"As Trade Policy is Determined Within an Imperfect 'Political Market' it is Unlikely to Reflect the Best Interests of the Country as a Whole and Will Prove Even More Costly to the Country." A Discussion.

Although it can be proved that, theoretically, any country can and will experience an increase in welfare if all types of trade barrier are ceased, it can be observed that in the real world trade is not completely free, and it is unlikely it ever will be in the future. While this may be argued to be due to the inevitable differences between theory and practicality, it is more likely that failure to adopt a free trade policy is because of the adverse political effects of such a policy.

To imply this, however, it must be shown that free trade is, in the vast majority of cases, beneficial and advantageous to all parties. We will look first at arguments which encourage the government of a country to act in a protectionalist way, and follow with further analysis which suggests government intervention should be kept to a minimum.

The basic neo-classical foundation of economic theory can be used to derive the Heckscher-Ohlin-Samuelson model, which shows that this is true, if some basic assumptions are true. The Heckscher-Ohlin model[1] looks at welfare increases for a small country – that is, one unable to affect the world price of goods through opening or closing its borders to trade (under this definition, for example, Nigeria is a small country whilst Britain is not). To accurately look at welfare changes we must start from a known, measurable, point, and to ensure that any gains in welfare are solely due to the introduction of trade it seems advantageous to start at a Pareto optimum point – that is, one on the country's production possibility frontier (PPF), at a tangential point to a community indifference curve (CIC). This position is built on several key assumptions: perfectly competitive markets (so completely efficient trading); perfect factor mobility between industries and internally within the country;

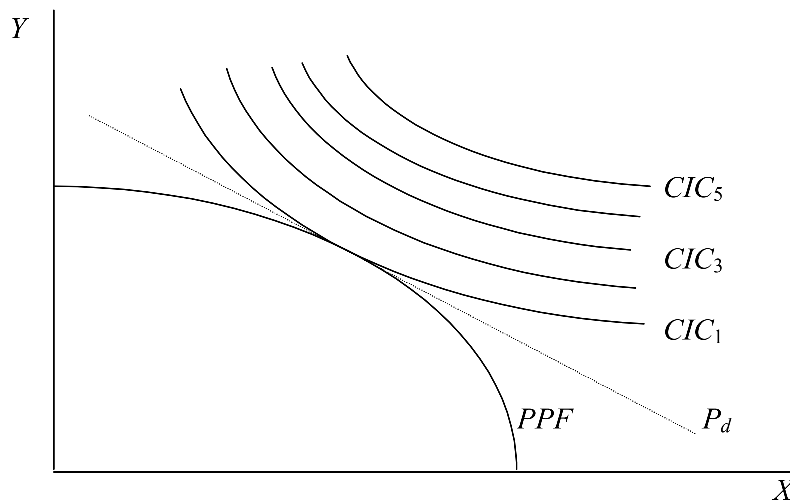
[1] After Heckscher (1919) and Ohlin (1933).

and a constant supply of factors of production. These three assumptions (primarily the first) lead to production and consumption efficiency, and mathematically these can be combined into a basic mathematical equation:

$$MRS = MRT$$

where MRT is the marginal rate of technical substitution for all goods (all are equal), and MRS is the marginal rate of substitution for consumption (with given utility functions).

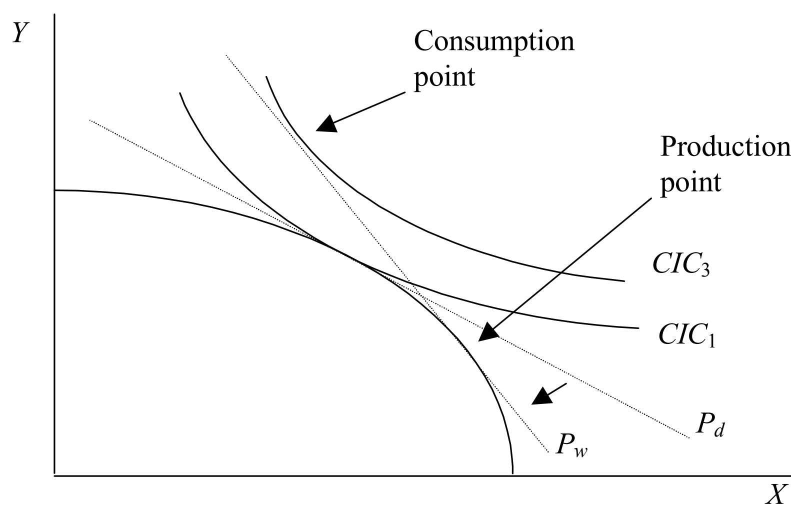
For a simplified case, with only two factors of production (labour (L) and capital (K)) and only two goods to be produced and consumed (X and Y), this equality of marginal rates can be shown on a diagram:



Here the marginal rates of substitution and technology give a price ratio line, P_d, which gives the Pareto efficient outcome reached in a closed economy. At this point, the economy cannot move to any point where the community is better off, since the PPF gives the absolute limit of production ability, and consumption cannot exceed this.

When trade is introduced, however, it is possible for consumption in the country to exceed production. Using the assumption that we are dealing with a small country, we can immediately adapt this diagram to show how entirely free trade will change both

production and consumption patterns, since the country will need to adapt to world price ratios (P_w), and the community (using the assumption of consumption efficiency) will settle on the most distant indifference curve. The country is, of course, still limited to producing on its PPF, so the position of the price ratio line is fixed meaning the community cannot move to an infinitely high curve. However, assuming the world price ratio differs from the domestic ratio (biased towards either direction), the country will theoretically benefit from trade.



From here we can easily see that the country will have to import one good, where consumption exceeds potential supply (good *Y* above); and export some of the other.

There are, as mentioned above, a few key assumptions which must hold for this simple model to take place. One of these, that of perfect domestic factor mobility, is unlikely in the short run, but possible in the longer run, especially for capital. The other two base assumptions could easily be overlooked; in the short and long run at least (but not the very long run) there is a constant supply of factors of production, and the assumption of perfectly competitive markets is primarily used in the Heckscher-Ohlin model to ensure that gains in welfare are purely due to trade. Assuming the economy does not become less efficient due to the opening of trade barriers (this is a reasonable assumption to simplify the model, but a different mix of factors being

employed may lead to a slight drop in productivity in the short run) the analysis will still produce gains in trade for the country concerned.

It is this discussion of the short and long term effects of opening of trade barriers which give us our first insight into the political component of trade theory. In most economies in which economists have a strong advisory role in how such policies are designed, the primary political system is democracy. Under such a system, the government is under constant pressure to achieve results in short periods in order to stay in office (such as the five year political term in Britain), and is thus unlikely to set in place policies which will not implement a near-instantaneous increase in welfare. It is this driving force of needing to be constantly politically popular which is behind many of the arguments outlined.

The Heckshcer-Ohlin model, it must be pointed out at this point, is only concerned with a small country. When looking at a large country, it is immediately obvious that government intervention will be beneficial to the country immediately - by careful use of tariffs and quotas, the government can immediately improve the terms of trade for that country, and there need be no further discussion on why such situations may arise. Many of the following arguments will still apply to large countries, however, and it must be considered that improved terms of trade for one country imply worsened terms of trade for all other countries – under a perfect global political system, therefore, this would not be a consideration.

Another primary reason for trade barriers in small countries can be derived from the Stolper-Samuelson hypothesis[2]. Under the model above, it is quite clear to see that the good or goods which are exported from the country command a higher price than they would do in an closed economy, and this will lead directly to an increased return to the factor of production used intensively in production of that good. The other factor of production, that which is not used as much, will see a fall in earnings – a serious governmental consideration if that factor is labour. Indeed, using these two

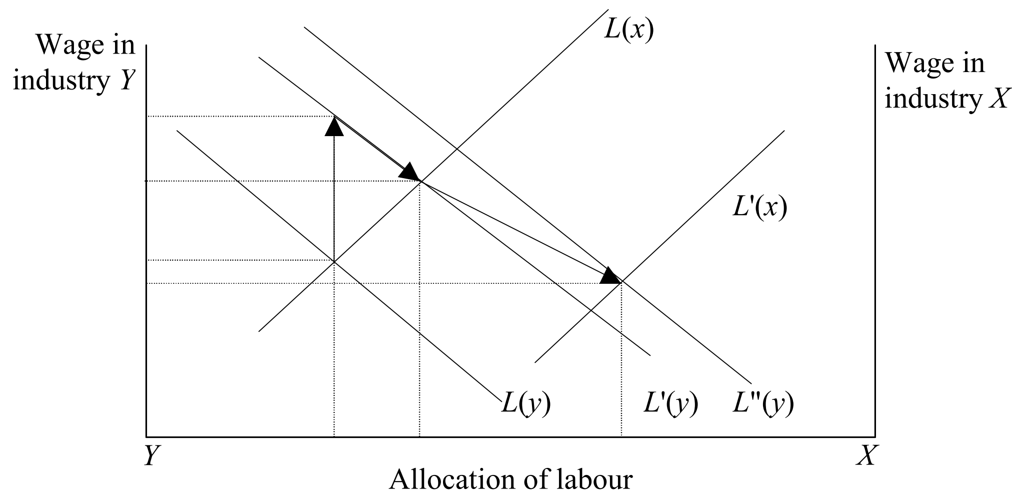
[2] Stolper & Samuelson (1941).

factors alone, the opening of trade barriers could be very damaging indeed to a government's short term popularity, with increased unemployment and no immediate welfare gain.

The Stolper-Samuelson hypothesis, however, again relies on some key assumptions – those of perfect competition and perfect industrial mobility of factors. In reality, the latter of these seldom holds, since machinery (the capital referred to above) tends to be industry-specific, at least in the short and medium term. Labour also tends to have certain skills which are non-transferable. For a movement to a new production point, therefore, the country will move further inside its PPF, since the adjustment to producing more of the exported good will cause several large costs - reduced productivity, increased unemployment and unused capital. This will cause the country to move to a separate price ratio line (at the same gradient as before), with a lower community welfare during the short term adjustment period, but gains during the longer term.

In a political economy where the government is under constant pressure to ensure welfare is kept high, therefore, it would seem that an opening of trade barriers would be very unwise. All the analysis so far points towards large benefits from trade, but only in the long term, and with a fall in welfare in the short term. It must be pointed out that this assumes the economy is closed to start with - if it is open, the adjustment costs in the extended Stolper-Samuelson are not applicable, and would instead refer to a closure of trade.

On the other hand, the government may also have a valid long-term case for protectionism when looking at the return to labour in a closed and an open economy. When a good suddenly gets a higher demand (due to the opening of export markets), in the very short term wages will increase to artificially high levels, to encourage workers to work harder, but over time extra workers will enter the market, and the wage level will fall a little. In the long term, due to the higher price of labour, more capital will be used, and the labour wage rate is likely to fall to below the original level:



Note here that as the economy moves through the process shown above, the payment to capital (the triangular area above the wage rate and under the $L(y)$ lines) also increases. In the medium term, at the second point, both labour and capital have benefited, but this changes over time. Note that at the final point, capital has increased its returns significantly, although this may well be due to increased volume of capital being used.

It would seem, therefore, when solely looking at employment and wage rates, the government will be politically unwise to open trade barriers – the labour force will lose out no matter which it is intensively employed in – if the country exports a labour intensive good, labour loses out in the long run, whereas if the exports are capital intensive, labour will lose out in the short run. The government’s problems are further compounded by an inability to use a flat trade policy to combat this, as the different factors in some industries will have a different viewpoint on whether free trade is desirable or not. However, one study of the viewpoints of American industries[3] pointed to a general agreement between capital and labour as to whether certain industries should be protected or not – this certainly agrees with the analysis above. Whilst this does make the government’s task slightly easier, it does still mean that

[3] Magee (1974)

each industry’s needs must be independently evaluated, which is obviously not practical in an economically diverse country.

There is also an issue with ‘infant industries’ – those industries with high start-up costs and a need to work towards being competitive. Under a closed economy, these industries would be able to set higher prices during the initial introduction of the product into the market place, and this would ensure the industry could become firmly rooted in the economy, and become more productive over time. In an open economy, however, there may be an incumbent competitor, and the industry may not be able to establish itself without the opposing country’s industry taking defensive action. While this seems economically unimportant, as only one such industry is needed (one industry may contain several firms, after all), it is important politically, both for the creation of jobs, and as a military insurance. If, for example, the only industry producing guns was based in an opposition country during a war, the government would stand virtually no chance of staying in power!

To overcome this, several countries have, for some time, operated compensation schemes under which any industry seeing a fall in returns and increased unemployment as a result of world trade can claim assistance to ensure it does not cease to be operational. Whilst this does appear to be an effective method to determine whether the government should be offering protection to the industry, there are several key areas in which the scheme falls down. By perpetuating the inefficient industries, the government is keeping labour from training for the industries with comparative trade advantages, and so causing the economy to produce at a point away from its PPF. There is also the question of asymmetric information, both in terms of adverse selection (only the worst industries will apply for compensation, and these will need the most money – as time goes by, those only marginally losing from trade will also apply, but the government will not be easily able to determine whether they should be given a smaller grant) and moral hazard (since once the industry is receiving a grant it need not adjust its processes to make itself more efficient).

Most market economists, regarding this last point, conclude that the government ought therefore only to intervene to reduce the number of distortions in the economy. By ensuring that inefficient organisations (such as trade unions and industry cartels) are reduced in power, the government can ensure that firms are in the best possible position to stay competitive in an open economy, and that using this the most efficient and productive firms will flourish. Of course, this will least to several less efficient firms closing, and this is again the deterrent to government.

Thus far the government has been most interested in maximising short term social welfare – a goodwill factor. There is, however, another goodwill factor, which is that of pleasing lobbyists. This latter factor will be looked at in more detail later. For now, however, we should say that the model discussed so far is largely covered by the Grossman-Helpman model[4], which is mainly concerned with small countries. However, as mentioned above, it is possible to include large countries in this analysis, if we look at world welfare as an ideal political gain.

There are further problems with the Heckscher-Ohlin model than the failure in assumptions, however. Whilst the model is competent at looking at economies in which there is only inter-industry trade, it is unable to deal with intra-industry trade – that is, where a certain good is both exported and imported in one country. For certain commodities, especially those with large economies of scale and product differentiation, this is a significant detail, and must be taken into consideration.

We can look at this using two separate models, for differentiated and non-differentiated products. The latter is the easier case to see – when looking at two companies producing the same good in different countries, a move from autarky to an open economy effectively changes the industry from a monopolist to a duopolist (or an oligopolist when more than two countries are considered. This pro-competitive shift has the standard effect of greater output and lower prices for each firm, and the

[4] After Grossman & Helpman (1994).

opening of extra consumption markets to each firm also shifts demand, causing output to rise further.

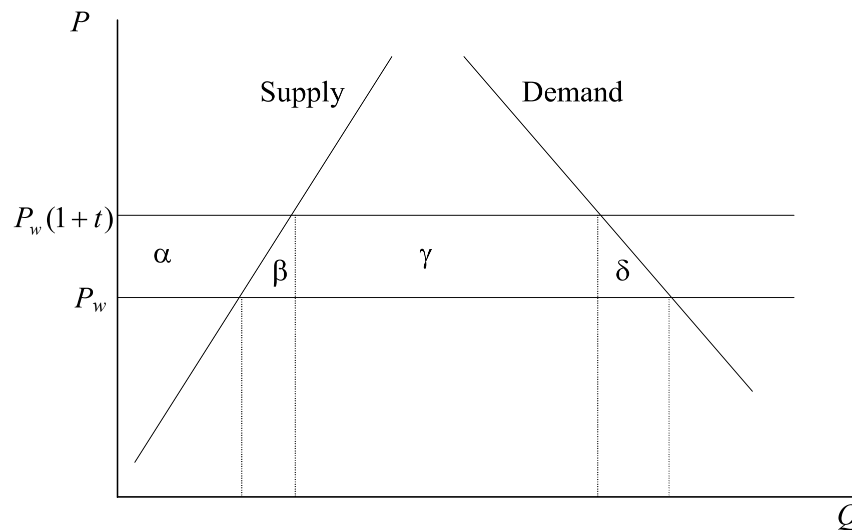
Under this scenario, therefore, it would seem that the government would benefit from opening the economy – by trading with another country industry would wish to increase output (thus reducing unemployment in factors of production), and the general price level would fall (improving the welfare of the economy). This cannot be considered on its own, however, and should be compared to the losses the government would see in the economy through inter-industry trade and all other factors discussed thus far. It is highly likely that, apart from in a few key industries (those with very strong intra-industry trade conditions), this welfare gain would not be significant enough to warrant a change in government policy from that of protectionism outlined above, especially when only considering those industries with homogenous products.

By allowing for differing tastes, a model with differentiated products can be incorporated as well. It is most likely that in an autarky not every consumer’s exact tastes would be provided, and there are some who would not consume at all since the products available are not significantly beneficial to them. Once trade begins, however, the variety of products increases, and these last consumers may find the imported goods are exactly what they want to consume (or at least are near enough for consumption to take place). The open economy therefore has increased consumer welfare, through improved choice and consumer surplus, and it can easily be shown to have improved that of firms also – although there are some consumers who will switch to the imported good in preference to the domestic, those lost are those willing to pay the lowest price, and the market in the other country, previously starved of the specific producer’s good, will enable sales to be higher and at a higher price.

Under this model, therefore, the government would seem to be very foolish to put in place trade barriers. This is further compounded when looking at Krugman’s analysis of this situation, which looks at how the increase of labour supply due to opening of barriers will lead to a fall in real prices through economies of scale.

These arguments, however, seem insignificant against those outlined above in favour of protection from a political viewpoint. Certainly, the increased unemployment and loss of efficiency in the short term seem to imply that all governments should be operating closed economies. There is, however, one major factor which has, until now, been overlooked. For a country to close its borders to trade, many different schemes must be run to ensure goods are not imported and exported; it is these costs of protection which are possibly the main issue when looking at the government's ideology.

Many of the costs of protection can be simplified by looking merely at tariffs, which are in any case the most common form of protection. By looking how a tariff affects the welfare of a country, we may see that, assuming excess demand, a tariff will normally seem to be a poor move for government:



From this diagram, we can easily see welfare changes from the introduction of a tariff. Consumers will lose out on all areas ($\alpha+\beta+\gamma+\delta$), but of these losses α goes to the producers in terms of additional domestic produce sold, whilst γ is a transfer to the government in the form of taxes. Since overall welfare has fallen, we would assume the government would not wish this policy to be put in place – however, we must consider that, as the essay title suggests, we are dealing with an imperfect government,

and with this we may consider that producers have more influence over the policy decisions than individuals - this is certainly true in the real world, as consumers tend to be a lot less vocal over their rights than firms, and firms are more likely to actively take part in rent-seeking (that is, a non-productive activity designed to secure economic rewards). The Consumers Association is a comparatively small organisation in this country, for example – import tariffs form a small part of consumers concerns, but firms are very outspoken on the issue, since it is of high importance to them.

Another form of commercial lobbying is also quite common, in association with this. Tariffs introduced for the reasons described above almost always generate some revenue for involved parties – many others will join in the lobbying in a hope to share some of the additional profits once they appear. This model ties in quite close to the analysis previously given of increased wages for labour in the short run – firms will seek to alter the labour to capital ratio to minimise costs with the new wage levels.

Another interpretation of asymmetric information can be introduced here – the consumers may not know exactly how tariffs are in operation, and this lack of knowledge will mean that trade policy is unlikely to affect the majority of the population; with this assumption it is plain to see that the government will attempt to please only those that care, introducing tariffs. It is following this that many recent papers[5] have debated the welfare addition to the economy of smuggling, but there is currently no clear consensus on whether smuggling should be conspicuously prevented or not.

In conclusion, therefore, it is obvious from looking at real economies that there do exist welfare-depleting barriers to trade, and there are many reasons why these may exist. The question of whether the imperfect political system is entirely to blame cannot easily be answered, but there are indeed many arguments why this may be so.

[5] Including those by Bhagwati & Hansen (1973), Sheikh (1974), Pitt (1984), and Deardorff & Stolper (1990)

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