

Are Second-Best Tariffs Good Enough?

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ABSTRACT

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In the presence of distortions, tariffs may potentially be beneficial, although they are “second best” in that other policies exist that would be preferable. If those other policies are somehow not available, are tariffs then “good enough”? This essay discusses several reasons that may be advanced for answering No to this question: 1) Tariffs are second best because they introduce a second distortion, even while correcting a first. This second distortion may mean that the net welfare effect of the tariff is negative. 2) Rejection of the first-best policy may be viewed as a signal that society does not favor correction of the distortion, and that it would accept a tariff only because it does not understand it. 3) Taking account of the incentives for advocates of protection to argue in its favor, one may question the accuracy of the information they provide. 4) In general ignorance of the nature and size of the many distortions that undoubtedly exist in the economy, protection may be argued to be as likely harmful as helpful, and therefore should be rejected. None of these arguments are conclusive, as it turns out, but together they make a somewhat compelling case against the second-best use of tariffs.

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We teach our students that free trade is optimal for a small open economy, and also for the world, as long as there are no distortions in markets in either case. If distortions exist, we accept that a tariff can be welfare improving, but we argue that it is, at most, second best. That is, some other policy exists that will deal more effectively with the distortion than the tariff – usually by addressing it more directly – and therefore the tariff, being less than ideal, is not the preferred policy. Since distortions are surely rife in the world economy, and since first-best policies may often be unavailable for political or other reasons, our students might easily conclude that tariffs are “good enough” to be used routinely. Indeed, in opposing their use we might be accused of letting the “best be the enemy of the good.”

There are several responses to this argument, and I want to discuss them here. Most are, I believe, rather standard, but perhaps they have not been assembled for easy delivery to our students. One of them – the last that I will discuss – is not, I think, standard at all, and I’m not even sure that it is sensible or correct. But I want to get feedback from my colleagues as to whether it is worth considering.

* In writing this paper I have benefited greatly from the writings of, and conversations with, a great many people, most importantly Rachel McCulloch.

Response 1: Harm May Exceed Benefit

To start, let me just remind us of the very standard partial equilibrium analysis of a tariff and its effect, both with and without a distortion. Figure 1 is the familiar picture for a small open economy. Curves S and D are the country's domestic supply and demand curves for the good, with price P and quantity Q .

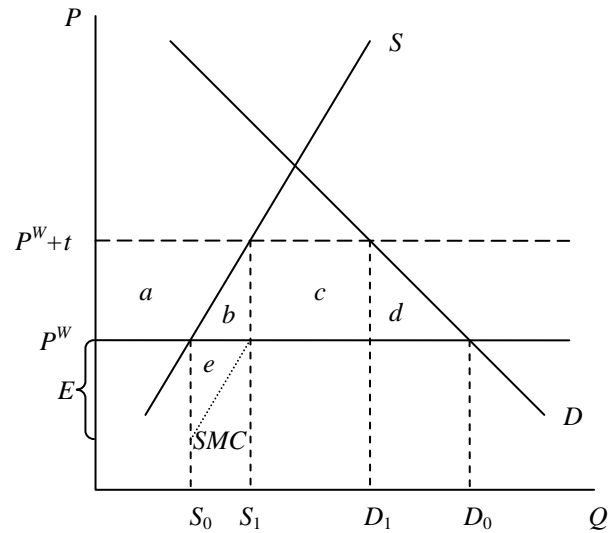


Figure 1: Effects of a Tariff

The world price is P^W , which the country takes as given, leading it, with free trade, to supply S_0 , demand D_0 , and import the difference. A specific tariff, t , levied on imports raises the domestic price to P^W+t , expands supply to S_1 , contracts demand to D_1 , and reduces imports to the new difference. In the absence of any distortions, the welfare effects of the tariff are that suppliers gain area a , demanders lose area $(a+b+c+d)$, and government collects area c as tariff revenue. The country as a whole therefore loses the dead weight loss area $(b+d)$, which is the excess of the loss to demanders over the gains to suppliers and government. On this basis, we say that the small country loses from the tariff.

Suppose however that there is a distortion that causes suppliers to produce too little. To keep it simple, suppose that there is a positive externality E , generated by production of this good, which society captures but suppliers do not. Then in the absence of any policy to correct this, suppliers will produce too little. The tariff, which causes supply to increase, then has the potential to raise welfare. In particular, we can

incorporate the benefit from the externality by deducting it from private marginal cost to construct the Social Marginal Cost curve, SMC, directly below the supply curve by the distance E , which I take here to be the same size as the tariff. This tariff therefore has the effect of internalizing the externality and raises supply to its optimal level, S_1 . The welfare effects of the tariff now include the additional benefit from generating more of the externality, and this extra benefit appears as area $(e+b)$. It is possible, in general, for this benefit to tilt the welfare calculus sufficiently for the tariff to be beneficial

Now our standard argument against a tariff is that it is second best. In the case of this externality, a better policy would be simply to subsidize supply, thus lowering the private marginal cost to the level of social marginal cost. In that case, quantity supplied would be S_1 under free trade, with demand still equal to D_0 , and this would be optimal.

But what if such a subsidy is not feasible for some reason? Then, might the tariff in fact be better than nothing? Yes, it might be, but it also might not be.

The first argument against a second best tariff, then, is that it may well raise welfare not at all, and instead push it down. Indeed, that is the case in Figure 1, where I have deliberately constructed the curves so that the net effect of the tariff, even in the presence of the externality, is negative. That is, the net benefit from the tariff, including the externality, is $(e-d)$, and I have constructed it so that area d is larger than e .

The reason the second best tariff may be harmful, and is harmful in this case, is that a tariff alters the incentives for both supply and demand. In the presence of a distortion such as this externality, one of these alterations is desirable, since it “corrects” the distortion. But the other is not desirable, and instead it introduces a distortion of its own. Twenty years ago, Bob Stern and I compared this use of a tariff to correct a

distortion to attempting “acupuncture with a fork.” Whatever good one prong of the fork may do, the second may do even more harm.

This is a valid argument against use of a tariff, but it is not conclusive, for two reasons. First, supply and demand conditions may be such that, in Figure 1, area d is smaller than area e , in which case the net effect of the tariff is positive. This would be the case, in this simple partial equilibrium setup, if the demand curve were steeper than the supply curve, rather than flatter, as drawn.

Second, I arbitrarily chose to set the tariff equal to the externality, thus yielding a level of supply, S_1 , that would be optimal in a first-best situation. But that is not the second-best optimum using a tariff – clearly so, having seen that this tariff lowers welfare. In fact a sufficiently small but positive tariff will be welfare improving in the presence of the externality, even accounting for the distortion that it introduces for demand. Therefore the lesson here is not that a tariff should not be used at all, but only that it should not attempt to fully offset the distortion.

Response 2: Rejection Is Meaningful

A second response to those who may advocate a second-best tariff is to ask why, after all, is the first-best policy not available. Does the fact that it is not available actually tell us something important? Suppose that the first-best policy is not available because it would be politically unacceptable. That has to mean that the benefit from that policy is not viewed politically as being worth the cost. It follows, if our political processes are to be trusted, that the distortion we were trying to correct may not exist, or at least is not believed to exist by the body politic.

Consider again the example of the alleged positive externality from supply. The first-best policy is a subsidy to supply. If a democratic society rejects the use of such a subsidy, then that means that “society” either does not accept the existence of that externality or perhaps that it does not view the benefits from it as being worth the distributional cost of enriching suppliers with a subsidy. But if that is society’s decision, then wouldn’t society equally reject a tariff if the effects of the tariff were fully understood? For economic reasoning tell us that the tariff has exactly the same effects as the subsidy, including enriching suppliers, but with the addition of an adverse effect on consumers. If the tariff is acceptable while the subsidy is not, it can only be because the tariff is misunderstood by the voters.

Again, however, although I regard this as an argument worth making, I do not find it conclusive, simply because I do not have that much faith in the democratic process. It seems to me that our democracy – in the U.S. at least, but elsewhere too, I’m sure – makes demonstrably bad choices all the time. As an economist who believes in global warming, for example, I am convinced that a carbon tax would be a socially desirable policy for the country and the world, but I don’t for a moment expect our democratic process to enact one. If a second-best interference with trade could achieve the same effects as a carbon tax but at higher cost, and could be enacted by fooling the public, I might well be in favor of it.

Response 3: Why Should We Believe You?

Of course, if I am willing to fool the public, paragon of academic integrity that I am, imagine how much more willing may be those who told us about the distortions in

the first place. Which brings me to a third response: who is telling us that there is a distortion to be corrected, and what are their motives? Yes, we agree that the economy is rife with distortions. But when the policies for correcting them so clearly benefit particular interests whether or not the distortions exist, then perhaps we should not trust those interests when they tell us about the distortions.

In the example of Figure 1, the gain to suppliers from either a subsidy or a tariff is positive (area a) and may easily be substantial, regardless of whether the externality exists. So suppliers have an incentive to tell us that there is an externality, whether or not it is true. Indeed, this may be part of the reason that the public would decline to provide a subsidy if it were asked. The voters may actually be more attuned to these incentives than we are.

Unfortunately, in most cases the people who have the best information about an industry are the producers in that industry. They therefore may have the best information about whether a distortion exists in the industry and warrants correction. If that correction will benefit them, they have an incentive to claim it whether or not it is valid. But we may have no one else to ask. Therefore we are in a classic Catch 22: Only producers know their industry well enough to justify protection; but industries that ask for protection should not be trusted.

Response 4: In Ignorance, Just Say No,

Which brings me to the last of my responses, one that as a trade economist I am most familiar with but least confident of: The policy recommendation one should make when one is completely ignorant of the facts.

My argument is this. Yes, there are distortions. In fact one would probably be hard pressed to find a single industry and country in which the assumptions we make in our arguments for free trade are valid. There do exist externalities of all sorts – positive and negative, on production and on consumption, in industries across the board. In addition, few markets even approximate perfect competition. And to cap it all, governments around the world interfere in markets by taxing and often by regulating, sometimes to correct other distortions but often for extraneous reasons that cause their interventions to constitute distortions themselves.

But while we can agree that there are distortions, we cannot possibly claim to know what all of them are, nor are we able to measure many of the ones that we believe exist. Thus we are in a world of general ignorance about these distortions.

So what should be do? If we trusted the information that we do have, then we might argue that those distortions of which we are relatively certain should be addressed by policy. I am inclined to agree with that, if the policies are reasonably transparent and direct, such as the subsidy in the example of Figure 1.

But given the uncertainties about even the net effects of second-best policies (Response 1 above), their lack of transparency (Response 2), and distrust of the advocates of such policies (Response 3), the safer general policy is to decline to provide protection.

What I would like to argue is that, in ignorance of what the distortions actually are, the expected social value of limiting imports is negative. The argument would go something like this. The distortion as depicted in Figure 1 does provide a case for second-best protection. But in our ignorance of actual externalities, they are as likely to

be negative as positive, in which case protection here would certainly make matters worse. Or even if an externality is positive, it is as likely to be in export sectors as in import-competing ones, in which case again a policy of providing import protection to the latter would make matters worse. Similar arguments can be applied to other sorts of distortions, including both imperfections in competition and government interventions. Thus, once we accept not just the presence of distortions in a particular sector that someone wants to protect, but throughout the economy in sectors of all sorts, then the case for protection is weakened if not nullified.

What I don't know how to do is to quantify and justify the notion of "as likely" in this argument. Suppose, in a multi-sector general equilibrium model, that each sector includes an externality of the sort in Figure 1, although not necessarily a positive one, and that these externalities are drawn independently from a common random distribution. What then would be the expected welfare effects of a tariff, in one of these sectors chosen randomly. A suitable framework for such an analysis might be the Eaton-Kortum (2002) model of random comparative advantage. I suspect if one had the patience and skill to work this out, one might find it to be negative.

But would this convince anybody? Distortions, after all, are what they are, even if we don't know them. Why should we assume that they are randomly and independently determined? Why, in particular, should we assume that positive externalities are just as likely in export sectors as in import competing ones? I may believe that myself, but I can't begin to imagine how to convince others of it.

Conclusion

So in the end, my answer to the question in the title is a somewhat infirm No. For the reasons I have given here, I am inclined to believe that second-best tariffs are a bad idea, in that they are likely to reduce the overall welfare of society rather than raise it. But none of these reasons are as compelling as I would like them to be. I look forward to feedback from others about how to strengthen the case for free trade.

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