The Consequences of Free Trade for Atlantic Canada*

James R. Melvin
Department of Economics, University of Western Ontario
London, Ontario N6A 5C2

Introduction

A free trade arrangement between the United States and Canada has recently been negotiated, and will become law if approved by the legislatures of both countries. The debate about whether this arrangement is a good deal both for Canada and for the various regions goes on, and will probably intensify over the months to come. The principal opponents of the free trade arrangements are Ontario and Prince Edward Island, with most other provinces in favour, some more strongly so than others. The federal government has taken the position that a free trade arrangement would be beneficial to the lower-income regions, and could result in a significant reduction in interregional disparities. Indeed, Prime Minister Mulroney seems to see a free trade arrangement as an important regional policy, and one that could reduce the need for other more traditional regional policy initiatives.

But while there has been a good deal of political discussion of the consequences of free trade for the Canadian regions, there has been very little serious economic analysis. It is anything but clear from the popular discussion exactly how a free trade arrangement will benefit regions such as Atlantic Canada, and there has been no explanation with which I am familiar of why Atlantic Canada would benefit more than, say, Ontario. The purpose of this paper is to look at the question of the possible gains from free trade for a region such as Atlantic Canada.

*This paper was originally presented at the Sydney, Nova Scotia, Meetings of the ACEA in October 1987. I am indebted to participants at the conference and to two referees for helpful comments.

ISSN: 0705-4580

[©] Canadian Journal of Regional Science / Revue canadienne des sciences régionales, XI:2 (Summer/été 1988), 227-244.

While there has been some empirical research on the effect of free trade for the Canadian economy, little has focused specifically on regional issues. Harris (1983) has produced a comprehensive numerical general equilibrium model that shows substantial gains from trade for Canada, but he does not provide a regional breakdown of the effects. However, since he finds the gains to be a consequence of rationalization in the manufacturing sectors, one can infer that the principal winners will be the highly industrialized provinces, such as Ontario.

There has been even less research that focuses on the theoretical issue of the regional consequences of free trade. Perhaps one of the reasons is that it is not clear which international trade model would be the appropriate one to address this question. Does one use a model that focuses attention on endowment differences, or is increasing returns to scale the most important determinant of trade for the Canadian economy? Some would argue that the role of natural resources should play a prominent role in any theoretical model, and of course federal and provincial policies in the taxation and regulation areas could also be of crucial importance. Generally one does not expect policy conclusions to be independent of the models used; thus the choice of what model is to be employed in the analysis is crucial. The problem is complicated by the fact that no model clearly dominates any other. Indeed, the pattern of trade both for regions and for the economy as a whole is undoubtedly affected by all of the factors mentioned above, and very likely many others. Thus the problem is not so much choosing among the models as attempting in some way to synthesize the results obtained from all of them.

Of course it may be that many of the models lead to similar conclusions. Thus, if we found that all of the models predicted the same direction of change for some important variable, then we would have increased confidence in our prediction. In this paper we will briefly examine the three main theoretical models presently used to examine international trade questions, with the hope of identifying some conclusions that are common to them all. We begin by considering the standard Heckscher-Ohlin model, then investigate the effects of different resource endowments using the specific factor model, and finally turn to an examination of increasing returns to scale. In each case we will be concerned principally with two questions: the first is how the utility or welfare of the region will be affected; the second is how the returns to factors of production would be changed.

The Heckscher-Ohlin Model¹

In this section we will consider a small open economy consisting of two regions that have different relative endowments of capital and labour, and where the regions are assumed to be separated by some finite distance that results in substantial transportation costs. This is the model developed in Melvin (1985), and used to examine the consequences of various trade policies for a regional economy. In our discussion here, attention will be focused on a single region, and it will be assumed that this region is well endowed with labour relative both to the rest of the country and to the United States. Thus in a free trade situation the region would be expected to export the labour-intensive commodity. This is shown in Figure 1, where C and O are the free trade consumption and production points, respectively. It is assumed that commodity Y, the capital-intensive commodity, is manufactures, and that commodity X, which is labour-intensive, represents food. The region is thus exporting food and importing manufactured goods in the free trade equilibrium. If there is a tariff on manufactures then production will move to Qt and consumption to Ct, with the trade vector CtQt clearly smaller than the free trade vector of CQ. We assume that the tariff-ridden situation shown in Figure 1 represents Atlantic Canada prior to the institution of a free trade arrangement with the United States.

The elimination of tariffs between Canada and the United States will have two consequences for the region shown in Figure 1. First, the elimination of Canadian tariffs will re-establish the free trade equilibrium with production at Q and consumption at C. Second, if tariffs are reduced in the United States it would be reasonable to assume that this would result in an increase in the price of the exports of this region, resulting in a new terms of trade line P' with production at Q' and consumption at C'.² We note that both the reduction in the domestic tariff and the reduction in the foreign tariff have resulted in a welfare increase for residents of this region.³

What can we say about the returns to factors of production in the region represented in Figure 1? We note that the removal of the

¹There is an extensive literature on the Heckscher-Ohlin model, and an excellent overview can be found in Jones and Neary (1984).

²This assumes a U.S. tariff on Canadian food. Although such tariffs have not been high, there have been recent increases in the tariff on certain fish products, and there was concern about a possible tariff on potatoes.

³Melvin (1985) has shown, however, that terms of trade changes may be a mixed blessing for the economy as a whole. Thus if tariff reductions do change the terms of trade, while some regions will gain, others, with differing trade patterns, will lose.

domestic tariff moved production from Q_t to Q and the removal of the foreign tariff moved production from Q to Q'. Both changes result in an increase in the production of commodity X, which we have assumed to be the labour-intensive commodity. From the Stolper-Samuelson theorem we know that an increase in the production of the labour-intensive commodity must be accompanied by an increase in both the relative and real return to the factor labour. Thus, in this example labour is made better off by the movement towards free trade while the capital owners are made relatively and absolutely worse off.

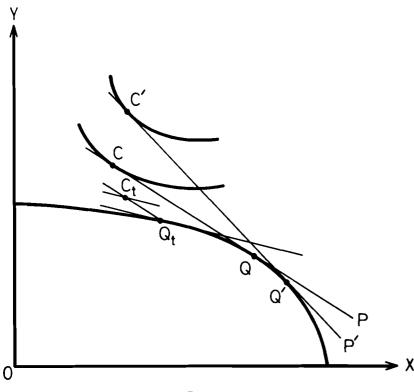


Figure 1

It is important to note that the effects of tariff removal on the returns to factors very much depends on the assumption we make about which good is being exported. In particular, had the export good been commodity Y, which is capital-intensive, then we would observe just the opposite effects on the returns to factors of production. In particular, we would have a real and relative increase in the return to capital and a real and relative fall in the return to labour. Thus the effect on the factors of productions depends critically on whether the

labour-intensive or the capital-intensive good is being exported. Whether the exports of Atlantic Canada are labour-intensive or capital-intensive is an empirical question, but casual empiricism certainly suggests that the exports are relatively labour-intensive when compared to the exports of other regions of the country.

The simple Heckscher-Ohlin model used in Figure 1 is unrealistic for a number of reasons; one is the assumption of constant returns to scale, and another is the assumption that only capital and labour are used in the production process. These two assumptions will be relaxed in the next two sections. A third assumption implicitly included in our analysis, and one that may also seem unrealistic, is that the movement to free trade results in a substantial change in the pattern of production for the region. In Figure 1, tariff removal results in a substantial increase in the output of commodity X and a reduction in the output of commodity Y. Putting the argument the other way around, Figure 1 shows that the introduction of a tariff substantially increased the production of manufactured goods in the region. This does not conform to our understanding of the effects that tariffs have had in the Canadian economy. While historically there have been large tariffs on manufactured products, this has not resulted in a substantial increase in the production of such goods in Atlantic Canada. The effect of the Canadian tariff has been primarily to protect Ontario industry from competition from the United States, and in particular to protect the markets in both Eastern and Western Canada for Central Canada producers. Substantial increases in the production of manufactured products in Eastern and Western Canada have not been generated by high Canadian tariffs, although tariffs have undoubtedly resulted in some increase in output.

It is reasonably easy, however, to adjust the analysis of Figure 1 and make it conform more closely to the reality of Canadian trade. In Figure 2 it is assumed that production conditions in the region are such that, at free trade prices P, the region specializes in the production of X at point Q. Furthermore, even the price increase of commodity Y associated with a tariff resulting in price line P_t is not sufficient to result in any production of commodity Y in the region, and thus production stays at point Q even though a tariff has been introduced. Now the removal of the domestic tariff moves consumers from C_t to C_t , while the elimination of the foreign tariff will move consumers from C to C_t . In this example the gains from the introduction of free trade are entirely in the consumption sector, for nothing has changed on the production side. Of course this is an extreme case, for complete specialization is not a realistic assumption. In general, some small change in production would be expected.

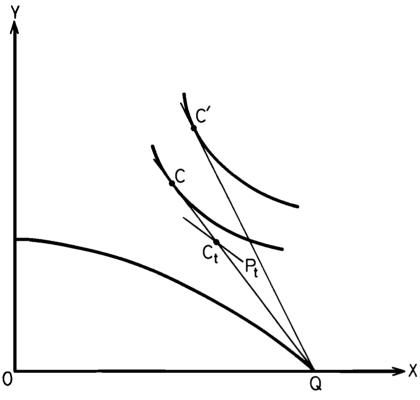


Figure 2

In Figure 2 there is no ambiguity about the effects on the return to factors. Because only one good is produced, all factors are used in that industry, and the wage-rental ratio is determined by the slope of the relevant X isoquant. The regional endowments of capital and labour are given, and they determine the unique output level. Thus commodity price changes leave relative factor prices unchanged. The reduction in the price of imports associated with the removal of the domestic tariff and the increase in the price of exports associated with the removal of the foreign tariff will increase the utility of all factors of production regardless of whether the export commodity is labour-intensive or capital-intensive. Of course, this will generally imply different factor prices in different regions, and in the long run factor flows would occur that would eventually equalize interregional factor rewards.

We can conclude, then, that if the Heckscher-Ohlin model appropriately characterizes a regional economy, free trade will result in gains to the region as a whole and will result in an increase in the real

return to labour if the region's exports are labour-intensive. Furthermore, if the effects of tariff removal are felt mainly on the consumption side so that production is unaffected, then tariff removal will be unambiguously beneficial to all factors of production.

Natural Resources as the Basis for Trade

The simple Heckscher-Ohlin model described in the previous section is a rather unrealistic characterization of any Canadian region, for it makes no attempt to capture the effects of natural resources and their consequences for trade patterns. A model that can be used to study the effects of natural resource endowments is the *specific factor model*, where it is assumed that each production process uses some factor of production that is specific to that particular industry.⁴ Thus a certain type of capital could be used for the production of manufactured goods but not required for the production of food or forest products, while agricultural land is required for the production of food but not necessary for the production of manufactured goods.

One of the principal differences between the Heckscher-Ohlin model and the specific factor model is that in the former we have an unambiguous relationship between changes in commodity prices and changes in factor prices. From the Stolper-Samuelson theorem we know that any policy that increases the price of a commodity will result in an unambiguous real and relative increase in the price of the factor used intensively in that industry. Thus, in the example given, an increase in the price of X, the labour-intensive commodity, will result in an increase in the real and relative return to labour and a reduction in the return to capital. In the specific factor model, no such simple relationship exists. While a production possibility curve exactly analogous to the ones shown in Figures 1 and 2 can be constructed for the specific factor model, the underlying relationships between commodity and factor prices are quite different. These relationships can be shown in Figure 3, adapted from Melvin (1987). In quadrants 2 and 4 we show the marginal product curves for labour in the Y and X industries respectively, while in quadrant 3 the line LL represents the total fixed supply of labour in the region. The allocation of any quantity of labour between the two industries, such as that associated with point A, for example, determines the marginal products in each industry and thus gives the return to labour in terms of Y and X. Note that the line MM' shows labour's return in terms of commodities Y and X and is therefore the budget constraint for a representative worker. MM' is also

⁴The specific factor model was introduced into the trade literature by Jones (1971) and Samuelson (1971).

the commodity price ratio both for consumers and for the economy as a whole.

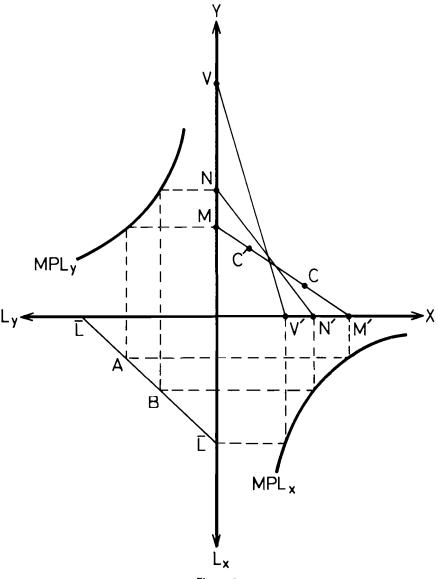


Figure 3

Suppose that initially, before the introduction of the free trade arrangement, commodity prices were as represented by MM'. When the tariffs are removed we assume that the relative price of X increases, resulting in a production shift towards X and away from Y and a corresponding shift in labour away from the Y industry towards

the X industry. The new equilibrium position could be represented by line NN', and the new allocation of labour could be given by point B. Whether a representative worker has been made better off or worse off by this change in relative commodity prices depends on the location of the original consumption point. If consumption with tariffs was at C, then the removal of tariffs, which resulted in the price increase for commodity X associated with the shift to NN', clearly makes workers worse off, for the new equilibrium consumption point must be below C. On the other hand, if C' had been the original consumption point, then the switch to prices NN' would make workers better off. Thus the unambiguous effects of commodity prices on factor prices associated with the Stolper-Samuelson theorem do not hold in this model. From Figure 3 it is clear that how labour fares when prices change depends, among other things, on the bundle of commodities that the consumers choose. Thus in a resources model, even though the overall effects on community welfare are unambiguous, for they are exactly the same as shown in Figures 1 and 2, the effects on labour are uncertain.

But, as in our previous example, the situation shown in Figure 3 may be judged to be unrealistic, for it supposes that the introduction, or the removal, of tariffs has a substantial effect on the production of manufactured goods. Alternatively, we could suppose that even in the face of tariff protection the region specializes in commodity X, which in turn implies that the entire labour supply of the region is allocated to the X industry. This would give rise to a marginal product of labour given by point V' in Figure 3. Now, regardless of where the consumption point is on the line VV', any increase in the relative price of X must unambiguously make labour better off, because any increase in the price of X simply results in a clockwise rotation of the line VV' through point V', which implies more imports of Y for the same exports of X.

Thus, in a model in which trade is determined by the endowment of natural resources, the results of trade liberalization are very similar to those found for the Heckscher-Ohlin model. First, as shown in Figures 1 and 2, both the tariff reduction in the home country and the removal of tariffs in the foreign country will produce consumption gains for all individuals in the region. If the region produces both goods, then it is well known that the effects of commodity price changes on the returns to factors are ambiguous. For the case where resource endowments result in specialization in production in the region, however, any increase in the price of the export commodity will necessarily make labour better off. Of course, it will also be true that the return to the factor used specifically in the export industry will also increase. Thus, for the case of specialization, trade liberalization unambiguously makes all consumers in the region better off.

Trade With Increasing Returns to Scale

One of the difficulties encountered when investigating the consequences of increasing returns to scale for trade patterns is that there are many alternative specifications of the model that could be used. In the first place there is the question of whether returns to scale are assumed to be internal or external to the industry. The traditional case of external economies has received a good deal of attention, and is typically analyzed by assuming that while individual firms are perfectly competitive there are economies of scale associated with the output of the industry as a whole. 5 This allows the standard neoclassical production conditions to be employed and permits the use of the perfect competition methodology. Internal economies of scale are generally assumed to result in some form of non-perfect competition, perhaps monopoly or imperfect competition, but in these models very little is known about the effects of tariffs.6 In this paper we assume that the economies of scale are external to the industry. We thus avoid the complications associated with imperfect competition, although at a substantial cost in terms of realism.

Another issue that must be decided is whether increasing returns to scale are to be assumed for all industries in the economy, or whether some industries exhibit increasing returns to scale while others enjoy constant returns to scale technology. In Canadian policy discussions, the presumption generally is that the manufacturing industries operate under conditions of increasing returns to scale. Indeed, in most analyses of potential trade gains for Canada, it is the existence of returns to scale that gives rise to the substantial gains that Canada is expected to enjoy. When one considers industries such as agriculture, forestry, or fishing, however, it is not clear that the assumption of increasing returns to scale would be appropriate. Thus we assume that the export industry in the Atlantic provinces operates under conditions of constant returns to scale.

With increasing returns to scale, one of the variables that is important in determining trade patterns and the returns to factors, and an issue that is not important in the standard Heckscher-Ohlin model, is the relative size of the regions. Large regions would be expected to

have an advantage in the production of increasing-returns-to-scale commodities and this, as shown in Melvin and Markusen (1981), will have important implications for gains from trade and for factor returns.

Figure 4 illustrates a case where there are increasing returns to scale in the production of Y and constant returns to scale in the production of X. Because of increasing returns in Y, the equilibrium commodity price ratio will not be tangent to the production possibility curve but will intersect it as shown at point A. This must be true for any production equilibrium.8 With a community indifference curve tangent to price line P₀ at A, point A represents the autarky equilibrium point, where the region does not engage in trade. If this region is small relative to other regions in the economy, and if preferences and relative factor endowments are the same among regions, then it is easily shown that the autarky prices in the larger region will show a lower price for the increasing-returns-to-scale commodity, in this case Y. Trade between the two regions would therefore result in an increase in the production of Y in the large region, an increase in the production of X in the small region, and a trade equilibrium for the small region such as shown in Figure 4, with production at Q and consumption at C. An interesting feature of the trade equilibrium in Figure 4 is that trade has resulted in a welfare loss for the region, for we note that C must be on a lower indifference curve than A. Indeed. Markusen and Melvin (1981), among others, have shown that a sufficient condition for gains from trade in a model with increasing returns in one industry is that trade results in an increase in the production of the increasing returns commodity. In the situation in Figure 4, trade has resulted in a reduction in the output of commodity Y, and this has led to a reduction in welfare for the small region.

Of course, the converse to the above argument is also true. Thus if free trade gives rise to production at Q and consumption at C, then a national tariff imposed on the imports of Y could result in a welfare gain for this region. Indeed, a prohibitive tariff moving the region back to point A is clearly preferable to free trade. Obviously, in this situation a free trade agreement would be detrimental to the small region.

The movement from restricted trade at a position such as A to free trade with production at Q and consumption at C has resulted in an increase in the output of X and a reduction in the output of Y. Markusen and Melvin (1981) have shown that this will result in an increase in both the real and relative return to labour, and that in the final equilibrium the return to labour will be higher in the small region than it was with trade restrictions. Furthermore, in comparing the two regions it can be shown that the real wage rate will be higher in

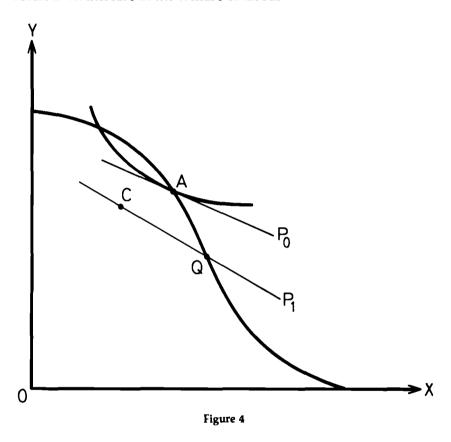
⁵For a discussion of increasing returns to scale as a determinant of trade see Melvin (1969), and for an analysis of the effect of returns to scale when countries differ in size see Markusen and Melvin (1981).

⁶For an excellent survey of both internal and external returns see Helpman (1984).

⁷There would seem to be no reason for supposing, for example, that proportional increases in all factors of production in the agricultural sector, including increases in the amount of land, would result in more than proportional increases in output.

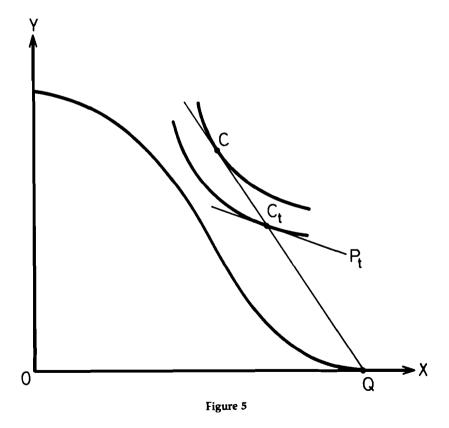
⁸For a full explanation see Markusen and Melvin (1981).

the small region than in the large region, while the real and relative return to capital will be higher in the large region relative to the small region shown in Figure 4. Thus, while a move from restricted trade to free trade will reduce the welfare for the community as a whole, it will result in an increase in the welfare of labour.



In Figure 4 we have again analyzed the situation in which the small region continues to produce both commodities both before and after the change in the trade policy. This is by no means necessary; indeed, in the increasing-returns-to-scale case it is more likely that specialization will occur than in models with constant returns to scale. Figure 5 illustrates an example where, with trade restricted by tariffs, consumption would be at point C_t. The removal of domestic tariffs would move consumption to point C and would clearly make the region better off. Again in this case, because production has not changed, the elimination of tariffs has no implications for the return to factors; thus all the gains are associated with the removal of the price distortion on the consumption side. Furthermore, as was shown

in Figures 1 and 2, an improvement in the terms of trade associated with the removal of foreign tariffs would further increase welfare for this region. Note that in this case there is no ambiguity about the return to factors. Both capital and labour will be better off in the free trade situation. It may well be, however, that a comparison of wage rates between regions would show that wages were lower in the small region. This would be a consequence of the fact that the large region is specialized, at least to some extent, in the increasing-returns-to-scale commodity, and this may allow firms to pay both workers and capital owners a higher return than is possible in the constant-returns-to-scale industry. Note, also, that because of specialization in industry X in the small region, there need be no relationship between relative factor rewards in the two regions, and in the long run factors will be expected to move.⁹



There are a wide variety of models with increasing returns to scale, all of which produce somewhat different results. We have seen

9For a full discussion see Melvin (1987a).

that in the situations considered in Figures 4 and 5, although production conditions were the same in both, quite different conclusions were reached depending on whether specialization in production was assumed. Furthermore, the results on the effects of trade liberalization on factor rewards very much depend on the assumptions we make about whether the industry with increasing returns to scale is capital-intensive or labour-intensive. In the example considered, the industry with increasing returns to scale was capital-intensive and this resulted in an increase in the return to capital in the large region. Had we assumed that the increasing-returns-to-scale industry was labour-intensive, then labour in the small region would have been disadvantaged by free trade, both in comparison to autarky and in comparison to the return to labour in the large region.

Production Gains for Small Regions

In the previous section it was argued that large regions have an advantage in a model with increasing returns to scale since their size very often dictates that in equilibrium they will be producers of the increasing-returns-to-scale commodity and therefore will garner most of the benefits associated with trade. To some extent this result is a consequence of the assumption of only two goods. In a more realistic model with many commodities, it is quite possible that a small region could gain the productive advantage in some commodity as long as that commodity did not form a major share of the economy-wide or world-wide consumption. Furthermore, Atlantic Canada is favourably placed with respect to the large eastern market of the United States. and it is quite possible that products could be developed that could be exported to the large American market. 10 What could form the basis for such an export industry in Atlantic Canada? It seems unlikely that the traditional sources of comparative advantage, namely natural resources, could generate the increasing-returns-to-scale production that would allow exports to the U.S. market. Of course, specialty products could well be developed, but why Atlantic Canada would have a comparative advantage in such products is anything but clear. It seems more likely that candidates for export would be technologically based, which in turn suggests that education, and research and development, will play a major role in the development of such export industries. Thus, if Atlantic Canada seriously wants to participate in the production gains associated with the large North American market, serious consideration should be given to directing public policy towards increasing educational opportunities, both in universities and in other

training facilities, and perhaps by providing incentives for more research and development in the region.¹¹

It must also be remembered that, even if a region develops a product that can be sold in foreign markets, there is no guarantee that the product will be a market success. American consumers are not sitting waiting for Canadian producers, either in Atlantic Canada or elsewhere, to develop and market commodities that they will then automatically buy. Sales in foreign countries will require aggressive marketing strategies, and this will require the development of such skills.

Trade and Regional Inequalities

In the models analyzed in previous sections it was argued that trade liberalization would generally be expected both to increase the welfare of Atlantic Canada and to increase the return to labour. Indeed this result was found for all three of the models that we considered. There remains the question of how trade would affect the relative return to labour among regions in a free trade regime. We will begin by assuming that trade liberalization does result in an increase in the return to labour in Atlantic Canada. Whether this will result in a reduction in regional income differentials will, of course, depend on how the returns to labour are affected elsewhere in the country. The opponents of free trade, particularly Premier Peterson from Ontario, have argued that the free trade deal will be bad for Ontario and will reduce the returns to residents of Ontario.

It is, however, difficult to find an economist who accepts Premier Peterson's arguments. Certainly the evidence on how free trade with the United States would affect Canadian industry clearly points to Ontario as being the big winner. Certainly if there are gains associated with being able to take advantage of economies of scale these gains must accrue where production takes place, and this is largely in central Canada. Furthermore, since consumers in Ontario and Quebec will benefit from lower prices in exactly the same way as will citizens in Atlantic Canada, there would seem to be every reason to believe that Ontario consumers would be made better off by free trade than citizens of Atlantic Canada. It is therefore difficult to provide a persuasive

¹¹Given the footloose nature of educated individuals, it may well be appropriate for the costs of such programs to be borne by the federal government.

¹²Harris (1983) has used a numerical general equilibrium model to analyze possible gains from free trade between Canada and the United States, and he estimates gains of as high as 8 percent of GNP. Most of these gains would accrue to workers in central Canada.

argument that a free trade deal will result in the reduction of interregional disparities in Canada.¹³

Conclusions

Will free trade be beneficial to Atlantic Canada? Our analysis suggests that the answer is yes, although this conclusion must be interpreted with some care. The principal gains illustrated above were on the consumption side, and were associated with the fact that free trade would result in lower prices to consumers in the Atlantic provinces. In some cases, there will also be an increase in the real and relative return to labour, but such gains depend on free trade changing the basic production structure for the eastern provinces, and it is not obvious that this should be expected.

Most recent analysts of potential gains for Canada of a free trade agreement with the United States, including Harris (1983), have argued that the principal gains will be associated with the rationalization of Canadian industry, allowing such industries to take advantage of economies of scale. If these are indeed the principal sources of gains from trade, there is little evidence that these gains will accrue to Atlantic Canada. While it is certainly possible that industry may develop in the Atlantic provinces to take advantage of the expanding opportunities of the large U.S. market, there would seem to be no reason to expect that Atlantic Canada would have any particular advantages in attracting such industry. Indeed, the agglomeration economies argument would suggest that it is more likely that such development would take place in Central Canada.

Thus, while all Canadians will benefit from the lower commodity prices that free trade will bring, only the industrialized regions will benefit from the gains associated with the rationalization of Canadian industry, and this would be expected to increase interregional income differentials. Of course, the important point is that residents of Atlantic Canada will be better off, and it would be foolish of them to oppose a free trade deal simply because some other Canadians obtain even larger benefits.

The argument that the large benefits associated with free trade will come from the rationalization of Canadian industry and the advantages of large scale production depends on Canadian industry being able and willing to meet the challenge of foreign competition. The Ontario government has spoken out strongly in opposition to a free trade deal, and must therefore feel that Ontario industry cannot

meet this challenge. In the past Ontario industry has benefited substantially from the Canadian tariff structure, because tariffs have protected the markets in Atlantic Canada and the western provinces from foreign competition. Ontario has been able to sell its highly-priced and inefficiently-produced manufactured goods in the Canadian market, and this has resulted in substantially higher prices for manufactured goods in all parts of Canada. The Ontario government seems content with this position. Ontario is apparently not prepared to subject its industry to foreign competition, but it does want to be able to continue to sell its products in Eastern and Western Canada behind tariff barriers.

It is possible, of course, that the Ontario government is correct. Perhaps industry in Ontario is so inefficient that it stands no chance of competing with U.S. firms. But even if this is the case, there would seem to be no reason to subject Atlantic Canada and the western provinces to the substantial costs associated with the tariffs. Tariffs on Canadian industry were instituted on the basis of the infant industry argument, but these industries have long since had time to grow up. The East and the West have borne a good deal of the costs but have obtained few of the benefits.

Ontario's Premier Peterson has argued that a free trade arrangement with the United States would not be good for Ontario nor for Canada. Apparently he believes that Ontario industry cannot compete with the U.S. and, furthermore, that whatever is good for Ontario is good for Canada. But even if one accepts the argument that Ontario would be disadvantaged by free trade, and this is doubtful, it is difficult to see how losses could occur in the rest of Canada. Certainly residents of Atlantic Canada have much to gain and little to lose from a free trade arrangement with the United States. Indeed, the principal puzzle in the current policy debate is why spokesmen for the Atlantic provinces have not argued much more strongly in favour of a free trade arrangement.

References

Harris, R. 1983. Trade, Industrial Policy, and Canadian Manufacturing. Toronto: University of Toronto Press.

Helpman, E. 1984. "Increasing returns, imperfect markets and trade theory", Chapter 7 in R. W. Jones and P. B. Kenen (eds.), Handbook of International Economics: Vol. 1. Amsterdam: Elsevier Science Publishers.

Jones, R. W. 1971. "A three-factor model in theory, trade, and history", in J. N. Bhagwati et al. (eds.), Trade, Balance of Payments, and Growth: Essays in Honor of Charles P. Kindleberger. Amsterdam: North Holland; 3-21.

¹³For a preliminary discussion of the causes of regional inequalities see Melvin (1987b).



244 MELVIN

Jones, R. W., and J. Peter Neary. 1984. "The positive theory of international trade", Chapter 1 in R. W. Jones and P. B. Kenen (eds.), Handbook of International Economics: Vol. 1. Amsterdam: Elsevier Science Publishers.

- Markusen, J. R., and J. R. Melvin. 1981. "Trade, factor prices. and the gains from trade with increasing returns to scale", Canadian Journal of Economics, 14:450-469.
- Melvin, J. R. 1987a. The Interregional Effects of Canadian Tariffs and Transportation Costs. Toronto: University of Toronto Press for the Ontario Economic Council.
- Melvin, J. R. 1987b. "Regional inequality in canada: Underlying causes and policy implications", Canadian Public Policy, 13:304-317.
- Melvin, J. R. 1985. "The regional economic consequences of tariffs and domestic transportation costs", Canadian Journal of Economics, 18:65-82.
- Melvin, J. R. 1969. "Increasing returns to scale as a determinant of trade", Canadian Journal of Economics, 14:389-402.
- Samuelson, P. A. 1971. "Ohlin was right", Swedish Journal of Economics, 73:365-384.