made worse-off by using the Kaldor-Hicks criterion or wealth maximization with hypothetical but not actual compensation cannot be said to be similarly consented to.

the given amounts of consumption goods for distribution. Then, in the simplest case of just a given amount of one single good, any distribution (the only decision available) of the single good between J and K are efficient (Pareto optimal). As long as no unit of the only good is wasted, no inefficiency is involved. Also, since the amount of the only good is given and each of the two individuals want more instead of less of the good, it seems appropriate to view any outcome (without wasting any unit of the good) as having the same amount of wealth. (Any sensible concept of wealth should regard the same quantity of a single good as having the same amount of total wealth.) Either we use Pareto efficiency or wealth maximization, we know: A. We should not waste any unit of the good; and we do not know: B. How many units to distribute to J and to K respectively. Thus, Pareto efficiency and wealth maximization amounts to the same thing in this simple case.

To abstract from complicated issues, we also ignore any possible differences between (individual) utility and welfare (on which see Ng 1999). In the presence of these differences, efficiency should be defined in terms of welfare (Ng 1990, 2015). Taking welfare as intrinsic and ultimate, this approach resolves issues such as preference changes, preference authenticity, etc. at least in principle, though the difficulties of estimating the ultimate effects on welfare may become larger. The utility of an individual is taken as a representation of her preference (the modern approach in economics), and her welfare as her happiness. Since we abstract from the divergences between preference and welfare, we will use (individual) utility, happiness, welfare largely interchangeably. However, since we will be using ‘social welfare’, it is better just to use (individual) utility. Then, utilitarianism is defined as the principle for the maximization of social welfare as the unweighted (or equally weighted) sum of individual utilities; welfarism is defined as the maximization of social welfare as a positive function of individual utilities. Utilitarianism is welfarism plus the requirement of unweighted sum or aggregate. Utilitarianism entails welfarism but welfarism may or may not entail utilitarianism. Again for simplicity, we ignore complicated issues of population size (on which see Ng 1989), nationality, etc. by taking a given set of individuals of the same nationality, not to mention issues of animal welfare (on which see Ng 1995, 2016).

For the simple pure distribution problem of a single good above, clearly utilitarianism/welfarism also dictate A, no waste of any unit of the good, as both individuals want more of it. However, unlike Pareto efficiency and wealth maximization which give no

answer to B, utilitarianism/welfarism (if the specific functional form of the social welfare function is known) tells us exactly how to distribute the single good to maximize social welfare, if the utility functions of all the individuals concerned are also known. Again for simplicity, we ignore questions of incentives, desert, etc. by taking a single-period, or an a-temporal model to abstract from indirect effects. In the real world where such effects must be present, utilitarianism/welfarism does not rule out the observation of certain rights, justice, laws, etc. Thus, a welfarist only accepts at the descriptive level but not at the normative level such statements as: “Any attempt therefore to justify the current practice of most tort systems in terms of welfare maximization or Pareto optimality is destined to fail” (Pino-Emhart 2016, p.506). However, these complications are abstracted away here for simplicity. They have of course to be brought back again when we actually deal with the real world. However, to clarify some basic principles/differences first, simplicity will help.

In Figure 1, the horizontal and vertical axes stand for the amount of the only good X allocated to J and K respectively. A point in Figure 1 involves the amounts of X allocated to (or consumed by) J and K . For example, the point E involves J having $X^0/2$ amount of X along the horizontal axis and K having $X^0/2$ amount of X along the vertical axis, where X^0 is the given amount of X . Given this fixed total amount, the feasible allocation is given by the 45° downward-sloping straight line AB (costs of distribution ignored). Any point within the triangle ABO is feasible, but only points along AB is efficient, as points below AB involves some wasted units. As noted above, either Pareto efficiency or wealth maximization requires allocation along AB . However, neither one dictates how to choose between different points along AB . But utilitarianism and welfarism do.

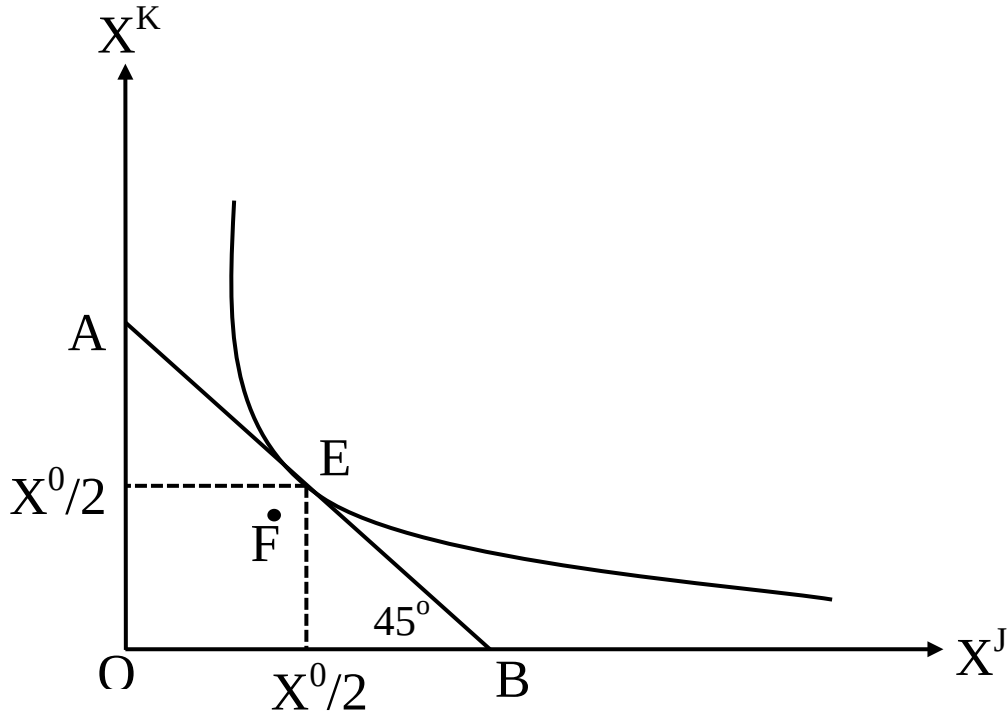


Figure 1

For simplicity, apart from ignoring issues of desert, incentives, etc. mentioned above, reasonably assume that both J and K have diminishing marginal utility in consuming the good. More units of X increase total utility at a decreasing rate. Then, with the additional assumption of equal capacity or equal need, utilitarianism suggests allocating the good half to J and half to K, choosing the equal division point E along AB. The equal capacity assumption was relaxed (Lerner 1944) into absence of knowledge as to who has higher capacity/need. This is the simple case for equality under classical utilitarianism. If we use welfarism instead, we need the additional assumption of impartiality (anonymity) between persons to get the equal division result (Sen 1973). The point here is that wealth maximization does not have an answer (to the question which point to choose along AB) while utilitarianism and welfarism do (at least in our simple case above). So wealth maximization is clearly different from either utilitarianism or welfarism.

Now consider the case of two goods X and Y (which both individuals J and K prefer to have more), both in fixed quantities, with other simplifications unchanged (referred to as ‘2 by 2’

below). Going from one to two goods allow some economics to come into the picture, as the issues of diversity (between J and K) of preferences (between good X and good Y) and exchange then become relevant. This simple economic problem of the efficient allocation of two final goods between two individuals (consumers) is discussed in many intermediate microeconomics textbooks using the construction of an Edgeworth box as presented in many intermediate microeconomics textbooks. Here, we may just note the result that, in this case of two goods, efficiency requires not only no waste (some unit of some good not consumed by any individual), but also an additional requirement of allocating the goods consistent with the preferences of the two individuals. For example, if the two goods are clothing and food, and if J, being a small eater, prefers to have more clothing than food, relative to K the big eater, we should allocate relatively more clothing to J and more food to K. Even after satisfying this requirement for efficiency, there is still a large range of possibilities, e.g. we may favour J and allocate absolutely more of both X and Y to J than to K, though relatively even more Y to J, satisfying efficiency, or the reverse, favouring K.

If we observe (Pareto) efficiency in the allocation, but vary the degree of favouring one than the other individual, we may derive a utility possibility curve (UPC) for the given collection of the two goods, as shown in Figure 2. Here, in contrast to Figure 1 (where the axes stand for the amount of the only good allocated to the two individuals), the axes represent the utility levels of the two individuals. Any point along the downward-sloping utility possibility curve QPRS is Pareto-optimal, as no individual may be made better off without the other individual being made worse off, given the collection of goods (and presumably other non-economic factors ignored here). Though (Pareto) efficiency here cannot discriminate between points along this downward-sloping UPC, it shows that any point below the curve, e.g. T, is inefficient, as it is dominated by some points (e.g. P) on the curve that involve higher utility levels for both individuals. Utilitarianism/welfarism may again compare different points along the UPC (in fact all points in the utility space of Figure 2). For example, if a certain SWF (social welfare function) has the social welfare contour W_1 , it indicates that the point P gives the highest level of social welfare along the UPC. (A welfare contour indicates different combinations of individual utilities that give the same level of social welfare according to the corresponding SWF.) If the SWF is utilitarian, the welfare contours will be 45° downward-sloping straight lines.

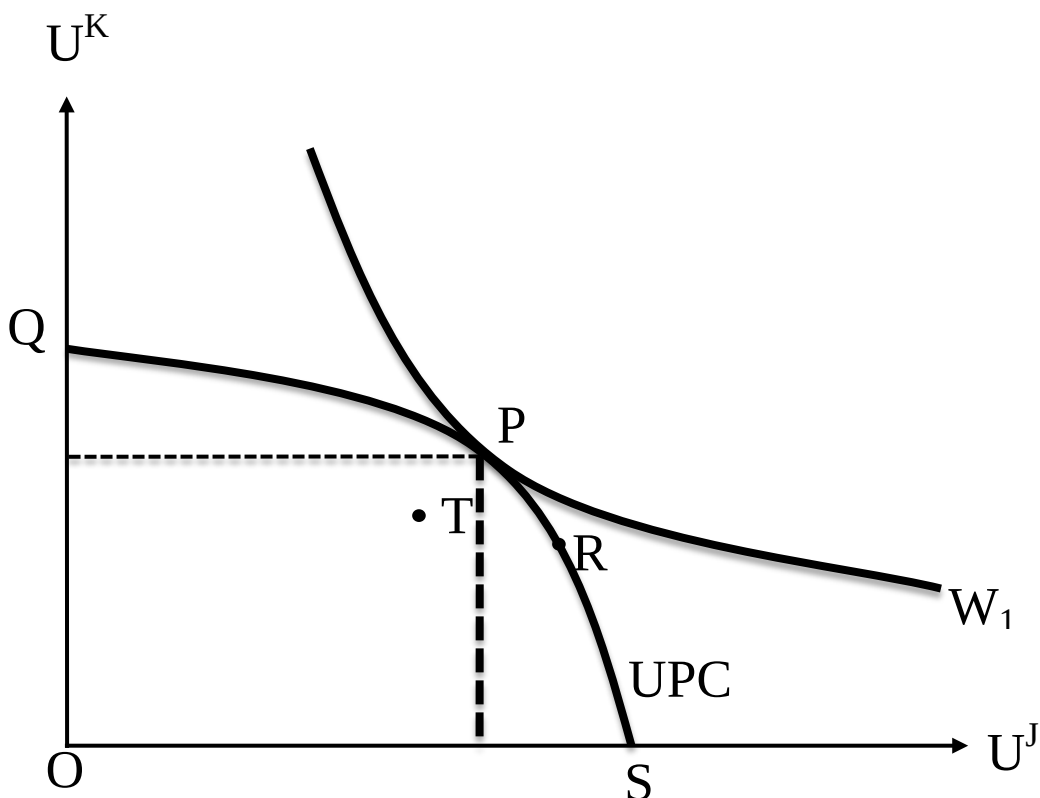


Figure 2

What about wealth maximization. In contrast to the previous case of a single good, in this case of two (and similarly for more) goods, the amount of wealth becomes less precise; it depends on the distribution (of goods or of income) and on which good is used as the numeraire. To see the point simply, suppose we have the same quantities of the two goods, say 100 units each. Also suppose J prefers X more relative to Y (if she has the same quantities of the two goods) and K prefers Y more relative to X. Then, if we allocate all goods to J, she has 100 units of X and 100 units of Y. Suppose that, at this equal-quantity point, she finds that one unit of X is worth two units of Y. Then her wealth (which is also the wealth of the society as K has nothing) is worth 150 units if valued in terms of X (being the 100 units of X plus the 100 units of Y converted into the worth of 50 units of X); but it is worth 300 units if valued in terms of Y. You may say that this is OK as one unit of X is worth 2 units of Y to the only wealth owner. However, if all goods are owned by K, the situation is different. Suppose that, at this equal-quantity point, K finds that one unit of Y is worth two units of X. Then his wealth (which is also the wealth of

the society as J has nothing) is worth 150 units if valued in terms of Y (being the 100 units of Y plus the 100 units of X converted into the worth of 50 units of Y); but it is worth 300 units if valued in terms of X. So the same collection of goods (100 units of X and Y each) is worth 150 units or 300 units using either good as the numeraire, depending on the distribution between the two individuals. Thus, the total amount of wealth is not independent of its distribution, making wealth maximization ambiguous. This point has been made by a number of critics of Posner before, but our simple case makes the point very clear.

Obviously, this problem does not go away when we consider the case of more goods and more individuals. Nevertheless, in the real world of many millions of individuals and thousands of goods and with wealth measured in monetary terms (i.e. used as the common numeraire), most relatively small decisions usually do not involve a large change in relative prices, making the concept of wealth maximization (though still not perfectly precise, as some small price changes are still possible) less arbitrary or indeterminate (Ng 2004, ch.7). This consideration makes the use of wealth maximization an acceptable practical instrument for welfare maximization, despite its non-perfect determinacy or precision, as discussed further in Appendix A.

As the total amount of wealth is not independent of its distribution of even a fixed collection of goods, the non-independency or indeterminacy problem is even more complicated (not necessarily larger) as we introduce production decisions and decisions involving extra-economic matters. For the simple case of '2 by 2', we may agree that, for any allocation ending up at a point below the UPC (referring to Figure 2), the amount of wealth involved is lower than some point on the UPC, just like its dominance in terms of Pareto efficiency. We may also agree to say that the amount of wealth is the same, at least in some sense, for all points on the UPC, as they involve efficient distribution of the same collection of goods. Then both Pareto efficiency and wealth maximization are able only to discriminate between points on and below the UPC, not between different points on the UPC. This is similar to the case of a single good discussed with reference to the goods or commodity space of Figure 1. For both cases, the more precise answer given by utilitarianism/welfarism over wealth maximization and Pareto efficiency is obvious. This is especially so for the case of Figure 2 where the utility levels of the individuals are shown. This obvious difference between wealth maximization (and Pareto efficiency as well) and utilitarianism/welfarism becomes rather obvious when put in this simple form of utility space of Figure 2. Much confusion and misunderstanding between the participants on the debate

whether Posner's wealth maximization is or is not different from utilitarianism could be reduced by thinking in terms of this simple framework.

3. The Unacceptability of Wealth Maximization as the Ultimate Objective

As the ultimate objective, wealth maximization is obviously totally unacceptable. Except for extreme misers, no one regard wealth as the ultimate objective or something of intrinsic value. Rather, wealth serves instrumentally to achieve other things of intrinsic value, e.g. happiness or welfare; some may want to include power, autonomy, dignity, etc. Secondly, the relationships between wealth and the more intrinsic values are not monotonic; an increase in total wealth does not necessarily imply an increase in total intrinsic value. Take the simple purely economic case of goods again, starting with the distribution of a given collection of goods discussed in the previous section. Even in the simplest case of Figure 1, we may see that the point F may be preferable to the point A (or B). Though F involves the wasting of some amount of X and hence has less wealth than either A or B, it involves more equal distribution. The use of wealth maximization would dictate the choice of A or B over F, even if A or B involves letting one of the two individuals starve to death. In itself, wealth maximization ignores distribution completely and hence is obviously unacceptable without further supplementation or qualification. Introducing more goods (and individuals) and the production of different collections of goods does not change this.

We may allow for production possibility (in addition to the distribution of a given collection of goods discussed in the previous section) to allow for different quantities of total wealth even abstracting from the pure waste of some units of goods (as for point F in Figure 1). With the production of different collections of goods as options, we no longer just have a single UPC (which refers to the utility possibility of distributing a single collection of goods) as in Figure 2. We still assume given quantities of (natural and labor) resources and a given level of the techniques of production (in addition to any other institutional constraints which are held unchanged to focus on economic production and consumption only). As resources may be used to produce different collections of goods, we have different UPC's each corresponding to one collection of goods. Taking the outer envelope of all the UPC's, we have a UPF (utility possibility frontier for the given resource and technology endowment and the given preferences of the individuals), as shown in Figure 3 where the range is also extended to cover the negative

areas. Here, the Pareto-inefficient point H (Pareto-dominated by point G) need not involve wasting some goods or resources. It may involve misallocation of the given produced collection of goods (reaching a point below the corresponding UPC such as the point T in Figure 2); it may also involve misallocation of resources (productive inputs) between different goods such that productive efficiency is not achieved. On the other hand, an allocation may involve both productive efficiency (no more of one good may be produced without reducing the amount of another good) and exchange (allocation/distribution of the given produced collection of goods) efficiency/optimality. However, the satisfaction of both productive and exchange efficiency does not ensure Pareto optimality. There may be excessive production of some goods and not enough of some others; the collection of goods produced may not be in accordance with the preferences of individuals. The top-level optimality condition is then said to be violated.

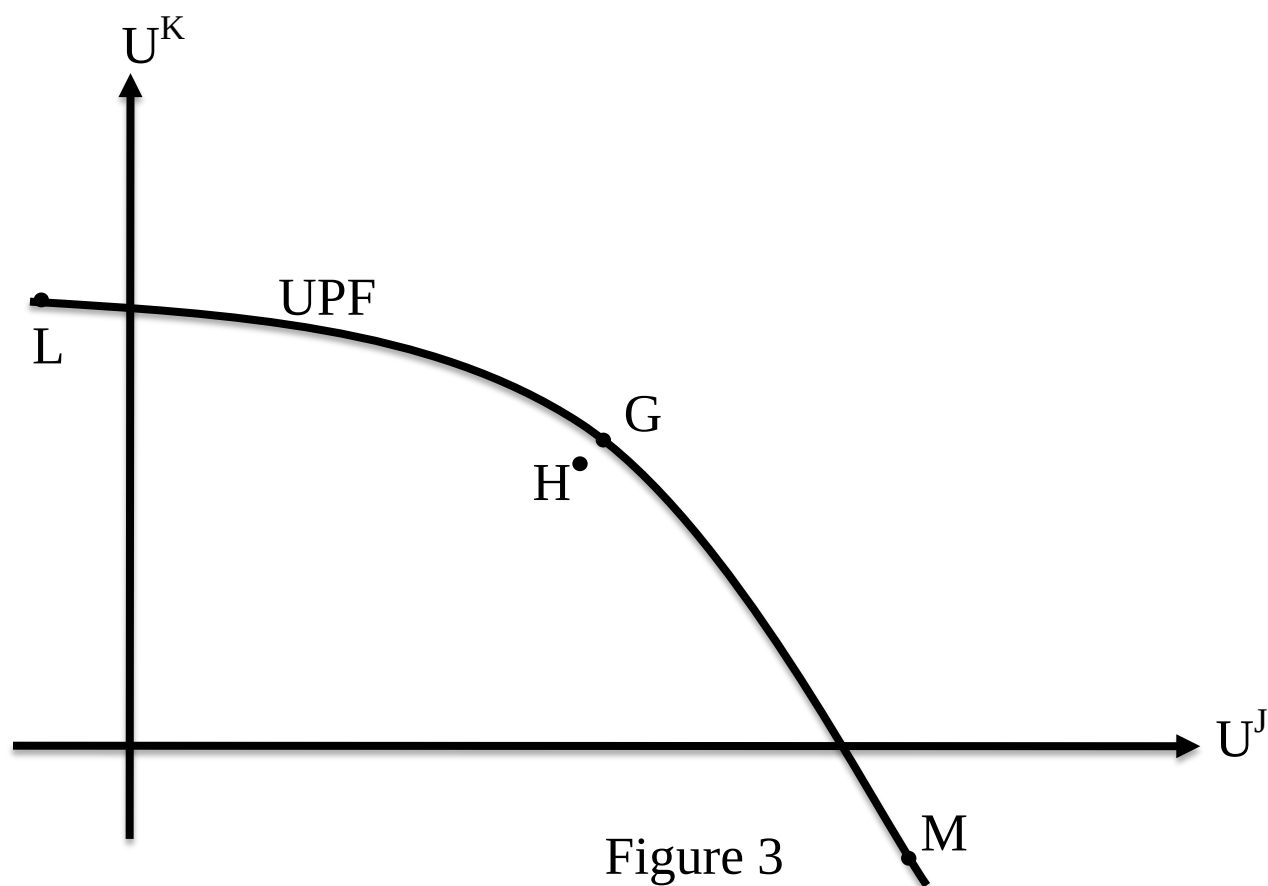


Figure 3

Especially for the case where the Pareto-inefficient point (H in Figure 3) is due to productive inefficiency, it must be seen to be NOT wealth maximizing, since more of some goods could be produced without reducing the amount of any other good. Yet, the point H with productive inefficiency and without wealth maximization may be much better than a point L or M on the UPF. As L (or M) is on the UPF, it satisfies all conditions for Pareto optimality: productive efficiency, exchange efficiency, and top-level optimality. Yes, its distribution could be so dismally unequal such that some persons (especially if only a tiny few, extending to beyond just two persons) are extremely rich, but some persons (especially if many) are starving and suffering (hence with negative utility levels). As is clear from Figure 3, the non-wealth maximization point H may be much better overall than the wealth maximization point L or M. Wealth maximization is clearly not acceptable without supplementation. Though we illustrate this point for the simple case of purely economic allocation rather than the more complicated issues like judiciary decisions, the principle of the unacceptability of wealth maximization alone is the same.

4. Utilitarianism/Welfarism Defended

Posner (1979, 1980a) rejected utilitarianism and proposed wealth maximization to replace utilitarianism. In this section, we defend utilitarianism and its more general form welfarism (which is utilitarianism without the unweighted or equally weighted sum requirement), especially against Posner's criticism.

Posner (1980a, p.251) mentioned the following 3 reasons for rejecting utilitarianism. The first is the measurement problem that utility is difficult if not impossible to measure. Second is the boundary problem as to whose utilities should be included. Third is the alleged 'moral monstrosity' that utilitarianism may lead to. In Posner (2015), the issues of the authenticity of preferences and values other than happiness are also added. A refutation of these points and a further defence of utilitarianism/welfarism are offered in this section.

The measurement problem has some validity as it may be difficult to measure individual utilities and compare them. However, this at most means that practicing utilitarianism may be difficult, not its acceptability in principle. Moreover, even wealth may involve some difficulties in measurement, and even conceptual ambiguity, as noted by Posner's critics and discussed in the previous section. Posner also recognizes that, in many cases, the relevant values of wealth

has to be based on ‘guess’, even though a court can make it ‘reasonably accurate[ly]’ (Posner 1979, p.120). However, it is true that, in most practical cases, utility measurement and comparison have more serious difficulties than those of wealth. These difficulties also suggest that our argument in the next section in using wealth maximization as an instrument for welfare maximization makes sense. Nevertheless, these difficulties are not insurmountable. If we regard utility only as a proxy for happiness (which is the ultimate value), recent advances in happiness studies suggest that welfare (defined as happiness) is not completely out of reach of scientific study (Diener et al. 2010, Ng 1996, 1997, 2015).

The boundary problem for utilitarianism/welfarism is real, but it is largely the same for wealth maximization. Should foreigners be taken into account is as real a problem for wealth maximization as for utilitarianism/welfarism. Some may think that the latter also faces the question of animal welfare, while most, if not all, laws do not recognize wealth owned by animals. Not so sure; many pet owners certainly regard that their pets own things they give them. Also, in animal rights circles, many animals are regarded as having personality (Rowlands 2016). Certainly, it is not unreasonable to regard the habitats that are important for their survival and welfare as their wealth. There seems to be no essential differences between utilitarianism/welfarism and wealth maximization regarding the boundary problem.

It is not the case that, under utilitarianism/welfarism, ‘the inclusion of animal feelings ... is unacceptable’ (Posner 1979, p.112) as it would lead to ‘avoid two sheep and deliberately killed a child’ (Posner 1979, p.112). Any reasonable form of utilitarianism/welfarism recognizes the huge different implications of killing a sheep and killing a human child. Not only that the much larger negative direct and indirect effects on the parents and on others have to be taken into account, we as a species may also choose to be partial, just like a nation may choose to be partial in favour of its own citizens. Much if not all discussion dismissive of utilitarianism/welfarism is based on similar unpersuasive comparisons ignoring indirect effects. Posner’s preferred position of ‘we don’t care about animal utilities save as they enter into human utility functions’ (1979, p.113) may be regarded as unacceptable homocentrism by those caring for animal welfare. Taking accounts of complicated indirect effects, utilitarianism is not inconsistent with ‘powerful intuitions that our social obligations are (usually) greater to family and close friends than to strangers, greater to the people of our own society than to outsiders, and greater to human beings than to (other) animals’ (Posner 2015, p.8). Similarly, our defence of utilitarianism/welfarism

also largely applies to consequentialism in general. Much criticism of consequentialism is based on ignoring the point that processes, rules, agency, etc. may all be relevant as they are generalized consequences or have effects on future consequences; consequences need not be confined to effects on allocations of goods, etc. only. However, under welfarism, all consequences are important only by ultimately affecting welfare. Nevertheless, probably a book-length treatment is needed to defend utilitarianism in particular and consequentialism in general against many different criticisms.

Regarding some monstrous outcomes under utilitarianism/welfarism, all such cases are similarly based on ignoring some relevant effects on others and in the future. Most if not all cases Posner use against utilitarianism are based on ignoring indirect effects. For example, ‘What is missing from utilitarianism is any direct concern with the productive side of human activity, all the focus is on the consuming, the appetitive. ... it seems odd to give consumption moral precedence over production, to sacrifice the frugal for the pleasure-loving’ (Posner 1985, p.97). This is a clear misinterpretation of utilitarianism. Utilitarianism/welfarism does not mean that we should only focus on our current happiness, ignoring indirect effects that may adversely affect the happiness of others and in the future. Similarly, the argument that utilitarianism/welfarism does not recognize appropriate rights for individuals is based on similar misinterpretation. If the observance of certain rights, laws, constitutional provisions, etc. are conducive to long-term net welfare maximization, utilitarianism/welfarism dictates their observance. Also, as we are born with a feeling for justice, even ‘corrective justice’ in tort law may be acceptable to a welfarist. Even if the very exceptional undetected murder of a ‘malicious, old and unhappy grandfather’ (Posner 1979, p.116) may be welfare increasing, the enforcement of severe penalty for murder will also be welfare increasing. In contrast, wealth maximization may lead to worse monstrous outcomes like making 0.0001% of individuals very wealthy with 99.9999% starving and suffering enormously.

The pleasure machine/pill argument [‘How many of us would be willing to take a pill that would put us into a blissfully happy dreamlike trance for the rest of our lives, even if we were absolutely convinced of the safety and efficacy of the pill and the trance?’ (Posner 2015, p.7)] appears very persuasive and has been much used in moral philosophy. My own reluctance can be explained by possible contributions to others (by not taking the pill) and possible irrational preference from both nature and nurture. If you put me (or any normal and healthy man) into a

locked hotel room with an extremely attractive young lady who is willing, I may not be able to resist even if I know that she has 5% chance of AIDS and it is certainly very expected welfare reducing to go ahead. Our preferences may be affected by nature and nurture (thus covering Posner's point about the authenticity of preferences), but ultimately, only actually felt happiness is of the intrinsic value (Ng 1990, 2015).

It is true that utilitarianism/welfarism requires that any rights, laws, constitutional provisions, moral principles, etc. must be consistent with long-run welfare maximization; not rights for rights sake; no Kantian categorical imperatives. However, this is perfectly defensible. Such principles irrespective of welfare consideration will likely lead to disastrous outcomes. For example, for many hundreds of years, people in ancient China believed in the intrinsic moral principle of 'one woman should not serve two men/husbands' (一女不事二夫) such that a woman should not remarry even long after the death of her husband. Allowing such intrinsic moral principles or categorical imperatives irrespective of their contribution to welfare resulted in huge suffering. After prolonged criticism, including by many novelists, this damaging imperative was given up as wrong. Did this sort of thing only happen to ancient people? Can it not happen today? Even right now, as reported early in April 2016, we have many thousands of so-called honour killings (typically by brothers or cousins killing their sisters/cousins for falling in love with men) each year in a single country like Pakistan. Does this only happen in underdeveloped countries? Euthanasia is still illegal almost worldwide (with the exception of the Netherlands), even for doctors helping suffering patients choosing to end their miserable and hopeless lives. Intrinsic/categorical principles not justified by welfare considerations are causing enormous suffering right now worldwide.

Rights for rights sake makes no sense. Why some rights and not others? Why only human rights, animal rights? Why not stone rights, table rights? Welfare (including both enjoyment and suffering) must be involved. Also, we almost certainly have more than just one single rule/principle/law to guide us, what should we do when one rule is in conflict with another? Which rule should we give up? As once happened when a radio announcer made a racist remark, should he be allowed to do so based on the rule protecting free speech or should he be stopped or penalized for violating the rule forbidding racism? When rules conflict, the reasonable ultimate principle to judge which rule to follow should again be long-term welfare, taking likely side effects into account as much as possible.

It is true that the above argues mainly in favour of welfarism, instead of utilitarianism with its unweighted sum aspect. However, the main points of the present paper requires only welfarism, not utilitarianism, if we interpret ‘welfare maximization’ as the maximization of social welfare as a positive function of individual utilities. Moreover, I have provided a ‘most forceful defence’ (in the words of Mueller 1989, p.441) of utilitarianism itself elsewhere (Ng 1975, 1984, 2015, Ng & Singer 1981).

5. Wealth Maximization for Welfare Maximization

Though wealth maximization is not acceptable as the ultimate objective, it may be used as an instrument for welfare maximization which is not only acceptable, but compelling, as argued above. This section shows how wealth maximization may be used (with supplementation) for welfare maximization. Since wealth is not intrinsically valuable while welfare is, this is a much reasonable position to take. In fact, perhaps in the back of his mind, Posner may also have something similar. In the concluding paragraph of his 1979 paper (p.136), he proposed a system that ‘provides foundation and accommodation both of individual rights and of the material prosperity upon which, in the modern world, the happiness of most people depend’. This sounds like welfarism. A welfarist also wants material prosperity and individual rights for the pursuit of happiness.

The obvious deficiency (‘monstrousness’) of wealth maximization without appropriate supplementation is that a large amount of wealth, if very unequally distributed, may still be disastrous, as mentioned above. Thus, an obvious way to supplement wealth maximization is to achieve an appropriate, usually more equal, distribution. Whenever distribution is too unequal, especially when some individuals are too poor, redistribution is made to avoid disastrous outcomes. More appropriately, redistribution policies are used routinely to avoid extreme inequality and poverty. Many such policies are in fact maintained in most high-income countries in the form of progressive income taxation and welfare spending including unemployment benefits. In the presence of such supplementation, wealth maximization may be pursued in specific areas, including the judiciary as advocated by Posner, with all income groups, the rich and the poor alike, being made better off, as shown below.

If redistribution may be carried out costlessly, it is clear that wealth maximization makes sense, at least when only economic issues are involved. The highest feasible amount of wealth

should be achieved, and then redistribution may be carried out to achieve the highest level of social welfare. Redistribution is of course not costless; substantial costs include administrative, compliance, and policing. However, economists emphasize the efficiency costs of distortion or disincentive (which is a distortion in the work-leisure choice). Especially for high-income countries, this emphasis makes sense, as the essential costs of raising government revenues and some basic public spending are largely given. Choices involve only the extra costs of raising more or less revenues. Then for these relevant *marginal* costs, the disincentive effects are the more important costs. Focusing on the efficiency costs of disincentive effects of tax/transfer, it is argued below that using the rule of efficiency supremacy or wealth maximization in specific issues (including in the judiciary) may be justified.

Roughly speaking, in specific issues, we should use efficiency supremacy ('a dollar is a dollar irrespective of recipients') to maximize the total social wealth. We then also use appropriate redistribution to achieve some desirable level of equality. What about the costs of redistribution? Despite substantial costs of redistribution, the case for efficiency supremacy in specific issues is not compromised. Though redistribution using tax/transfer to achieve equality has substantial disincentive effects, the pursuit of equality in specific issues like judiciary decisions also has the same degree of disincentive effects, if the degree of equality (in real incomes) achieved is the same. This is so because in the work-leisure choice of a rational person (irrationality may cause divergences either way and will likely net out to be negligible), not only will the tax/transfer system (its degree of progressivity or the marginal tax rates at the relevant income levels in particular) be taken into account, but the effective redistributive effects in specific issues will also be taken into account. It is true that information will be imperfect, but again the effects of this imperfection may go either way and will likely net out to be negligible. This is so because people (extreme misers possibly excepted) do not earn incomes for incomes sake but to gain utilities. When you earn higher incomes, if the extra money cannot be used to buy convenient parking spaces (distributed by first-come-first-served instead), the values gained by earning extra incomes will be discounted, equivalent to having a higher marginal income tax rate. Whether we achieve a given degree in equality (in real income or utility) by the tax-transfer system or by additional inefficient but pro-equality measures in specific issues including judiciary decisions, the same degree of incentives will prevail. However, the violation of efficiency supremacy will involve additional efficiency costs and hence is inferior.

For any system using a particular tax/transfer schedule plus some inefficient but pro-equality measures in specific issues, we may dismantle these inefficient measures but at the same time make the tax/transfer schedule more equality oriented or more progressive. This could be done in a way that the combined effects are to make every income groups indifferent after and before this change in policy. As we then have the same utility distribution over groups of people of different earning abilities, the same incentive effects will prevail for all groups. As the change is to dispense with inefficient measures, the government could impose more taxes than it needs to give more subsidies, in order to make all groups indifferent to before the change. The efficiency gain of this efficiency supremacy system then manifests in having a higher government net revenues which could be used to make all groups better off. This result was proved rigorously as a proposition and published in one of a few, if not the very top journal in economics, the *American Economic Review* (Ng 1984). It is somewhat ironical that, right in the heyday (early to mid 1980's) of the criticism of Posner's wealth maximization, a proposition was proved that is most supportive of Posner's position, but no one seemed to realize this connection for three decades.²

As all groups are made better off, this is at least a quasi-Pareto improvement. It is only quasi, because, in the presence of heterogeneous preferences of different individuals within the same income group, we may not be able to ensure that no one is made worse off. However, those made worse off could be compensated by the gainers within the same income group. This makes the quasi-Pareto change satisfying the Kaldor-Hicks criterion within each and every income group. As the compensation test in the original Kaldor-Hicks criterion is only hypothetical, it may not be widely acceptable if applied across all income groups. If the very rich are made better off by \$10 billion and the very poor are made worse off by \$5 billion, and the compensation is not actually carried out (with the actual compensation, the change would be a Pareto improvement), the result, even if wealth increasing, may be very welfare reducing. However, our quasi-Pareto change here satisfies the compensation test within each and every income group. It is thus much more acceptable as a sufficient condition for a social improvement than the Kaldor-Hicks criterion.

² See however Kaplow & Shavell (1994) on the superiority of using income tax/subsidy than the legal system in redistributing income.

Our argument here may be illustrated using the UPF (utility possibility frontier) curves discussed in Section 3 above. In Figure 3 there, we noted that the inefficient and non-wealth maximizing point H may be welfare superior to the efficient points L and M. Based on this comparison, referring to Figure 4 and starting from a situation at point A, it is tempting to think that, if a specific judiciary decision will move us from A to B, it may be welfare improving. Despite the lower wealth or the lower efficiency involved (the UPF through B being lower than the UPF through A), the higher degree in equality at B may make it on a higher welfare contour than A. Choosing between A and B as the final point, I would also choose B. However, starting from A, instead of making an inefficient or wealth-decreasing move to B by a decision/policy on a specific issue, we would be better off trying to increase equality from A, aiming at C. If redistribution is costless and C is attainable, it is Pareto superior to B. Everyone will agree that this is a better move. However, in the presence of redistribution costs, it is not feasible to move from A to C. We can only travel from A along the broken utility feasibility frontier (UFF) to D. If the disincentive effects are substantial, D may be Pareto-inferior to B. Does this make the inefficient move from A to B desirable? The answer based on the analysis of this section is: No! The reason is that, if redistribution through a general tax-transfer from A, aiming at C, will end up at D through the disincentive effects, the redistribution through the inefficient move from A to B will also generate similar disincentive effects, moving us from B to E, which is Pareto inferior to D. Thus, the real choice is between A or moving to either D (through general redistribution) or to E (through the inefficient pursuit of equality in specific issues). The choice is clear, either we stay at A, or if we want equality enough to be willing to pay the redistribution costs, we move to D by general redistribution. Never choose E by violating efficiency supremacy in specific issues.

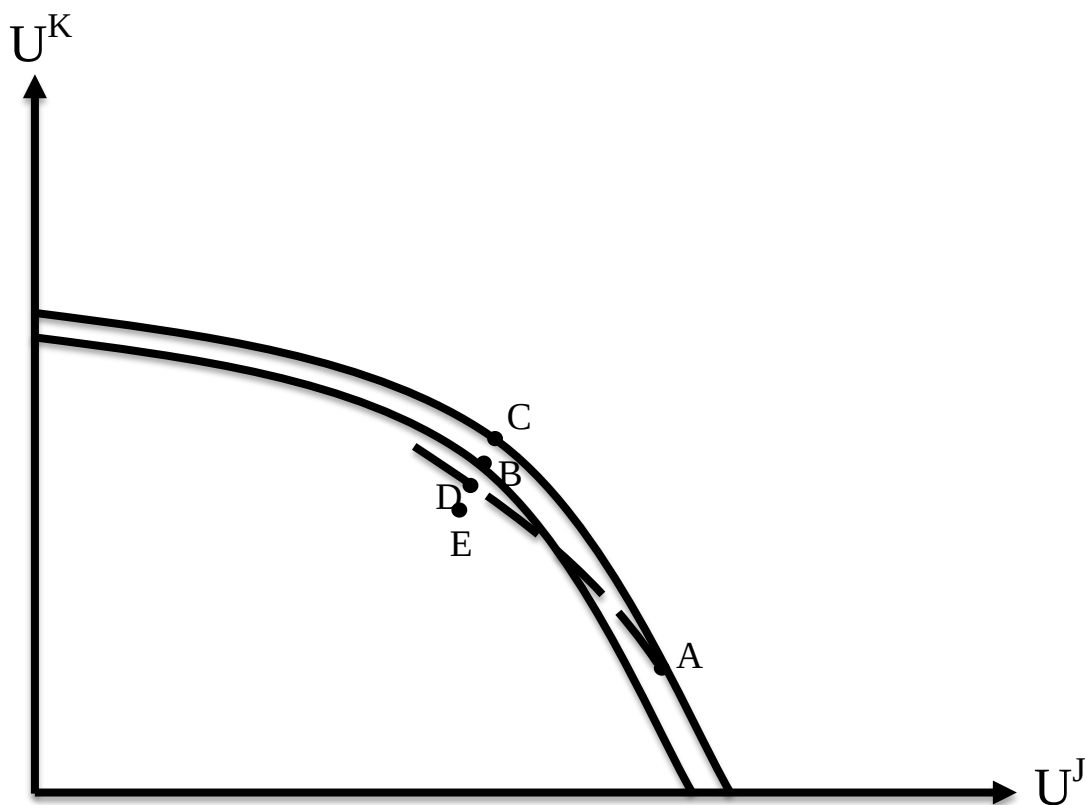


Figure 4

It is true that an equality-improving measure need not be inefficient. However, under our proposed efficiency-supremacy in specific issues, such efficiency-consistent equality-improving measures will not be ruled out. Only measures that are inefficient are ruled out. In fact, all specific inefficient measures, whether equality-increasing, equality-decreasing, or equality-neutral, should be ruled out. An example of inefficient measure is the use of first-come-first-served in allocating scarce parking spaces in city central areas. Usually, it is pricing at very low levels, making first-come-first-served the effective allocation method, at least partially. The refusal to increase the prices to equate supply and demand results in excess demand with insufficient empty spots. Drivers seeking for empty spots have to waste too much time and petrol, not to speak of the resulting increased congestion and pollution. This inefficient measure achieves some equality at least in parking, as people with low incomes may also afford to park there. This equality effect is presumably the reason for the popularity of such measures. However, this perception is based on seeing only one area without a more overall view. The efficient

solution is to increase parking fees to avoid excessive space hunting. This in itself may make the rich (who are willing to pay more for convenient parking spaces) better off and the poor worse off. However, if we also tax the rich more and help the poor more, all groups could be made better off. The same degree in equality in real income or utility could be achieved more efficiently.

Similarly, in judiciary decisions, at least for those affecting economic efficiency, the effects should not be weighted by incomes, such as counting a dollar to the poor as worth two dollars and a dollar to the rich as worth only half a dollar, as in fact proposed and done by some economists in cost-benefit analysis. Such systems of income or distributional weighting appear to be desirable in increasing social welfare, though they are counter to wealth maximization or efficiency. This belief in the desirability of these systems is again based on seeing the direct effects without seeing the indirect effects. The policy of using distributional weights in cost-benefit analysis also makes earning higher incomes less valuable, increasing the disincentive effects. Instead of trying to pursue equality in specific issues, we should pursue equality generally, leaving the specific issues to be purely efficiency oriented. In principle, this is similar to the point that, to achieve equality, we should try to achieve a high degree of equality in total purchasing power, leaving the choice of how to spend the total incomes to the individuals. The objective of equality is achieved without the distortion of efficient individual choices or the violation of individual freedom of choice. For example, even if we want to achieve complete equality, it is better to equalize post-tax/subsidy incomes across the board instead of allocating each and every good equally. Assuming perfect effectiveness (though unlikely in real life), both methods achieve perfect equality. However, the later inefficient policy would give Madonna and Kwang the same amount of lipsticks, but Kwang does not use lipsticks.

It is tempting for a particular judge or analyst to think, 'I have no control on the distribution policy which I take as given, then for a particular decision/proposal, if I could promote equality somewhat at only a slight cost in efficiency, this should be a good thing.' In fact, something similar probably had taken place for many decades, contributing to the inefficient pursuit of equality in many areas (such as the first-come-first-served system in car parking discussed above). Partly as a result, the total system was then perceived to be too low in terms of efficiency (including incentives) such that, starting from the 1970's, the degrees of progressivity in income taxation have been decreased several times in many countries. Combined

with this reverse changes in progressivity, we end up with no more equality, but with many inefficient policies. We would have been better off without those inefficient equality-oriented policies in specific issues and kept the higher degrees in tax progressivity. Short-term good doings lead to long-run badness. Thus, Posner's advocacy of the separation of the judiciary and the legislature and the related wealth maximization in the judiciary may largely be justified. For specific issues including judiciary decisions, efficiency supremacy irrespective of distribution (a 'separation of distribution and efficiency' continuously challenged until now, e.g. Driesen & Malloy, forthcoming, p.5 of typescript) is acceptable, if supplemented by appropriate distribution in the general equality policy, as this will make all income groups better off.

6. Reconciling Rights with Welfare Maximization: Concluding Remarks

In the face of strong criticism, Posner (e.g. 1985, 2015) has retreated into pragmatism without giving up wealth maximization. While this provides some workable practicability, the conceptual justification and consistency are lacking. In particular, he seems to be confused and confusing in both accepting and rejecting both utilitarianism and individual rights at different places at the same time. The present paper provides both a justification and an explanation of Posner's position. Posner probably see some merits and problems in both utilitarianism/welfarism and rights but has not been able to reconcile them in a conceptually consistent way. Hence the apparently inconsistent positions. In addition to the previous section, this section tries to provide a consistent position that may lie at the back of Posner's head. At least this is the position I see as consistent and justifies wealth maximization for welfare maximization.

Since welfare is the only ultimate value (Ng 1990), the **ultimate** objective for a society should be social welfare; cannot be wealth, GDP or any such similar objective things with no intrinsic value. Accepting welfarism and ignoring issues of animal welfare, social welfare is a positive function of individual welfares. Taking account of indirect and long-term effects, welfarism is consistent with the acceptance of certain rights, constitutional provisions, etc. if these may be justified on the ground of long-run welfare maximization. On any specific issue that a court, a government, or a policy adviser is making a decision/suggestion, we are in a particular point in time with our given history, constitutions, statutory laws, legal precedences,

accepted rights, moral principles, given endowments of individuals both in ability and inherited wealth, etc. Ideally, the previous decisions contributing to these ‘givens’ should be based on welfare maximization, but few things in the real world can be ideal. The point here is that these ‘givens’ determines the initial point A in Figure 4 in the previous section. There, we show that, given any initial point such as A, when we are making a decision/suggestion on a specific issue, we should follow the principle of efficiency supremacy, treating a dollar as a dollar whomever it goes to. But this efficiency supremacy in specific issues (very close to if not exactly wealth maximization in Posner’s sense; see Appendix A) should be supplemented by the equitable equality promotion policy in some branch of the government other than the judiciary.

Our position in using utilitarianism/welfarism as the intrinsic, ultimate, and long-run moral position, but using wealth maximization (for welfare maximization) for specific issues in the short-run situations with many ‘givens’ may then explain Posner’s apparently conflicting positions under his ‘hybrid ethical system’ (Posner 2015, p.10) not only in a conceptually consistent way but provides a strong support for the efficiency (all groups better off) of wealth maximization for welfare maximization with equality supplementation. Our position that allows for feelings for justice and short-term ‘givens’ also appears to be less extreme than that of Kaplow & Shavell (2002) who nevertheless provide a very powerful argument for basing policies ‘exclusively on their effects on individual’s well-being’ (p.465). I accept this at the ultimate level, but make some concessions in dealing with many ‘givens’ in short-run decisions. These include the feelings of fairness, justice, etc. However, ultimately, these are important not intrinsically, but by affecting welfare or happiness directly or indirectly. Frustration from feelings of injustice already counts as negative welfare, and it may generate further negative welfare effects in the future through increasing social disharmony, etc. Taking account of all these is consistent with welfare maximization. On the other hand, this paper goes further than this and accepts the use of wealth maximization in specific issues including judiciary decisions. However, in contrast to Posner, this is accepted under the qualification of appropriate supplementation in redistribution and as more clearly instrumental for welfare maximization.

Our acceptance of the many ‘givens’ including the feelings of justice in the short run may be regarded as a form of pragmatism. However, since for the long run and intrinsically, we have a consistent guide of welfare maximization, our position is conceptually adequate and consistent. For example, we will not be in an awkward position for all those who believe in rights (or

imperatives, including Kantian) for rights sake when faced with conflicting rights or when some rights may lead to disastrous outcomes in terms of welfare. This is so since no deontic, including Kant himself, believe in only one single right/imperative, and that welfare is not important. If one believes in only one single right, e.g. no murder under any circumstance and regards this as more important than any sacrifice in welfare, then he can be consistent. However, he may end up failing to save the whole world from going to hell when an escaped murderer carries out his hell creation plan. When we create/accept more rights/principles to constrain the excess or inadequacy of just one single right, we face the awkward position when two or more of our rights/principles are in conflict with each other, as also mentioned above. By using rights/principles for welfare maximization, we can provide a rational basis for accepting which rights (e.g. why human rights, animal rights, but no stone rights) and also on how to reconcile different rights when in conflict.

Of course, the effects on future welfare in the observation or violation of different rights by different degrees, or the welfare effects of social disharmony under different contexts, etc. are very difficult to guestimate, not to say estimate. Nevertheless, these are matters of our lack of relevant information on which further studies may help to lower, not a matter of conceptual or moral philosophical acceptability.

Appendix A. ‘A Dollar Is A Dollar’ vs. ‘Wealth Maximization’

As discussed in Section 5 in the text, the argument supporting ‘wealth maximization for welfare maximization’ is based on the principle of treating a dollar as a dollar whomever it goes (irrespective of the rich or the poor) in specific issues, briefly called efficiency supremacy. This is close, but not quite exactly the same as wealth maximization. An important difference is seen by my concession that the argument does not show that a trillion dollars are always equal to a trillion dollars (Ng 1984, p.1041). This point can be seen clearly by considering a simple example. Consider two alternative projects: project *M* will increase the incomes (after allowing for cost share) of one hundred million individuals by \$10 thousand each, and project *N* will increase the income of one single random individual by \$1 trillion. As the aggregate net benefits of both projects are the same, strict wealth maximization should be indifferent between the two. However, ruling out costless

transfers (that would make us indifferent between the two projects if 'costs' include all costs even just Nozick-like aversion to redistribution itself), it is clear that project *M* will be preferred to project *N* by all social welfare functions egalitarian in incomes. This preference is not based on valuing a marginal dollar to the rich as lower than a marginal dollar to the poor. Rather, it is based on treating the first dollar as more valuable than the trillionth dollar, whomever they go to.

On specific issues like judiciary decisions, a dollar should be treated as a dollar whomever it goes to, irrespective of the income or wealth levels of the recipients. Barring very unusual events where some judiciary decisions themselves may create huge inequality like project *N* above, the practice of wealth maximization à la Posner will be largely consistent with the principle of efficiency supremacy in specific issues and hence, if coupled with appropriate redistribution in the general equality promotion policy, will result in all income groups being made better off.

Another complication is some possible ambiguities in wealth maximization and even efficiency itself. Posner equate his concept of wealth maximization with the Kaldor-Hicks criterion. A change is desirable (wealth maximizing in Posner's terms) if the gainers could (note the hypothetical) fully compensate the losers and still left better off. Even if we strengthen it into the Kaldor-Hicks-Scitovsky criterion by adding the requirement that the reverse change back to the original position does not satisfy the Kaldor-Hicks criterion, repeated application of the improved criterion may still lead to a Pareto inferior position (as expounded in Ng 1984, Figure 3). This shows the difficulties of making judgments about social desirability without using interpersonal comparisons of individual cardinal utilities (i.e. taking account of the intensities of preferences). In fact, in general, there exist no non-cardinal ranking rule (a rule not using interpersonal comparisons of individual cardinal utilities) satisfying anonymity and the Pareto principle (Ng 1982, Proposition 4). The Kaldor-Hicks-Scitovsky criterion is in fact more than a non-cardinal rule as it effectively uses the amount of required compensation and the willingness to pay as indirect measures of cardinal utilities. However, these indirect measures are not perfect in their correspondence with the individual intensities of preferences, making inconsistency and Pareto inferiority possible, especially after repeated applications. This means that the criterion is imperfect. However, before we have better measures of intensities of preferences, the use of such measures as willingness to pay in cost-benefit analysis may be better than say just using preference rankings only. This is especially so since the problem of differences in willingness to pay due to different income levels has been taken into account by having appropriate redistribution if needed. For example, the rule of

stopping at red traffic lights is also imperfect as it creates some unnecessary waiting time. Nevertheless, it avoids many accidents and much congestion. The benefits are more important and we keep using it. Similarly, efficiency supremacy or wealth maximization in specific issues supplemented by appropriate equality measures will most likely lead to a bigger pie and make all income groups better off. It may thus be accepted as desirable even if not 100% perfect. This justification of using efficiency supremacy and/or wealth maximization is similar to my justification of using consumer surplus as a good approximation for welfare changes (Ng 1979/1983, ch.4). For an approximate measure, some imperfections are to be expected. Also, questions on the differences between willingness to pay and to accept, endowment effects, etc., may be treated similarly.

References

- CAMPBELL, D. (2012). Welfare economics for capitalists: the economic consequences of Judge Posner. *Ober*, 33(6), 2233-2274
- DIENER, E., KAHNEMAN, D. & HELLIWELL, J. (2010). *International Differences in Well-Being*. Oxford: Oxford University Press.
- DRIESEN, David M. & MALLOY, Robin Paul (2015). Critiques of law and economics. Available at SSRN 2572574 .
- DWORKIN, R. M. (1980). Is wealth a value? *Journal of Legal Studies*, 9(2): 191-226.
- FERNANDES, B. G. (2015). Legal argumentation and theories of adjudication in the US legal tradition: A critical view of Cass Sunstein's minimalism, Richard Posner's pragmatism and Ronald Dworkin's advocacy of integrity. In *Argument Types and Fallacies in Legal Argumentation* (pp. 203-218). Springer International Publishing.
- HATZIS, A. N., & MERCURO, N. (Eds.). (2015). *Law and Economics: Philosophical Issues and Fundamental Questions* (Vol. 22). Routledge.
- KRONMAN, Anthony T. (1980). Wealth maximization as a normative principle, *Journal of Legal Studies*, 9(2): 227-242.
- KAPLOW, Louis & SHAVELL, Steven (1994). Why the legal system is less efficient than the income tax in redistributing income, *Journal of Legal Studies*, 23(2): 667-81.

- KAPLOW, Louis & SHAVELL, Steven (2002). *Fairness versus Welfare*, Harvard University Press; previously published in *Harvard Law Review*. Feb 2001, Vol. 114 Issue 4, p966-1388.
- LERNER, Abba P. (1944). *The Economics of Control*, New York: Macmillan.
- MATHIS, Klaus. (2009). *Efficiency Instead of Justice? Searching for the Philosophical Foundations of the Economic Analysis of Law*, Springer.
- MUELLER, Dennis C. (1989) *Public Choice II*, Cambridge, England: Cambridge University Press
- NG, Yew-Kwang (1975). Bentham or Bergson? Finite sensibility, utility functions and social welfare functions, *The Review of Economic Studies* 42, no. 4: 545-569.
- NG, Yew-Kwang (1979/1983) *Welfare Economics: Introduction and Development of Basic Concepts*, London: Macmillan. Second edition published in 1983.
- NG, Yew-Kwang (1982), The necessity of interpersonal cardinal utilities in distributional judgments and social choice, *Zeitschrift fur National ökonomie* (J of E). 42:207-33.
- NG, Yew-Kwang (1984), Quasi-Pareto social improvements, *American Economic Review*, 74(5):1033-50.
- NG, Yew-Kwang (1989), What should we do about future generations? The impossibility of Parfit's theory X, *Economics and Philosophy*, 5: 135-253.
- NG, Yew-Kwang (1990), Welfarism and utilitarianism: A rehabilitation, *Utilitas*, 2(2): 171-193.
- NG, Yew-Kwang (1995), Towards welfare biology: Evolutionary economics of animal consciousness and suffering, *Biology and Philosophy*, 10:255-285.
- NG, Yew-Kwang (1996), Happiness surveys: Some comparability issues and an exploratory survey based on just perceivable increments, *Social Indicators Research*, 38(1): 1-29
- NG, Yew-Kwang (1997), A case for happiness, cardinalism, and interpersonal comparison, *Economic Journal*, 107(445): 1848-1858
- NG, Yew-Kwang (1999), Utility, informed preference, or happiness?, *Social Choice and Welfare*, 16(2): 197-216.
- NG, Yew-Kwang (2004), *Welfare Economics: Towards a Complete Analysis*, London: Macmillan.
- NG, Yew-Kwang (2015). *Happinessism*, Taipei: Wunan. (In Chinese.)

- NG, Yew-Kwang (2016). How welfare biology and commonsense may help to reduce animal suffering, *Animal Sentience*, 2016.007.
- NG, Yew-Kwang & SINGER, Peter (1981). An argument for utilitarianism, *Canadian Journal of Philosophy*, 11: 229-239.
- PINO-EMHART, Alberto (2016). The old and new philosophical foundations of tort law, *Modern Law Review*, 79(3): 504–518.
- POSNER, Richard A. (1973). *The Economic Analysis of Law*. Boston: Little Brown. Many editions published subsequently.
- POSNER, Richard A. (1979). Utilitarianism, Economics, and Legal Theory. *Journal of Legal Studies*, 8(1), 103-140.
- POSNER, Richard A. (1980a). The value of wealth: A comment on Dworkin and Kronman. *Journal of Legal Studies*, 9(2), 243-252.
- POSNER, Richard A. (1980b) The ethical and political basis of the efficiency norm in common law adjudication, *Hofstra Law Review*: Vol. 8: Iss. 3, Article 2.
- POSNER, Richard. A. (1984). Wealth maximization and judicial decision-making. *International Review of Law and Economics*, 4(2), 131-135.
- POSNER, Richard A. (1985) Wealth maximization revisited, in *Notre Dame Journal of Law, Ethics and Public Policy*, 2: 85-105.
- POSNER, Richard A. (1990), *The Problems of Jurisprudence*, Cambridge, Mass.: Harvard University Press 1990.
- POSNER, Richard A. (2015) Norms and values in the economic approach to law, *Law and Economics: Philosophical Issues and Fundamental Questions* 22: chapter 1.
- ROWLANDS, Mark (2016). Are animals persons? *Animal Sentience: An Interdisciplinary Journal on Animal Feeling*, 1(10), 1.
- SEN, Amartya K. (1973), On ignorance and equal distribution, *American Economic Review*, 63:1022-4.
- VELJANOVSKI, Cento G. (1981) Wealth maximization, law and ethics – On the limits of economic efficiency, in *International Review of Law and Economics*, 1: 5-28.