Trade in the Canadian Introductory Economics Textbooks

Abdella Abdou (Brandon University) and Roderick Hill (University of New Brunswick)

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Abstract

International trade policy has become a hot topic of political debate worldwide. How do the Canadian introductory textbooks cover the key topics of international trade and how well do they link economic ideas with current events and political controversy? We consider first what the texts should say about these topics and then examine the content of seven Canadian university-level introductory texts. In general, the texts do a better job at the traditional content of the welfare economics of trade, and give relatively little space to linking these ideas with either the globalization controversies or with the debates about Canada-U.S. free trade and NAFTA. By our criteria, of the texts surveyed, (a) Lipsey-Ragan, (b) Case, Fair, Strain and Veall, and (c) Frank, Bernanke, Osberg, Cross and MacLean do a satisfactory job.

I. Introduction

International trade policy has become one of the burning issues of our time. Virtually all countries of the world are involved in negotiations and implementation of regional trade blocks, IMF/IBRD-recommended trade liberalization programs, and/or WTO agreements. Correspondingly, the awareness of people in all countries of these negotiations and policy changes has created intense interest in the issue. Well-organized world-wide demonstrations take place against what its opponents call corporate-driven globalization -- witness the rallies in Seattle, Quebec City, Genoa, and Cancun. It would be natural if many university students enroll in introductory courses, and perhaps major in economics, in the hope of educating themselves on the issue.

In this paper we address the question of whether the comprehensive university-level Canadian introductory textbooks offer students a discussion of trade that illuminates the major issues involved and leaves students with a good grasp of the relevant theory and of the current issues in the global trading system. We examine the introductory texts because most people who study some economics in university don't go beyond the introductory level and even if they do, they may not be exposed again to the professional literature about international trade. So the central messages of the introductory texts are important in providing students with some background and understanding of what economists have to say about some of the most prominent political and economic controversies of our time.

Our objective in this paper is not only to examine the placement and extent of international trade issues in the introductory texts, but also to consider what the texts have to say about the subject. To consider critically the contents of the texts, we first have to consider and to justify what it is we think the texts *should* be telling introductory economics students. This is our primary concern in the next section. We then turn to a review of some of the main introductory texts in Canada to see how they measure up to the criteria we have set out, and we draw some conclusions in the final section.

II. Essential Issues in Trade Theory and Practice

What are the essential issues that comprehensive introductory textbooks should address with regard to international trade? To address this first requires some view about what the role of the introductory economics text is. We see its role as having two main parts. First, it should convey to the student in an accessible way the main results of the

professional literature, both theoretical and empirical. Second, it should help the student connect this analysis with the times they live in. Trade policy has played a prominent role in Canadian political debates for a long time, but this has been particularly the case in the last 15 years. As we noted earlier, trade policy has become a very prominent international political issue. Hopefully, students can be shown that economists' work has something to contribute to public debate.

Traditionally many economics topics have been addressed around four themes: efficiency, equity, their relationship to economic development and growth, and macroeconomic stability. The first two are usually reserved for microeconomics and the last two for macroeconomics. International trade can be discussed in light of all four themes, although we will focus here largely on the first two.

The 1970s ushered in an era of environmental concern, which led to environmental economics becoming a permanent feature of economics programs. This also meant the acceptance of 'ecological sustainability' as a further criterion in economic analysis. Nevertheless, because of the relatively recent inclusion of this criterion in economic analysis, and the interdisciplinary nature of the problem we discuss the ecological sustainability criterion with other contemporary trade related issues in a subsequent section.

Pedagogical and space considerations: There are pedagogical and space considerations that must be taken into account when assessing introductory texts. The relative complexity of trade theory and international trade institutions may not allow authors to delve very deeply into many issues. This is exacerbated by the fact that authors have to limit themselves to a chapter or two for the topic. Nevertheless, we note that

texts do include qualifications and some mention of the recent developments with regard to some issues. For example, discussions of monopoly often list both its advantages and disadvantages, despite economists' favorable inclination toward competition. The complexity of the topic or space considerations should not be a major obstacle in discussing trade issues in an appropriately nuanced fashion. We argue for making the shoe the right size rather than cutting the foot to fit the shoe. The right size in our view would have roughly half the coverage devoted to economists' ideas about international trade and the other half linking those ideas to contemporary issues in the world economy. We now discuss each of these in turn, before considering the contents of the texts themselves.

A. The Welfare Economics of Trade

International trade with its emphasis on the micro side can be expected to address efficiency and equity issues in some detail. Free trade is an issue around which competing views on economic efficiency and distributional effects have been most heatedly debated; it is an ideal subject to illustrate the equity-efficiency trade-off (Baumol, Blinder, and Scarth 1994, p. 362). While economists attempt to separate their values from the task of economic analysis, it is generally accepted that value judgments may interject in the economic analysis at the point of choosing the area of investigation. Is the choice of topics in textbooks largely dedicated to showing the efficiency outcomes of free trade, neglecting the income-distributional or equity aspects of free trade in practice? This would not be surprising if most economists (as many of the texts repeatedly suggest) favour free trade.

The ideas of comparative advantage and the potential gains from trade (compared with autarky) form the oldest core of trade theory. Texts should give these ideas an important place. But how are the gains from trade to be assessed? As Atkinson (2001, p.193) has recently observed, "despite the prevalence of welfare statements in modern economics, we are no longer subjecting them to critical analysis." He adds that "policy evaluation can only be made on the basis of a specified set of objectives, and that these should be explicit, not implicit" (p.196). "Textbooks should contain a section explaining to readers the basic problems in making evaluative statements. A proper basis for welfare prescriptions is essential because (a) there is scope for significant differences of view about the form of social objectives and (b) these differences can seriously affect the conclusions drawn for major policy issues." (p.203)

So one criterion that we use in assessing introductory texts is their handling of the welfare economics of trade. What should the texts say about this? A good deal of traditional trade theory focuses on the effects of trade on factor prices. The Heckscher-Ohlin model and various models with sector-specific factors were, in part, designed to highlight the differing interests of factor owners in trade and trade policy changes. A central message of that literature is: *Trade, changes in the pattern of comparative advantage, and changes in trade policy lead to gains for some persons and losses for others*. In light of this, do the texts make it clear that not everyone gains from trade or movements towards freer trade? Does the account in the texts, for example, suffer from a fallacy of composition, by suggesting that since two individuals benefit from voluntary mutual exchange, the same is true for two countries or (what would be equally fallacious) for everyone in the two countries?

If trade or trade policy changes lead to gains for some and losses for others, some value judgement is required to determine whether a net gain or loss has resulted. Deardorff (2003, pp.639-640) has recently written: "we all know and understand that free trade and other aspects of globalisation cause harm to some groups in society, at the same time that they benefit others, and we know that, according to our models, trade increases the total of economic welfare that could potentially be achieved through redistribution. Although I may favour such redistribution, I recognize that it seldom occurs, and I nevertheless make the value judgement that the overall gain from trade is worth having even when some will be hurt. Some anti-globalists ... make the opposite value judgement, viewing the harm that is done, often to the poorest in society, as unacceptable, and therefore viewing globalisation as harmful unless the terms are altered to share the gains more equitably."

There are two issues here. The first is empirical: how big are the gains and losses experienced by the different groups? Some notion of the size of these is surely essential in making the kind of value judgements that Deardorff describes. Empirical estimates of the gains from changes in trade policy exist, but consist largely of (often *ex ante*) simulations whose results are highly variable depending on the structure of the model used (Hazledine, 1990). There have been some attempts at *ex post* assessments of the Canada-U.S. Free Trade Agreement (FTA). The tenth anniversary of the FTA sparked some examination, Trefler (2002) being the most ambitious. (See also McCallum (1999) and Jackson (1999), for example.)

A lot of empirical evidence is available about the size of the monetary and nonmonetary losses experienced by displaced workers (for example, Jacobson, LaLonde and Sullivan, 1993, and Winkelmann and Winkelmann, 1998). Jacobson *et al.* find that "high tenure workers separating from distressed firms suffer long-term losses averaging 25 percent [of their pre-displacement earnings] per year". Losses remain "large even for those who find new jobs in similar firms" (p.685). The central message of that literature is: Losses experienced by permanently displaced, unemployed workers are high. Estimates are also available of the number of such displaced workers for recent trade policy changes, such as the Canada-U.S. free trade agreement (FTA). For example, Gaston and Trefler (1997) estimate job losses of perhaps 35,000-55,000 between 1988 and 1993 as a result of the FTA. Do the texts cite this kind of empirical work?

Textbooks on international trade typically consider the arguments for and against free trade. There are many reasons why (in certain situations) free trade would not be optimal. For example, Dunkley (2000, 112-132) lists twenty economic and non-economic qualifications each in turn involving a set of arguments that are frequently overlapping. He refers to a number of prominent economists who qualify or question the classical and neo-classical conclusions about the optimality of free trade including: Mill, Keynes, Samuelson, Robinson, Kaldor, Solow, Lucas, and Krugman. We do not expect introductory texts to be so comprehensive or to delve so deeply, but such questions that have persisted through time and/or have become hotly disputed contemporary issues need to be addressed. Do the texts provide any coverage of the 'free trade versus protection' debate or any acknowledgement that protection can, in certain circumstance, sometimes be a rational policy? This would help to create awareness of the limitations of the standard free trade conclusions of the simple Ricardian model.

In recent decades, the GATT/WTO has expanded its scope from merchandise trade to trade in services, agriculture, trade-related aspects of intellectual property rights (TRIPS), investment, competition policy, and to the potential treatment of health or environmental regulations as non-tariff barriers to trade. Harris (1993, pp.755-756) notes that "the change that is occurring on a wide range of economic, social, scientific, and political fronts has led thus far to a modest response in the way that international trade theory and empirical work is carried out...", but that "these trends are probably producing a paradigm shift ... in the way we think about international trade and international exchange more generally." Does the central focus on the idea of comparative advantage, formulated during an era in which inter-industry merchandise trade was dominant, adequately describe the new situation? The focus of comparative advantage is on fundamental differences between countries; instead, the 'new trade theory' focuses on determinants of trade that do not depend on traditional comparative advantage. These ideas are starting to have a prominent place in the undergraduate trade texts, but has this been reflected at the introductory level? It may be prudent to leave students with the idea that trade theory evolves in light of new knowledge and/or concrete conditions.

B. Trade and Contemporary Issues

The second major criterion is the contemporary relevance of the analysis. Students should learn something about how the theoretical framework explains or fails to explain some of the contentious issues of our time. It has been argued that the reason many students avoid majoring in economics is the absence of any clear relationship

between 'dry' theory and actual events. Many textbooks realize this problem and have attempted to address it. With regard to international trade the main issues that need to be included at this particular juncture in history are: the environment, labor rights, economic development, and globalization.

These were the main issues that galvanized the anti-globalization protestors in Seattle in November 1999. Mainstream economists and the mainstream media acknowledged the importance of that event. Commenting on the scale and complexity of the protests, Sylvia Ostry correctly noted that the drama in Seattle was "unprecedented and may well have established a new trend" (2001, p. 6). The Economist claimed that what it referred to as 'The Battle in Seattle' was a "global disaster" and that "the debacle in Seattle was a setback for freer trade and a boost for critics of globalization" (1999, p. 19). The 'globalization controversy' involves protagonists who roughly correspond to the four issues mentioned above, i.e., environmentalists, labour activists, developing country lobbyists, and critics of globalization who are also concerned about the impact of globalization on culture and on the sovereignty of the state to formulate domestic policies in light of the growing power of transnational corporations. The texts could perhaps briefly address at least some of the questions motivating globalization's critics. These are important trade-related issues in their own right on which economists have written, but they also help to connect economic ideas with contemporary events in which the students should have some interest.

In all these issues we consider whether the texts give the critics views some space, and if they are given a fair hearing. Dismissing the critics as economic illiterates is not sufficient. After all, they might simply be making different value judgements than

most mainstream economists, but the social welfare function includes everyone's views. We may even learn something by listening to them. Amartya Sen (2001) comments that "The protest movements against the global economy are often ungainly, ill-tempered, simplistic, frenzied and frantic, and yet they do serve the function of questioning and disputing the complacency about the world in which we live... the global doubts can help to broaden our attention and extend the reach of policy debates, by confronting the status quo and by contesting global resignation and acquiescence." With regard to these issues, textbooks could touch upon questions of the following type.

(I) International trade and globalization: What are the controversies surrounding what is commonly called globalization? In a recent book, Soros (2002, p.1) takes globalization "to mean the development of global financial markets, the growth of transnational corporations, and their increasing domination over national economies." He writes "I believe that most of the problems that people associate with globalization, including the penetration of market values into areas where they do not traditionally belong, can be attributed to these phenomena."Because multinational enterprises (MNEs) have been key players in the 'globalization' process, their role should be acknowledged. After all, a substantial amount of international trade now takes place within the firm, so-called intra-firm trade.

What is the impact of trade agreements on the sovereignty of the state to formulate domestic policies, culture, and stability of communities? The classical and neoclassical case for free trade is largely, if not exclusively, economic in nature, and some of these questions seem outside the realm of mainstream economics. Yet, these issues came to the fore because of the expansion of trade agreements into areas that had

been outside the traditional scope of the GATT until conclusion of the Uruguay Round and the formation of the WTO to administer the resulting broader set of international agreements. More generally the unprecedented success of the idea of the market since the 1980s in policy making, and the invasion of the economic method of other social sciences, described by George Stigler as 'the imperialism of economics', has forced the population at large and many academics from other fields to respond to the challenge of neoclassical-economics-based policy formulation and its method of thinking. Economics cannot refuse to wade into the implications of its successful expansion into hitherto non-economic areas.

- (ii) Trade and environmental issues: Does international trade reduce or promote environmental externalities? Is it helping or hindering ecological sustainability? What are the factors that fuel the conflict between free trade and the environment? In this regard, textbooks may note some of the following factors: globalization of environmental issues (global warming, deforestation); the potential for clashes between trade and environmental policies (for example the tuna net-dolphin dispute), and environmentally motivated tariffs related to transboundary pollutants (Uimonen and Whalley, 1997).
- (iii) Trade and labour issues: Labour-related issues have been prominent in political debate and have been the subject of considerable academic writing (eg. Agaarwal, 1995; Brown, Deardorff and Stern, 1996; Rodrik, 1996). Do the rules of the international trading system override the rules that the International Labour Organization attempts to put forward? Is there such a thing as 'unfair competition' from the existence of poor or unenforced labour standards in other countries? For example, countries are now allowed to ban the import of goods produced by prison labour. What about the

products of child labour? What about imports from countries where elementary labour rights do not exist? Other questions are also possible. Does specialization and trade, extolled by the texts, also lead to fragmentation of work and impose a psychological toll on workers? Does free trade affect the relative share of labour and capital in the national income?

- (iv) Trade, development and growth: What contribution does trade policy play in growth and development? Is the infant industry argument relevant for developing countries? Is free trade an engine of growth, the key policy that can propel countries to higher levels of development? Is (possibly unilateral) free trade the best policy for developing countries? What are the facts about the industrialized countries' trade policies for the products of industrializing/developing countries?
- (v) Regional trade agreements: the FTA and NAFTA In addition to the above topics a text aimed at a Canadian audience must discuss the Canada-U.S. Free Trade Agreement (the FTA) and/or its successor, the North American Free Trade Agreement (NAFTA). Its effects on economic welfare, trade patterns and employment could be noted, as we have discussed earlier. However, the issues of the environment and labour standards also played a prominent role in the NAFTA debate. Issues of sovereignty and asymmetries of national economic power in regional trade arrangements raise further issues that may have been neglected by traditional economic analysis, but which are real enough and have not been ignored by the affected populations (Helleiner, 1996).

III. What do the texts say? An assessment of selected textbooks

The texts that we consider are a sample of seven introductory texts currently in use at the university level in Canada. The texts (with their share of the combined university and college market in brackets) are Lipsey and Ragan (2001) [23%], Parkin and Bade (2003) [22.5%], McConnell, Brue and Barbiero (2002) [7.8%], Mankiw, Kneebone, McKenzie, and Rowe (2002) [8.8%], Case, Fair, Strain and Veall (2002) [2.7%], and Colander, Sephton and Richter (2003) [2.7%], and Frank, Bernanke, Osberg, Cross and MacLean (2003) [2.1%]. These texts have about 70 percent of the university and college markets. We have summarized the contents of the texts in a series of tables, based on the main points raised in the previous section. For the remainder of this section, we will comment on our findings.

The International Trade Content in the Introductory Books: It is apparent from Table 1 that all of the texts cover international trade topics to a greater or lesser extent. The typical pattern, followed by all, is to introduce the idea of comparative advantage and the gains from trade in the first few chapters. Much later in the book, usually at the end, is a chapter (or two, in the case of Lipsey and Ragan) devoted to international trade. In this regard, it is interesting to note that the earlier editions of economics texts have no sections on comparative advantage in the first chapters (McConnell and Pope, 1984; Lipsey and Steiner, 1969; Samuelson and Scott, 1968). It seems that the early introduction of the gains from trade in the texts coincided with the placement of free trade on the agenda in the political realm. This also has the effect of introducing the free trade argument very early in the course, while many courses may never cover that later

¹ We are grateful to Rich Gillis of Pearson Canada for providing estimates of the market shares of the texts.

chapter. Only Frank *et al.* qualify the free trade conclusion in this early presentation by noting adjustment costs and non-economic costs (Frank *et al.*, p.70).

Does everyone benefit? Net gains from trade: The texts uniformly set out the comparative advantage idea in the simple case of individual trade, likely for pedagogical reasons: it's easy to understand and it follows the simple Ricardian model where there is only one input — a person's labour time, in this case. Unfortunately, this model does not help to illuminate the reality of differing interests (depending on their sources of income or the nature of their expenditures), nor does it give any hint of the substantial adjustment costs that some must bear. Free trade is a 'win-win' proposition apparently. Students are then told that there's an analogy with trade between countries. Sometimes they are just told that "both countries" gain, which could lead them to think wrongly that everyone in both countries gains, an example of the fallacy of composition. Worse, sometimes they are told explicitly that "everyone" gains (eg. Parkin-Bade, who insist that free trade "creates only winners", p.791).

Colander *et al.* say that economists favour free trade, but "good economic policies are often not good politics" and politicians may "follow the politically popular policy" (p.416). (Why are almost all politicians apparently following the politically unpopular policy, in that case?) Are others making different value judgements? In explaining rent seeking as one of the reasons for trade restriction, Parkin and Bade state that anti-free trade groups undertake a larger quantity of political lobbying than do pro-free trade groups because of the distribution of costs and benefits associated with free trade (p. 801). However, in the case of FTA and NAFTA, the pro free trade forces were well

organized and won the contest. So it is not clear that in general anti-free trade groups are better organized than free traders. The Parkin-Bade argument relies on the assumption that consumers are the beneficiaries of free trade and are unorganized because of free-rider problems. It neglects the fact that business lobbies have an interest in trade policy.

Citations to the professional literature: The general failure of the texts to cite anything from the professional literature is not a failing specific to their coverage of international trade. It pervades the texts and contrasts unfavourably with introductory texts in other disciplines like sociology or psychology, where introductory texts contain extensive references. As a result, students could read most introductory books and have no idea that the professional literature exists. One result of this is that the texts can make contradictory claims and the reader has no idea of the evidence behind it. Colander et al. claim that individuals facing job losses due to changes in trade policy face small costs (p.416), while others claim that the costs are large. What support do these claims have? The reader cannot tell. Or Colander et al. (p.421) can claim that the "historical record" shows that infant industry protection has been a failure, while Lipsey and Ragan (p.844, p.811-13) can claim that it has worked for most of the currently industrialized countries and some newly-industrializing ones.

Many texts can claim that "most economists" support free trade and reject arguments for tariffs. Maybe so, but doesn't the reader have the right to expect a reference to some survey results? More importantly, one could also ask why the majority view of economists is of any interest. Do economists have some special ethical insights? Value judgments can and are made by everyone. All we need to know is the facts: who

gains how much, who loses how much? Then we can all decide whether we think that the policy change, whatever it is, is worthwhile. By not providing any information about estimates of gains and losses, which apparently exist if economists are making these value judgments in an informed way, the texts are not allowing people to make up their own minds, but instead are pretending that economists have some expertise here that others lack.

Free Trade Versus Protection: Do trade restrictions ever make sense? While most of the texts have a discussion of this, there is a considerable diversity of claims. Some accept and some reject a given rationale for protection, such as the infant-industry argument or restrictions due to protection of national culture. Most of the texts use a framework of "free trade versus protection". It is as if the texts come ready to demolish protectionist arguments. This may have been an appropriate framework twenty ago, but now that trade agreements have extended well beyond traditional merchandise trade, this framework may be more misleading than enlightening. Only Frank *et al.* (p.448) make the following important point:

"Another reason may be that what is being called 'free trade' is not primarily about the trade of goods and services. In recent times, 'free trade' agreements have sometimes been significantly about such issues as the rights of multinational corporations and the protection of intellectual property rights. These issues are quite distinct from the trade in goods and services that has been the focus of our analysis of the comparative advantage model. It is possible to oppose the strengthening of corporate rights and intellectual property rights without being opposed to free trade in goods and services."

We also note that Lipsey and Ragan, unlike Colander *et al.*, Mankiw *et al.*, McConnell *et al.*, and Parkin and Bade, have a more balanced presentation of the problem by providing sections on 'The case for free trade' and 'The case for protection'.

The Globalization Controversy and Contemporary Issues: How adequately do the texts help students understand the nature of the globalization controversy? In general, coverage seems rather scanty, particularly in Parkin-Bade and to a lesser extent in Lipsey-Ragan, the market leaders, given the prominence of the issue in the political arena in recent years. Tables 5, 6, 7 and 8 provide further detail on aspects of the 'globalization controversy' – the links between trade policy and environmental issues, trade and labour standards (particularly in developing countries) and the links between trade policies and the prospects of developing countries, as discussed in Section II above.

There are some serious problems with the content of some of the texts and their lack of correspondence with parts of the professional literature dealing with these questions. The relationship between trade and the environment has become an important political and research agenda (Low, 1992, Uimonen and Whalley, 1997). Only Parkin and Bade (p. 799) give any significant space to the issue, even if their discussion is one-sided. The impact of globalization on labour (through trade liberalization, the effects of information technology and enhanced mobility of capital) has become a leading concern for workers in terms of adjustment consequences to globalization of production, lean production, flexibility, and weakened unions (Moody, 1997). None of the texts have anything substantial to say on this issue. These three issues -- the environment, labour, and development, have become also prominent in WTO negotiations. The present round

of negotiations is named the Doha Development Agenda to underscore the importance of trade to developing countries. The Cancun ministerial meeting failed to a significant degree because of the stand taken by a coalition of developing countries. Something needs to be said about the relationship between trade and development. Aside from Case *et al.* and Lipsey and Ragan, this issue is largely ignored by the other texts.

FTA/NAFTA: The most contentious trade issue in contemporary Canadian politics, FTA/NAFTA, has in general been well described by all the texts except for Mankiw et al. and Colander et al. who bypass it after a very brief mention. While the descriptions of the five texts are useful, a good grasp of the issue requires a balanced presentation of supporters' and opponents' views, and analysis of the results supported by empirical literature. On this score Case et al. and Lipsey and Ragan perform well, whereas Parkin and Bade have a satisfactory section describing the facts, but their assessment of NAFTA is amazing. After noting high rates of job loss in the early 1990s, they write "the net outcome of NAFTA appears to be strongly positive. More than a million new Canadian jobs were created between 1994 and 1999." (p.803) This is the post hoc fallacy, something they warn students about on pp.13-14. In any case, even if the 'number of jobs created' due to NAFTA could somehow be identified, that is hardly the usual way to try to measure the gains from trade. McConnell et al. have a similar argument (see Table 9). All the books can improve their sections on this topic by simply citing references on empirical studies.

IV. Conclusions

Our survey shows that while the texts have some common structural features, they also have some significant differences. Table 10 sets out a summary ranking of the texts based on the two major sets of criteria and then an overall ranking. If we had to choose a text for our students based just on the criteria we have set out, we would go with one the three texts that have what we term a 'satisfactory' performance. These are (in descending order), Lipsey and Ragan, Case *et al.*, and Frank *et al.* The remaining texts will not be chosen given the availability of any one of these three.

Clearly we have made some debatable value judgments in setting our criteria about what the introductory texts should contain and then assigning weights to them. A different set of criteria and weights could result in a somewhat different evaluation and ranking of the texts.² We believe that our criteria are reasonable, but are not immutable. (For example, when Krugman (1993) asked what undergraduates need to know about international trade, he emphasized issues of basic economic literacy related to decoding and seeing through the 'rhetoric of pop internationalism' that was prominent at the time.)

Even within the area of international trade, we have not evaluated the texts on all the possible topics that could have been examined. All have an exposition of comparative advantage. We have not attempted to assess the clarity of their accounts. The texts differ in the quality of their descriptions of Canada's place in the international economy, its trade patterns, and so on. However, from our readings of the texts, we doubt that including these criteria would alter significantly our rankings.

² The two major sets of criteria were each given equal weight. The 'grades' from Tables 2-4 were used for Part 1 of Table 10; the grades from Tables 5-9 were used for Part 2. The grades in Tables 2-9 were the average of the grades independently assigned by each of the authors.

We hope that our exercise will generate some thought and debate about how the texts should address some of these crucial economic policy questions that are defining the times in which we live.

References

- Aggarwal, M. (1995), "International Trade, Labor Standards, and Labor Market Conditions: An Evaluation of the Linkages", USTC, Office of Economics Working Paper No.95-06-C.
- Atkinson, Anthony B. (2001) 'The strange disappearance of welfare economics.' *Kyklos*, 54, 193-206.
- Baldwin, Robert E., John Mutti and J. David Richardson (1980), "Welfare effects on the United States of a significant multilateral tariff reduction", *Journal of International Economics*, 10(3), 405-423.
- Baumol, William, A. Blinder and W. Scarth (1994), *Economics: Principles and Policy*. Fourth Canadian Edition. (Toronto: Harcourt Brace and Company Canada)
- Brown, Drusilla K., Alan V. Deardorff, and Robert M. Stern (1996), "International Labor Standards and Trade: A Theoretical Analysis", in J. Bhagwati and R. Hudec, eds., *Fair Trade and Harmonization: Pre-requisites for Free Trade?* (Cambridge, MA: MIT Press)
- Case, Karl E. Ray C. Fair, J. Frank Strain and Michael R. Veall (2002), *Principles of Microeconomics*. Second Canadian Edition (Toronto: Prentice-Hall)
- Colander, David, Peter Sephton and Charlene Richter (2003), *Microeconomics*. Second Canadian Edition. (Toronto: McGraw-Hill Ryerson)
- Deardorff, Alan (2003), "What Might Globalisation's Critics Believe?" World Economy, 26 (5), 639-658.
- Dunkley, G. (2000) The Free Trade Adventure: The WTO, the Uruguay Round and Globalism- A Critique. (London: Zed Books)
- Economist (1999a) "The battle in Seattle," The Economist, 12 November, 21-23.
- ---- (1999b) "A global disaster," The Economist, 9 December, 19-20.
- Frank, Robert, B. Bernanke, L. Osberg, M. Cross, and B. MacLean (2003), *Principles of Macroeconomics*. First Canadian Edition (Toronto: McGraw-Hill Ryerson)
- Gaston, Noel and Daniel Trefler (1997), "The labour market consequences of the Canada-U.S. Free Trade Agreement", Canadian Journal of Economics, 30(1), 18-41
- Harris, R. G. (1993) 'Globalization, trade, and income.' *Canadian Journal of Economics*, 26, 755-76.
- Hazledine, Tim (1990), "Why do the free trade gain numbers differ so much? The role of industrial organization in general equilibrium", *Canadian Journal of Economics*, 23(4), November, 791-806.

- Helleiner, G.K. (1996) 'Why small countries worry: neglected issues in current analyses of the benefits and costs for small countries of integrating with large ones.' *World Economy*, 19, 759-763.
- Jackson, Andrew (1999), "From Leaps of Faith to Lapses of Logic", *Policy Options*, June, 12-18.
- Krugman, Paul (1993), "What do undergraduates need to know about trade?" *American Economic Review*, 83(2), May, 23-26.
- Jacobson, Louis S., R.L. La Londe, and D.G. Sullivan (1993), "Earnings losses of displaced workers", *American Economic Review*, 83, 685-709.
- Lipsey, Richard E. and Christopher Ragan (2001), *Economics*. Tenth Canadian Edition. (Toronto: Addison-Wesley Longman)
- Lipsey, Richard and Peter Steiner (1969), *Economics*. (New York: Harper Row)
- Low, Patrick, ed. (1992), *International Trade and the Environment* (Washington D,C: World Bank)
- Mankiw, N. Gregory, R.D. Kneebone, K.J. McKenzie, and N. Rowe (2002), *Principles of Microeconomics*. Second Canadian Edition (Toronto: Thomson-Nelson)
- McCallum, John (1999), "Two Cheers for the FTA", Policy Options, June, 6-11.
- McConnell, Campbell R., Stanley Brue and Thomas Barbiero (2002), Macroeconomics. Ninth Canadian Edition (Toronto: McGraw-Hill Ryerson)
- McConnell Campbell and William Pope (1984), *Economics: principles, problems, and policies*. Third Canadian Edition. (Toronto: McGraw Hill)
- Moody, Kim (1997), Workers in A Lean World (London: Verso)
- Ostry, S. (2001) 'Dissent.com: how the NGOs are remaking the WTO.' *Policy Options*, June, 6-15.
- Parkin, Michael and Robin Bade (2003), *Microeconomics. Canada in the Global Environment*. Fifth Edition. (Toronto: Pearson, Addison Wesley)
- Rodrik, Dani (1996), "Labor Standards in International Trade: Do They Matter and What Do We Do About Them?", in R. Lawrence, D. Rodrik and J. Whalley, eds., *Emerging Agendas for Global Trade: High Stakes for Developing Countries* (Washington, D.C.: U.S. Department of Labor)
- Rodrik, Dani (1997), Has Globalization Gone Too Far? (Washington: Institute for International Economics)
- Samuelson, Paul and Anthony Scott (1969) *Economics: An Introductory Analysis*. Second Canadian Edition. (Toronto: McGraw Hill)
- Sen, Amartya (2001), "Global doubts as global solutions", Alfred Deakin Lecture, Australian Broadcasting Corporation, 15 May. Transcript at www.abc.net.au/rn/deakin/stories/s296978.htm
- Soros, George (2002) On globalization (New York: PublicAffairs)
- Stiglitz, Joseph E. and Robin W. Boadway (1997), *Principles of Microeconomics and the Canadian Economy*. Second Canadian Edition. (New York: W.W. Norton)
- Trefler, Daniel (2002), "The long and short of the Canada-U.S. Free Trade Agreement", 3 December. Available at http://www.economics.utoronto.ca/trefler/ (An earlier version was published as Paper No. 6, Perspectives on North American Free Trade, Ottawa: Industry Canada).
- Uimonen, Peter and John Whalley (1997), Environmental Issues in the New World Trading System. (London: MacMillan Press)

- Winkelmann, Liliana and Rainer Winkelmann, (1998) "Why are the Unemployed so Unhappy?" *Economica*, 65 (No. 267), 1-15.

 Wirjanto, Tony S. (1997) "World Trade Patterns and Contemporary Issues in
- Wirjanto, Tony S. (1997) "World Trade Patterns and Contemporary Issues in International Trade Policy", International and Development Studies Working Paper (Kingston, Ont.: John Deutsch Institute For the Study of Economic Policy, Queen's University)

Table 1: Treatment of Trade in the Introductory Texts

Text	International Trade Content		
Case, Fair, Strain and Veall (2002)	Brief intro to comparative advantage, Ch. 2; brief description of Cdn economys int'l sector in historical context, Ch. 3 trade, comparative advantage and trade policy, Ch.21, pp.491-511; import substitution and development, Ch.22, pp.522-3; Case Study 5: "International Trade Negotiations", pp.537-538.		
Colander, Sephton and Richter (2003)	Ch.2, pp.39-42: comparative advantage. Ch.3, pp.65-75: description of Cdn economy in a global setting, MNEs, trade patterns, international institutions; Globalization: Ch.14 on "Globalization, technology and real-world competition"; competitive effects (pp.364-365). Ch.19, pp.407-427: comparative advantage, determinants of the terms of trade, trade policy and restrictions. In general, a relatively qualified discussion of trade.		
Frank, Bernanke, Osberg, Cross and MacLean (2003)	Comparative advantage, Chapter 3, pp.51-55, 67-70; Ch.5, pp.109-111: economic interdependence; Chapter 16, pp.433-454: comparative advantage as basis for trade, supply and demand perspective on trade, effects of tariffs and quotas.		
Lipsey and Ragan (2001)	Ch.1, pp.14-15: Comparative advantage, globalization (and pp.254-255); Ch. 34, pp.822-836: static and dynamic comparative advantage, economies of scale, product differentiation, determination of trade patterns, Ch. 35, pp.841-860: trade policy, the case for free trade, the case for protection, trade agreements.		
Mankiw, Kneebone, McKenzie and Rowe (2002)	Ch. 1 trade as one of ten principles of economics, Ch. 3, pp.47-59: detailed comparative advantage, from two-person two-goods economy to trade between countries; Ch. 9, pp.181-198 gains/losses from trade, applies consumer and producer surplus to illustrate this and effects of tariff/quota; five arguments for restricting trade, a brief note on multilateral trade agreements.		
McConnell, Brue and Barbiero (2002)	Ch. 5, pp.99-120: Canadian economy and world trade, specialization and comparative advantage, description of trade agreements and global competition, MNE defined; Ch. 17, pp.401-426: comparative advantage, supply and demand analysis of exports and imports, effect of tariffs and quotas; critical review of six protectionist arguments.		
Parkin and Bade (2003)	Ch.2, pp.39-42: static and dynamic comparative advantage; Ch.33, pp.785-805: trends and patterns in international trade, comparative advantage, diversity of taste and economies of scale, the case against protection, regional trade agreements. Brief mention of trade and growth, Ch30 (p.716) of their <i>Macroeconomics</i> .		

Table 2: Do changes in trade policy benefit everyone?

TEXT	ACKNOWLEDGEMENT OF GAINERS/LOSERS AND VALUE JUDGEMENTS				
Case, Fair, Strain and Veall (2002)	Ch.2 intro to comparative advantage: two persons-two country analogy (p.29). Adjustment costs (pp.508-509), called 'significant', no empirical evidence cited. Trade-off between long-term gains and transitional costs of higher unemployment (p.509). Good description of relative sizes of gains and losses, lack of compensation, political judgements involved (p.537), tied in with trade negotiation strategy.				
Colander, Sephton and Richter (2003)	Ch.2 intro to comparative advantage: two persons-two country analogy (p.39). Economists' mantra: "trade is good." Change has "small costs to some individuals" who "loudly oppose the particular free trade that hurts them" (p.416) and who "don't want to make radical changes in the kind of work they do – they want to keep on producing what they're already producing." (p.415) Claims "trade adjustment assistance programs" are "designed to compensate losers for reductions in trade restrictions", failing to note these don't exist in Canada and don't offer full compensation (p.416).				
Frank, Bernanke, Osberg, Cross and MacLean (2003)	Ch.3, p.67 intro to comparative advantage: two persons-two country analogy. Unreserved acknowledgment of gainers and losers, asks why free trade at times faces opposition; suggests plausible economic and non-economic reasons, states the possibility of opposing recent type trade agreements without opposing free trade in goods and services (pp.70, 448-449).				
Lipsey and Ragan (2001)	Ch. 34, two persons-two country analogy. Free trade does not always improve living standards for everyone (p.842). Discussion of adjustment costs (p.860), no estimates. No value judgements offered.				
Mankiw, Kneebone, McKenzie and Rowe (2002)	Discuss winners and losers in terms of consumers and producers and states that the gains of the winners exceed losses of the losers (pp. 182-185).				
McConnell, Brue and Barbiero (2002)	Nothing, except for a brief statement that while imports may eliminate some jobs, they create others (p. 421).				
Parkin and Bade (2003)	Two country example showing gains from trade. Claim: "Trade does not create winners and losers. It creates only winners" (p.791). Yet on p.797: "free trade does cost some jobs, but it also creates other jobs Although protection does save particular jobs, it does so at inordinate cost." Oppose compensation for job losses due to trade liberalization (p.801). High rate of job destruction in late 1980s/early 1990s; claim "net outcome of NAFTA" "strongly positive": "More than a million new Canadian jobs were created between 1994 and 1999." (p.803)				

Table 3: Citation of professional literature and/or mentions of empirical evidence

TEXT	PROFESSIONAL LITERATURE/EMPIRICAL EVIDENCE CITED?			
Case, Fair, Strain and Veall (2002)	Box on empirical work by J. Helliwell <i>How much do national borders matter?</i> and D. Trefler 'The case of missing trade and other mysteries', <i>AER</i> , Dec. 1995. Reference to Ricardo (1817) and Kindleberger <i>The World in Depression</i> .			
Colander, Sephton and Richter (2003)	Nothing. Unsubstantiated claims about 'large benefits' from trade liberalization; claims about 'small costs to some individuals' from changes in trade policy contradicted by evidence they don't cite (p.146).			
Frank, Bernanke, Osberg, Cross and MacLean (2003)	Two references on 'creation' of Cdn. pulp and paper industry (including Norrie and Owram's A History of the Canadian Economy. Nothing in main trade chapter.			
Lipsey and Ragan (2001)	Nothing in two detailed chapters on trade. Web links to WTO, Cdn government (pp.853, 858, 860) and magazine articles by Krugman (p.847), Lipsey (p.860), and Sachs (p.815).			
Mankiw, Kneebone, McKenzie and Rowe (2002)	Nothing except for two newspaper articles by economists.			
McConnell, Brue and Barbiero (2002)	Nothing. Claims that study after study shows the costs of tariffs and quota substantially exceed gains to producers and governments (p. 420).			
Parkin and Bade (2003)	and Bade (2003) U.S. International Trade Commission estimate of effects of textile quotas mentioned; no reference given (p.797).			

Table 4: Free Trade versus Protection: Do trade restrictions ever make sense?

Text	FREE TRADE VERSUS PROTECTION	Grade
Case et al. (2002)	'Free trade vs protection' (p.505f.). Case for free trade: pro-competitive effects; others retaliate; tariffs on intermediate goods bad; p.e. analysis of cost of tariffs. Case against free trade: adjustment costs; retaliation for unfair trading practices; unfair competition from cheap foreign labour (refuted); safeguard national independence (partly countered by account of Helliwell's border effects work) and national security; infant industry argument/strategic trade policy. Conclusion: the majority of economists favour free trade.	
Colander et al. (2003)	Comparative advantage case for free trade made. 8 reasons for protection examined: eg, short terms costs (vs. long run gains); strategic bargaining between countries; infant industry/strategic trade policy; macro policy; national security; trade sanctions; tariff revenues, esp. for developing countries. Case against protection: "Each of the preceding arguments has some validity, but most economists discount them and support free trade" (p.420). Exception: national security. Larger total output; increased competition; "dispose of the infant industry argument by reference to the historical record" (p.421). Claim: "trade restrictions are addictive", so "just say no".	5.5
Frank et al. (2003)	No separate and detailed discussion. Case for free trade combined with pulp and paper case study showing complexity of actual choice. Can accept logic of comparative advantage yet oppose freer trade because of distributional equity, reduced sovereignty, increase difficulty of shaping pattern of comparative advantage, environmental and labour standards issues (pp70, 448). Distinguish between 'free trade' and "such issues as the rights of multinational corporations and the protection of intellectual property rights" (p.448), so framework is broader than just 'free trade versus protection'. No explicit value judgements made.	7.5
Lipsey and Ragan (2001)	Comparative advantage and case for free trade. Thorough discussion of valid and fallacious reasons for protection (pp.842-848). Note validity of "national objectives other than maximizing national income", taking seriously "social advantages in a more diversified economy", the "risks of specialization", protecting the incomes of unskilled workers and other "social and distributional concerns" (p.843); terms of trade alteration; countervail/anti-dumping; strategic trade policy; infant industries/economies of scale. Comment on industrialized countries use of tariffs in industrial development (p.844) and some developing countries (pp.811-813).	10
Mankiw et al. (2002)	Discuss five arguments for restricting trade and present counter arguments in favour of free trade.	6
McConnell et al. (2002)	A critical discussion of six protectionist arguments, dismisses four as emotional, half-truths, and fallacious, suggests hesitantly that infant industry and military self-sufficiency arguments valid under proper conditions (pp.421-425).	
Parkin and Bade (2003)	In "The case against protection": dismiss rationales for tariffs based on adjustment costs, infant industry/dynamic comparative advantage, dumping, national security, 'competing with cheap foreign labour', econ. diversification and stability, protecting national culture, 'penalizing lax environmental standards' in other countries. Why does protection exist? Rent-seeking primarily (p.800); tariff revenues needed by governments in developing countries.	6

Table 5: Acknowledgement of the Globalization Controversy

TEXT	GLOBALIZATION		
Case, Fair, Strain and Veall (2002)	Two-page Case Study on International Trade Negotiations (pp.538-539, a rather obscure location) that deals with other issues too; half-page box discussion of McCallum-Helliwell-Trefler findings on the importance of border effects (p.510).		
Colander, Sephton and Richter (2003)	Two paragraphs (p.66) on 'global corporations' summarizing some criticisms. Discuss globalization largely from the perspective of firms (pp. 308-311 and 364-365).		
Frank, Bernanke, Osberg, Cross and MacLean (2003)	'Globalization' and 'WTO' not in Index. Note (p.70) 'contentious' discussions about global trading arrangements (p.70); explain compatibility of logic of comparative advantage with opposition to freer trade. Historical context, p.433; 'free trade' agreements and rights of multinationals and intellectual property, p.448.		
Lipsey and Ragan (2001)	Notes that the tenth edition takes the forces of globalization into account and defines MNEs from the outset (pp. xv, 14-15), a good discussion on the WTO (pp. 852-853). Mention (p.255) of growing pressure on wages and constraints on governments. Multilateral Agreement on Investment (p.854); Globalization and discussion of role of TNCs in developing countries (p.812), but no hint of dissent.		
Mankiw, Kneebone, McKenzie and Rowe (2002)	Nothing.		
McConnell, Brue and Barbiero (2002)	Nothing on it as a phenomenon or process, brief discussion of anti-WTO protestors.		
Parkin and Bade (2003)	WTO mentioned briefly (p.793); no mention of MNEs. No discussion of globalization controversies. Indirect references: 'exploiting developing countries', p.800; environmental standards, p.799.		

Table 6: Trade and the Environment

TEXT	TRADE AND ENVIRONMENT ISSUES			
Case, Fair, Strain and Veall (2002)	Mentioned in a phrase in Case Study (p.538) as issue of concern to protestors in Seattle regarding environmental practices of MNEs in developing countries.			
Colander, Sephton and Richter (2003)	Nothing.			
Frank, Bernanke, Osberg, Cross and MacLean (2003)	Only a phrase about how "some opponents of NAFTA" "also feared that Mexico would not honour Canadian and U.S environmental policies" (p.70) – no discussion of whether this is a real issue.			
Lipsey and Ragan (2001)	Called a "hot policy issue" (p.853), but problem unexplained. Case made for dealing with it through a separate international organization. Brief mention about 'environmental standards' regarding MAI, FTAA (p.854, 856).			
Mankiw, Kneebone, McKenzie and Rowe (2002)	Nothing.			
McConnell, Brue and Barbiero (2002)	Nothing on trade and the environment relationship, states trade too important to be linked to such issues, lists environmentalists among anti-WTO protest group and advises them to direct their political efforts toward nations with lax environmental laws (p. 426).			
Parkin and Bade (2003)	A militant free trade perspective: 'Lax environmental standards' in other countries a 'weak' argument for trade restrictions. Poor countries can't afford to be as concerned about the environment. They have a comparative advantage in doing 'dirty' work, raising environmental standards in rich countries (p.799). Claims more trade leads to faster growth, leading to better environmental standards.			

Table 7: Trade and Labour Standards

TEXT	TRADE AND LABOUR STANDARDS		
Case, Fair, Strain and Veall (2002)	Mentioned in Case Study (p.538) as issue of concern to protestors in Seattle, and in 'questions for analytical thinking') as an issue raised in Seattle by the U.S.		
Colander, Sephton and Richter (2003)	Nothing on labour standards. Brief mention on impact of globalization on jobs, and its relation to labour costs, pp.309-310.		
Frank, Bernanke, Osberg, Cross and MacLean (2003)	A phrase on how "some opponents of NAFTA" "also feared that Mexico would not honour Canadian and U.S. labour standards" (p.70) – no discussion of whether this is a real issue.		
Lipsey and Ragan (2001)	Mentioned as a "hot policy issue" (p.853), but what the problem is remains unexplained. Claims it shouldn't be included in trade agreements; instead strengthen the ILO. No mention with respect to NAFTA.		
Mankiw, Kneebone, McKenzie and Rowe (2002)	Nothing.		
McConnell, Brue and Barbiero (2002)	Not much on trade and labour standards; says trade too important to be linked to such issues; lists labour unions among anti-WTO protest group and advises them to direct their political efforts toward nations with lax labour laws (p. 426).	2	
Parkin and Bade (2003)	No mention of 'labour standards'.	0	

Table 8: Trade and Developing Countries

TEXT	TRADE, GROWTH, AND DEVELOPMENT		
Case, Fair, Strain and Veall (2002)	A phrase (p.510) on LDC dependence. Discussion of the reasons for the failure of import substitution as a development policy (pp.522-523); some discussion of North-South issues and developing country interests in int'l trade negotiations (pp.537-538)		
Colander, Sephton and Richter (2003)	Nothing. Discussion of tariffs as revenue source for developing countries' governments, but it's claimed that "most economists discount" this, apparently favouring unilateral free trade for these countries (p.420).		
Frank, Bernanke, Osberg, Cross and MacLean (2003)	No discussion of development issues.		
Lipsey and Ragan (2001)	Extensive discussion, Ch.33. Discussion of TNCs placed here (all advantages, no disadvantages). Claims consensus about the 'Washington Consensus' (p.813), the only issue: are its prescriptions "sufficient or just necessary" (p.814). Detailed, but somewhat one-sided. Weblink to Sachs' critique of IMF/World Bank.		
Mankiw, Kneebone, McKenzie and Rowe (2002)	Nothing.		
McConnell, Brue and Barbiero (2002)	Nothing, except for a general statement that developing countries are better off with open economic policies than with import restrictions (p. 425).		
Parkin and Bade (2003)	Effects on wages in developing countries (p.800) refutes idea of 'exploitation'; "rapid income growth through free trade" is Mexico's "best hope for a better environment" (p.799). In <i>Macroeconomics</i> , p.716: "free international trade stimulates growth". (No evidence cited.)		

Table 9: Regional trade agreements: the FTA and NAFTA

TEXT	CANADA-U.S. FTA/NAFTA			
Case, Fair, Strain and Veall (2002)	Mentioned (p.505), then a page-long box (p.506) on FTA and NAFTA; summaries of views of supporters and opponents.			
Colander, Sephton and Richter (2003)	Brief mention in the context of other free trade associations (pp.73, 427). No real evaluation.			
Frank, Bernanke, Osberg, Cross and MacLean (2003)	Brief mention p.70, with no institutional detail. Two paragraph summary of views of NAFTA opponents; no summary of views of its supporters (assumed to be the comparative advantage logic?). No trade flow data and other descriptive data.			
Lipsey and Ragan (2001)	Extensive discussion (pp.856-860) of provisions, industry case study, review of post-FTA trade disputes; 'free trade debate' (critics get one sentence). Very positive overall evaluation; no discussion of gains from trade in this case – just notes growth in trade volume.			
Mankiw, Kneebone, McKenzie and Rowe (2002)	Very brief mention (p. 196).			
McConnell, Brue and Barbiero (2002)	A brief description of NAFTA, refutes the 'pessimism' of critics by claiming that the unemployment rate in Canada sunk from 10 to 7, and that NAFTA has enhanced the standard of living in the three countries.			
Parkin and Bade (2003)	Canada-U.S. FTA/NAFTA (pp.798-799; 802-803): FTA terms set out; NAFTA extension described; half-page evaluation of effects: mentions changes in trade flows; changes in jobs in Canada. One-sided.			

<u>Table 10:</u> <u>FINAL RANKING</u>

Performance	Part 1: Welfare Economics, Citations, Free Trade vs. Protection	Part 2: Globalization and related issues; FTA/ NAFTA	Overall
Satisfactory	Case, Fair, Strain, Veall (2002) Lipsey and Ragan (2001) Frank, Bernanke, Osberg, Cross and MacLean (2003)	Lipsey and Ragan (2001) Case, Fair, Strain, Veall (2002) Frank, Bernanke, Osberg, Cross and MacLean (2003)	Lipsey and Ragan (2001) Case, Fair, Strain, Veall (2002) Frank, Bernanke, Osberg, Cross and MacLean (2003)
Unsatisfactory	Mankiw, Kneebone, McKenzie, and Rowe (2002) Colander, Sephton, and Richter (2003) Parkin and Bade (2003) McConnell, Brue and Barbiero (2002)	Parkin and Bade (2003) McConnell, Brue and Barbiero (2002) Colander, Sephton, and Richter (2003) Mankiw, Kneebone, McKenzie, and Rowe (2002)	Parkin and Bade (2003) McConnell, Brue and Barbiero (2002) Colander, Sephton, and Richter (2003) Mankiw, Kneebone, McKenzie, and Rowe (2002)