

RESEARCH ON THE "COST OF NON-EUROPE"

BASIC FINDINGS

VOLUME 16

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THE INTERNAL MARKETS
OF NORTH AMERICA

FRAGMENTATION AND INTEGRATION
IN THE US AND CANADA

Document

COMMISSION OF THE EUROPEAN COMMUNITIES

This publication was prepared outside the Commission of the European Communities. The opinions expressed in it are those of the author alone; in no circumstances should they be taken as an authoritative statement of the views of the Commission.

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**The Internal Markets of North America.
Fragmentation and Integration in the US and Canada**

by

**Jacques Pelkmans
in cooperation with Marc Vanheukelen**



THE INTERNAL MARKETS OF NORTH AMERICA

fragmentation and integration in the US and Canada

Executive Summary

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Report, written for the project 'The costs of Non-Europe'

PREFACE

The Commission of the EC, strongly supported by the European Parliament, has initiated a project on 'The costs of non-Europe', and the benefits of "completing" the Community's Internal Market by the end of 1992. The steering committee, chaired by Mr Paolo Cecchini, decided that the work could benefit from an exploratory study of the Internal Markets of the US and Canada, in particular, their remaining 'incompleteness' as well as the costs and benefits.

The present paper aims to analyze the nature of the Internal Market of the USA, with special attention for its remaining fragmentation, and that of Canada, with its fragmentation too, as well as the nature and scope of non-tariff barriers and other distortions discussed in the Canada-US free trade area talks. A second objective is to come to an assessment of costs and benefits of the barriers inside the two Internal Markets of the USA and Canada, respectively, as well as the costs and benefits of the Canada-US free trade area for the Canadian economy.

The assignment is to provide an exploratory study, not a fully-fledged research product nor a very detailed and minute comparison. A major limitation of the paper is that no original research was conducted. The basis of the following is literature, interviews and discussion.

The author is indebted to numerous Canadian and US civil servants, academic experts and specialists, who generously helped to gather material and to improve the understanding of the many intricate aspects of market integration in their countries. Special thanks are due to Mark Vanheukelen (DG II, EC Commission). His painstaking efforts to clarify lots of detailed pieces of economic regulation have been indispensable. His insightful analytical survey of the empirical economic studies on the impact of the US-Canada free trade area on the Canadian economy has greatly increased the quality of this report. Needless to emphasize, however, that only the author is responsible for any errors or omissions.

EXECUTIVE SUMMARY AND CONCLUSIONS

1. In the framework of the research project 'The costs of non-Europe' it was considered useful to dispose of a study of the Internal Market arrangements in the US and in Canada as well as the recent endeavour of the two countries to establish one North American market. A second objective is to provide, whenever possible, a cost/benefit assessment of still existing 'barriers' in the two countries and of the removal of 'barriers' between the two neighbours. Since the free trade area agreement implies an enormous market enlargement for Canada, the latter cost/benefit analysis will concentrate on the Canadian case.

2. The assignment is to provide an exploratory study. The report summarized below is not a fully-fledged research product, as no original research was conducted and sourcing, interviews and the processing of literature and material were limited by time constraints.

3. The main features of the report are four:
 - o the context of market integration in the US and in Canada
 - o a comparative description of seven 'barriers' within the two Internal Markets
 - o an assessment of the market fragmentation caused by each 'barrier', and its costs, where possible
 - o an assessment of the (net) economic benefits of North American market integration, especially for Canada.

4. The context of market integration in the two countries studied differs considerably from that of the European Community today, or even from the EC in 1993. It is also important to appreciate essential contextual differences between the US and Canada. The report highlights a number of non-economic factors, such as demographic and geographic determinants of market size, some essential historical, constitutional and legal characteristics, and key political values. Although the factors are not elaborated, it is crucial to take them into account before any possible lesson is drawn from the assessments.
5. The Internal Markets must also be placed in a wider economic context before a proper evaluation of the nature and degree of market integration and fragmentation can be made. The allocative function of government - exercised by the choice between the market mechanism on the one hand and the options of regulation and intervention in markets on the other hand - is not fully centralized in the two federations. However, the degree of delegation of allocative functions to the market and the degree of decentralization of regulation/intervention interact with two other economic functions of government: redistribution and macro-economic stabilization. The nature and degree of market integration depend on this interaction, and not solely on allocative decisions.
6. Both Canada and the US have centralized their macro-economic stabilization policies. They each have one money and the federal government's budget carries a large weight in the national economy. There are no internal exchange controls and the money and capital markets are fairly well-integrated. Nevertheless, fiscal policy is not fully centralized and this gives rise to both macro-economic and allocative issues. The federal governments also assume certain general redistributive functions both directly and via (co-)financing welfare programmes at subcentral level. In both countries this central function is closely linked to labour mobility as citizens anywhere in the nation are always entitled to equal and free access to social security and related benefits.

7. The seven categories of 'barriers' were selected in prior consultation with the Commission in view of their prominence in the White Paper and their expected importance in the two countries. 'Barriers' are defined as impediments to or artificial encouragements of economic mobility between States or Provinces. For a discussion of the concept used, the reader is referred to section 4.1. The seven categories of barriers selected are: (in) taxation, public aid, discriminatory public procurement, (in) financial services, technical barriers, (in) labour mobility and (in) transport.
8. An elaboration of these barriers for both countries is not possible in the executive summary. Nonetheless, without some basic description, the assessment cannot be explained at all. A compromise is presented in Table EX-1, providing a highly condensed presentation of the comparative analysis in the chapters 5 and 6 of the report. The reader is warned that this material does not lend itself very well to such compression; for a proper understanding it remains indispensable to consult the main text.
9. Very little research on the quantitative economic costs (and benefits, if any) has been conducted on the intra-US 'barriers'. For Canada some simple static estimates exist. Therefore, the report discusses internal 'barriers' in the two countries almost entirely in qualitative terms. Hence a 'ranking' of barriers in terms of costs is not possible and the following impressions are inevitably partly subjective.
10. In Canada, the most costly 'barriers' are likely to be excises on alcoholic beverages (including the restrictions of provincial liquor boards); the administrative burden on road haulage flowing from the enforcement of the destination principle in fuel taxes; provincial subsidy competition; and the administrative burden on road haulage flowing from provincial entry regulation and registration fees. It is uncertain whether discriminatory public procurement is so costly to the economy. Interprovincial tax competition in Canada is unimportant in the retail sales tax and personal income tax and more

TABLE EX-1
THE INTERNAL BARRIERS IN CANADA AND THE US:
a summary of facts and costs

'barriers' or sector	CANADA	USA
1. <u>taxation</u>		
- sales	<p>provinces levy retail sales tax; rates vary from 0% to 12%; Ontario 7%; Quebec 9%, distances prevent major distortions; fiscal cross-border shopping is exceptional.</p>	<p>states and local authorities levy retail sales tax; rates (incl. local) vary from 0% to 9%; many states exempt various basic needs, but often in different ways; certain states tax services, others don't; geographical distribution and distances prevent major distortions; only few identifiable cases of fiscal cross-border shopping.</p>
- excises	<p>excises differ among provinces but the main issues are with alcoholic beverages and motor fuel; local preferences through liquor boards' rules are combined with restrictions to minimize cross-border shopping; wine and spirits excises can be much higher than in the US; fuel excises differ also but the major concern of provinces is that miles travelled by trucks in a province are roughly proportional to fuel bought locally (via extra administrative controls).</p>	<p>states levy excises especially on cigarettes, alcoholic beverages and motor fuel; state cigarettes excises vary from 2 cents a pack up to 29 cents; large scale cigarette bootlegging is a federal crime; individual cross-border shopping is accepted and can be substantial; spirits excises differ enormously from \$1.50 to \$6.50 (often combined with state monopoly systems); random checks on cross-border shopping of all alcoholic beverages; state motor fuel excises vary from 8 cents to 19 cents a gallon, with cumbersome fuel use administration for trucks (per state).</p>

- corporate provincial rates vary from 10% to 16%; federal tax collection agreement for 7 smaller provinces (i.e. identical base); there is uniformity for multi-provincial firms in apportioning tax revenue among provinces. state (marginal) rates vary from 0% to 11,5%, ignoring all kinds of special cases; however, states compete via exemptions, too; 5 states have no corporate tax; unitary taxation is not forbidden, though strong pressures discourage it somewhat; altogether, interstate corporate tax competition has reduced average state corporate tax revenue below 5% of all state revenues.

- personal income rates vary somewhat among provinces; base is harmonized through federal tax collection agreement (exc. Québec); progressivity structure is similar; provincial tax credits may differ but not much. rates vary considerably among states, the highest marginal rates ranging from 10% to 13,5% in nine states and lower in other (before the recent tax reforms; to be reduced to four) states; seven states have no personal income tax and three levy only a tax on interest & dividends; state/local income tax is deductible for federal income tax purposes (reducing the impact of interstate tax competition); federal and states' tax base not harmonized.

- 2. public aid
 - subsidies vigorous subsidy competition among provinces; no federal supervision via Ottawa or the Supreme Court; great variety of instruments, frequently 'off-budget' (via 'crown' corporations or special funds); subsidy competition is reduced via federal regional programmes. all states have inward-investment promotion activities, but direct state aids are very modest, major instruments are infrastructural, easier access to capital and various tax exemptions; many states' laws forbid production subsidies; commerce clause enforcement is another major constraint.

 - tax breaks numerous; limits (for corporate tax breaks) are set by the federal numerous; especially on construction, initial outlays for plant and

collection agreement for physical capital; also the 7 smaller provinces, excise and income tax (for but not for the three immigrating business bigger ones (as they opted executives) exemptions are out) used.

3. procurement
- formal

complete constitutional around 20 states have freedom for provinces to preference laws (up to 5% purchase preferentially; price differential in provincial laws usually set bids); states as purchasers are normally not maximum price differences for tendering constrained by the procedures. commerce clause.

- informal

the formal leeway is there are many anecdotes materially reduced by about informal pressures; interprovincial sensitivities and tax payers' tax payers' consciousness in the US is very high, consciousness; nevertheless, and blatant numerous informal discrimination (if costly) local content requirements can be politically or 'understandings' are damaging (Note: state reported. (Note: the purchases are small provincial purchases are compared to EC Member States as major purchase categories are private in Canada or federal).

4. financial services
- banking

nation-wide operations banks can be chartered at with, however, quite some federal or at state level; provincial regulation; no most supervision is nation-wide freedom to federal, but assigned to a supply cross-border handful of institutions in banking services; a complex setting (savings efficient national and loans as well); frag- clearing; different mentation arises out of banking functions were crippling branching regulated at federal level restrictions: there are (banks) and provincial many thousands of 'unit' (near-banks and banks with no branches at securities); recent all; interstate branching deregulation upset this is forbidden, with groups of states sometimes the capital market is truly allowing exceptions; nation-wide and open to intra-state branching the world; there are 4 prohibitions still exist stock exchanges in the in a number of states. For country; the banks are few the many complexities this

in number (5 big ones attract most business) but competition is fierce. 6.2.2. Pressures to reduce this fragmentation are strong: they originate from financial stability concerns, technology, business strategies and consumer sources. The costs of fragmentation have probably decreased for consumers due to technology, but financial instability costs are still high.

- insurance most regulation at provincial level; some at federal level; far-reaching harmonization between provinces has been achieved via uniform laws proposed by the Association of (provincial) Super-intendents of Insurance, close collaboration between industry and regulators at federal level, and delegation of the control of the financial integrity of insurers to the federal Dept. of Insurance; in this way, formal provincial powers have nevertheless enabled effective market integration in insurance, with considerable standardization and mutual recognition and 'home province control' where necessary. regulated at state level since Congress has explicitly allowed for this. Licensing of insurers and brokers per state and divergent state regulations lead to serious fragmentation, although formally the freedom of services is nation-wide. States refuse 'home state control', so super-vision is expensive and duplicative. Regulation extends to rates (at times very strict), solvency, insurance products, taxes and fees, and licensing - there is reciprocity for licensing agents and brokers. Costs are further increased by almost permanent legislative drift in many states (recently again in response to the problems in product liability insurance).

5. technical barriers

formally, provinces have substantive regulatory powers; yet, apart from road haulage and a few instances in agriculture, there appear to be few problems in technical regulations. Standards are mostly nation-wide; so is certification. although standard writing is (privately) organized in an extremely complicated way, the issues arising are in the antitrust area, not so much in differences among states regulations themselves, or the standards they refer to.

Standards are nation-wide. The major exception is in the building codes. Nevertheless, the commerce clause should not be considered as preventing differences in technical regulations from arising at all, and this can be costly in individual cases.

6. labour mobility

- general access to labour markets constitutional rights to travel and to migrate; recourse to provincial social security/services; nation-wide public pension; incomplete portability of private pensions; some cases of preferential provincial hiring of labour. constitutional rights to travel and to migrate; recourse to state social security/services; fairly strict case law to prevent preferential hiring.

 - professions extensive regulation of professional licensing at provincial level; sometimes the local professional organizations decide on admission; minimum residence requirements are rarely costly (but some are); barriers are serious for lawyers, pharmacists and surveyors, as well as for certain skilled craftsmen; university education is to federal standards in many cases (although restrictions exist in the medical field). extensive regulation of professional licensing at state level; dependent on state and professions, restrictions can vary from trivial to very serious; however, higher education in many cases is federally oriented or to federal (university) standards (yet, some states require local exams in some professions); mutual recognition exists in some cases, not in other - there is no general rule.
- (Note: mobility is actually substantial). (Note: mobility is actually substantial).

7. transport

- registration At provincial level; until '82 license plates for every province; now there is 'home-province control' with mutual provincial recognition of the home plate, with an inter- At state level; registration reciprocity is widespread; registration 'fees' competition is reduced in 'compacts' (more than 30 states), with fees shared

- provincial clearing based on miles travelled per province (i.e. an administrative burden). acc. to miles travelled (i.e. an administrative burden).
- fuel fuel taxes differ among provinces; the real problem is the destination principle; fuel tax revenues are shared out among provinces according to miles travelled in the province(s), which imposes cumbersome administrative requirements for road haulage. as in Canada, the destination of the fuel tax revenue is the key issue; truckers are held to fill tanks proportional to miles travelled in the various states (or pay the excise anyway), and file forms and accounts proving this; random checks are regularly held.
 - other licensing before entering the road haulage sector takes place at provincial level (stricter regulations for out-of-province truckers are sometimes validated by the Supreme Court, which reduces the cabotage right). 43 states have not deregulated on intra-state transport incl. entry barriers and 'fair competition' rules which can be peculiar; they can create some costs for firms operating nationwide; property taxes and sales taxes on trucks differ; on axle/distance taxes, there is even tax retaliation among certain states.

NOTE: For a proper evaluation, this list of barriers should be read together with the assessment in the text. The economic context, the benefits and minor costs are not indicated in this summary. Details are ignored.

pronounced for corporate taxes. Financial services present some complications but in reality, fragmentation has been largely prevented. The costs of having formal provincial powers in insurance are negligible as harmonization is almost complete. There are hardly any problems with securities, but near-banks cause regulatory and supervisory costs. Technical barriers are exceptional in Canada. Migration for the professions can be onerous in some cases; uncertainty exists because of local admission procedures.

11. In the US, the most costly 'barriers' include interstate tax competition in general, interstate branching prohibitions in banking, state regulation in direct insurance and administrative burdens connected to interstate road transport arrangements.

Interstate tax competition is so fierce in the US that it covers almost any conceivable tax, including death taxes and gambling taxes. In sales taxes there is only a moderate spread of rates, but this is likely to be related to transaction costs for non-marginal cross border shopping, given the absence of fiscal frontiers (so, one could argue that sales tax competition is also fierce but restrained by open borders). In excises, competition is stronger, and complemented by non-fiscal (f.i. administrative) measures to secure tax revenues for the state of consumption. These measures even lead to cooperation among the States and, in cigarettes, to federal law enforcement for the States' purposes! In corporate and personal income matters, tax competition is strong; in corporate taxes, exemption policy and other tax breaks play a role as near-subsidies. State subsidies are of trivial importance and public procurement discrimination seems only marginally more costly. Technical barriers in interstate commerce are effectively minimized (if not removed) by commerce clause case-law but, to some extent, state technical regulation and their differences may still lead to higher costs for multi-state business; standards and certification present few problems, however. Interstate mobility of the professions sometimes seems to be hampered by overly strict regulation, including licensing and supervision. Since national standards for professions and university education are well-accepted, mobility costs are generally not increased more than marginally.

12. Finally, in both countries incidental 'barriers' can be identified outside the selected group of seven categories. They remain outside the scope of this report (for an impression of this problem, see sections 5.1 and 6.1).
13. A cost/benefit perspective of the fragmentation and integration of the internal markets of the US and of Canada requires, however, a broader set of criteria. Looking strictly to 'barriers' as impediments to access to state/provincial markets or as artificial encouragement of inward economic mobilities might provide a singular emphasis on 'costs'. From this angle, 'benefits' would be identified only for sectoral or regional interests, with the national economy presumably suffering an overall welfare loss. Given the nature of the Commission's research project 'The costs of Non-Europe', this report does not address the benefits of sectoral groups.
14. The problem is quite different with regional interests. Of course, at regional level sectoral lobbies will attempt to present their case in terms of 'regional' benefits. If and only if this is all there is to the political economy of 'barriers', the mere concentration on costs to the national economy would be proper. But in federal countries, this cannot always be correct. It is conceivable to design a model federal country where market integration is complete, and where subcentral governments are only involved in purely regional expenditure and regulation (with no spill-over effects to other subcentral economies). Neither the US nor Canada fully respond to this model. Since they do not, 'barriers' must be presumed to generate certain 'benefits', as elements of political support to the federalist structure of government.
15. If there are 'benefits' of plurality, variety or diversity, two questions emerge in the context of this report:
 - (a) given the constitutionally assigned powers and politically agreed division of labour between the central and the subcentral governments - i.e. the 'benefits' - are these powers utilized in such a way as to achieve the highest degree of market integration? In other words, given the 'benefits' of a federal structure, are the 'costs' of fragmentation minimized?

- (b) The 'benefits' of diversity may include more than the satisfaction of having one's own regional government with some powers to satisfy local preferences. To what extent, then, do regional regulation and intervention (in the US and Canada) yield benefits to the national economy, that are not captured by the focus on their distortive nature as 'barriers'?
16. If the immaterial, but genuine, 'benefits' of a federal structure are expressed in regional competences with a market-fragmenting potential, the issue is one of cost minimization. A variety of approaches are used in the two countries.
- o federal judicial review on the kind of measures, allowed to affect market integration; in the US the commerce clause case-law goes very far in protecting interstate commerce from state measures; in Canada, the interprovincial economic mobilities are also protected but there is more attention to preserve the effective economic powers of the provinces (the 'benefits').
 - o a complementary factor in both countries is the threat of federal preemption, possible under the constitution but not utilized so as to increase the 'benefits' of decentralization. The threat tends to become more credible as the costs of fragmenting subcentral measures increases, thereby having the effect of curbing local protectionist pressures. In the insurance market in the US, states can only retain current powers if they find mechanisms keeping the costs of fragmentation acceptable, so that federal pressure to preempt does not build up. In the US banking market, interstate branching prohibitions in federal laws have been threatened a number of times; in the distant past, new measures bordering on the problem have been used as palliatives (federal deposit insurance being one); during the last few decades more and more routes of evasion have been agreed or condoned at federal level, leading at state level to a measured relaxation of the prohibition as a response since 1985. In Canada, the federal government delegated road transport regulation to the provinces in the early 1950's and the mounting irritation about the costs of fragmentation (against the backdrop

of a constitutional debate on an 'economic bill of rights' guaranteeing market integration) forced the provinces to reduce these costs in the early 1980's.

- o cooperation among the States or Provinces. For subcentral governments this has the advantage of retaining powers (and, whenever relevant, tax revenues), while reducing fragmentation, duplication or harmful competition. Both countries have developed legal techniques that greatly reduce costly differences in regional laws and procedures: the major instrument is Uniform Law Codes, but sometimes uniform insurance policies exist or identical procedures. Cooperation may extend to 'mutual recognition' (e.g. licensing insurance brokers in US States) but not frequently (e.g. rarely in licensing insurers). Mutual recognition is approximated, however, in cases where national standards (technical; diploma's) are used as references in regional laws; some costs remain in such cases, as licensing procedures may still be required. Cooperation is also developing in joint institutions (cf. solvency investigation of non-US insurers by the NAIC, seeking licenses in a State), in interstate compacts (sharing truck registration fees, for instance, or, allowing limited reciprocal interstate bankbranching) and in joint lobbying organisations (promoting federal-subcentral cooperation so as to reduce fragmentation or enhance 'harmonization'). Cooperation can go as far as delegating administrative execution (tax collection agreements in Canada; some insurance controls in Canada) or enforcement power (checks on cigarette bootlegging in the US) to the federal government. In the case of administrative execution this increases uniformity as a condition to the federal task (e.g. a uniform tax base). In the case of cigarette bootlegging, however, it has reduced the constraint of (illegal) cross-border trade, thereby increasing the freedom of the States to raise excises.

17. Are there other benefits of regional powers to the national economy, that are not captured by the focus on their distortive nature as 'barriers'? If so, they would have to be weighed against the 'costs' of barriers. The report does not discuss this question in any detail.

For a good understanding of how Canadians and Americans perceive the cost/benefit issue, it is nevertheless valuable to identify briefly these other benefits. This may well have some relevance to the Community's own assessment of costs and benefits of the 'remaining' fragmentation of its Internal Market.

- o under appropriate conditions, the combination of a high degree of market integration with some remaining subcentral powers generates the benefits of 'competitive federalism'. The idea is that citizens and firms can signal dissatisfaction with taxes, public goods and services and regulation by interstate/provincial migration. Subcentral governments may also compete with respect to the nature and intensity of interventions in the goods and services markets, setting different objectives or imposing different costs for given targets. More generally, subcentral government performance is subject to competitive challenges from other subcentral governments, and this may prompt policies to be more responsive. In the Padoa- Schioppa report this idea is echoed as 'competition-among-rules'. The benefits flowing from such competition cannot be available when central powers are the alternative. On the other hand, for the benefits to materialize, a fairly high degree of market integration must be achieved (especially for factors of production) for migration to serve as a disciplining factor. This applies, mutatis mutandis, to product and services market integration. In other words, in the EC context, the completion of the White Paper is essential before this benefit could be enjoyed. Note that neither in the US nor in Canada competition among rules, among tax regimes and public goods has led to a removal of diversity, or to overall 'low standards' of whatever activity. For instance, tax competition accentuates diversity while at the same time finding a minimum standard in the desired ability everywhere to provide good infrastructure, certain merit goods and certain public goods.
- o decentralization fosters innovation, which may or may not spread according to its attractiveness. This is a longstanding argument against coordination or centralization. The argument is used to rationalize powers which currently carry some costs in terms of fragmentation. However, it cuts two ways. The mobility of the

professions in the US regulated is stricter than necessary, due to rapid interstate imitation of 'innovations', thereby having made interstate mobility more costly. On the other hand, where deregulation is proving successful, a possibly beneficial side-product of spreading regional deregulation is improved market integration (cf. banking in Canada, led by Québec; road transport deregulation in the US).

- o finally, and not surprising for federalist countries, in a number of policy areas, the mere avoidance of central policies or regulation is perceived as a benefit, worth some costs of fragmentation. In Canada this point is related to the peculiar economic geography of the country (chapter 2 and section 5.1), which causes federal sectoral policies to benefit certain clearly identifiable provinces at the expense of other equally clearly identifiable ones. However, in both countries, there are also political objections which fall outside the scope of this report.

18. The recently signed but still not ratified US-Canadian free trade agreement is discussed in the last two chapters.

Three questions are addressed. First, was the expectation borne out that the negotiating parties would move beyond mere free trade to a kind of common market, possibly the only case comparable to the White Paper? The answer is clearly no. Although from a GATT perspective, the agreement is ambitious and may be a helpful exercise for the Uruguay Round, it falls far short of virtually all the major dossiers of the White Paper. Trade in services is not tackled, merely the 'right of establishment' combined with 'national treatment'. The direct investment regime, especially on the Canadian part, is conditional and has significant exceptions. What exactly will happen to the mobility of the profession is unclear. Even in product trade certain restrictions have been 'grandfathered' (i.e. accepted), notably for beer, and others have been relaxed only conditionally and incompletely. On subsidies, no agreement was reached but new rules are nevertheless announced as a basis for 'binding' dispute settlement; however, all this has to be agreed in the next five to seven years. In other words, there are reasons to be sceptical about Congress's willingness to give up its power of countervailing duties

before March 3, 1988 (the deadline of the 'fast track' procedure) without having the slightest idea about the principles and the rules on subsidies.

19. Second, the North American free trade area (NAFTA) negotiations called forth the question whether states and provinces would give up regulatory and subsidy powers for the sake of bilateral economic intercourse, although these powers are on the whole seen as essential to federalism. The short answer is that subcentral governments, especially in Canada, have informally influenced the negotiations in such a way that competences have hardly or not been undermined. Possibly, NAFTA may force provinces and states to exercise their economic powers in a less costly fashion. Thus, it is conceivable that the cost minimization, discussed in para. 16 (infra), is facilitated by bilateral or multilateral liberalization, if only it is stringent enough. However, it does not imply that the assignment of economic competences to the two levels of government in both federations is called into question.

20. The third reason to study NAFTA is the rich Canadian economic debate on the impact of the enormous market enlargement it implies for Canada. The economic methodology as well as the orders of magnitude found are of obvious interest to the 'cost of non-Europe' project. Methodological issues are especially important as Canadian economists have published path-breaking work on NAFTA, using general equilibrium models with economies of scale and imperfect competition (here: price collusion behind protection). This also enables to break out of the narrow confines of traditional partial-equilibrium estimates (based on 'welfare triangles'), which are known to yield too low estimates of welfare effects of trade liberalization, given their assumptions.

21. Chapter 8 discusses in some detail (adapted) partial equilibrium estimates, general equilibrium model estimates and those from large macro-econometric models, including some methodological issues. For the purpose of this study it is important that these different approaches produce empirical estimates much larger than the simple traditional approaches. Nevertheless, the empirical problems are

considerable: general equilibrium model estimates vary but go up to a high of 9% GDP increase, whereas the macro-econometric estimates (after 10 years) move between 1.9% and 3.3% GNP increase (as well as different employment increases). Amongst a number of empirical puzzles one has to solve when using these models, the proper calculation of the 'height' of 'non-tariff barriers' in the product market - not to speak of services or factors - and the assumed reactions on their removal stand out as particularly difficult. All in all, the work on the economic impact of NAFTA on Canada supports the methodological direction of the 'Costs of Non-Europe' project with respect to the goods markets and the empirical results for Canada lend plausibility to the range of estimates on the EC of 1992.

THE INTERNAL MARKETS OF NORTH AMERICA

fragmentation and integration in the US and Canada

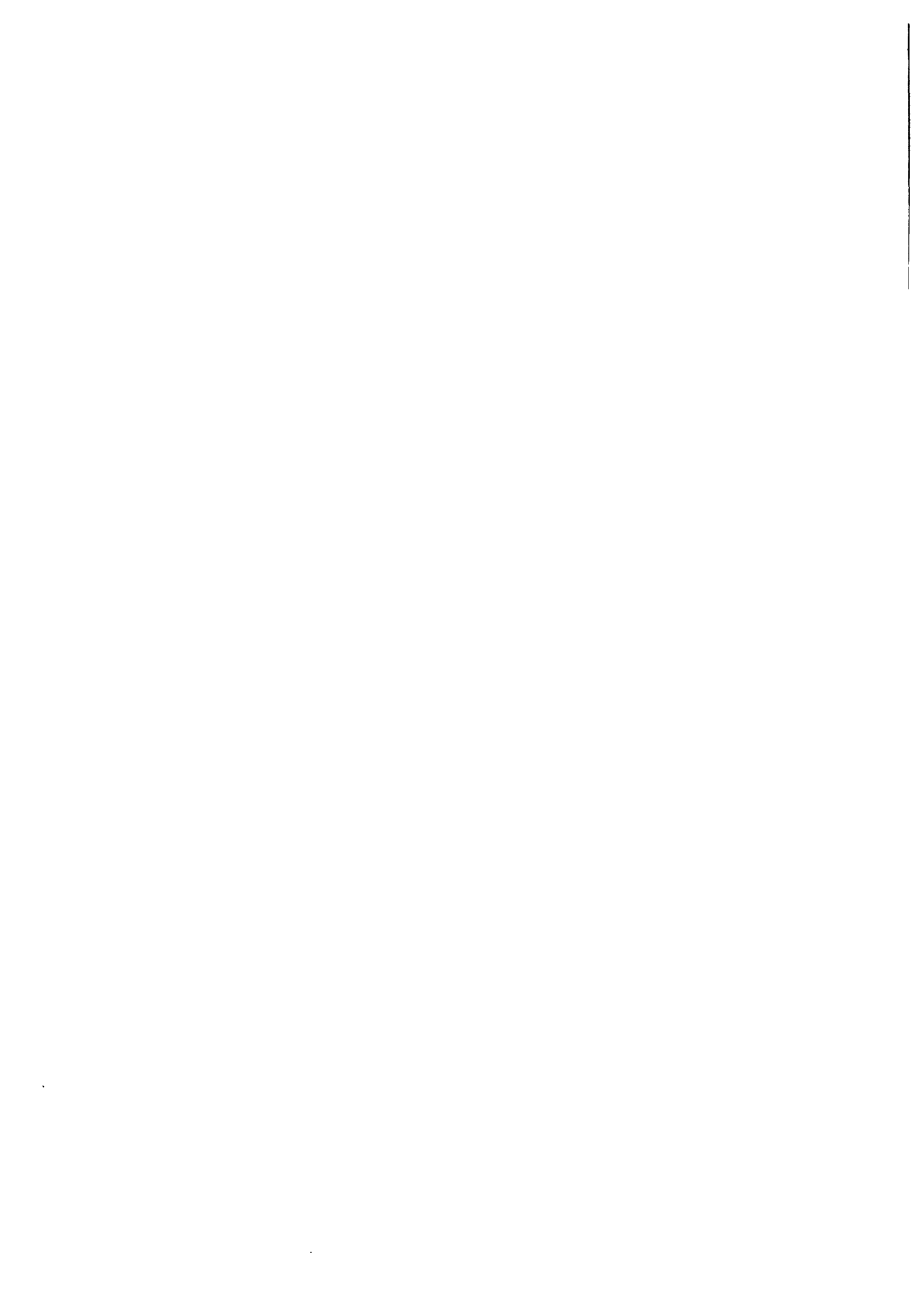
Full Report

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European Institute of Public Administration

in cooperation with Marc VANHEUKELEN,
Commission of the European Communities

Report, written for the project 'The costs of Non-Europe'



III

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EXECUTIVE SUMMARY AND CONCLUSIONS

1. In the framework of the research project 'The costs of non-Europe' it was considered useful to dispose of a study of the Internal Market arrangements in the US and in Canada as well as the recent endeavour of the two countries to establish one North American market. A second objective is to provide, whenever possible, a cost/benefit assessment of still existing 'barriers' in the two countries and of the removal of 'barriers' between the two neighbours. Since the free trade area agreement implies an enormous market enlargement for Canada, the latter cost/benefit analysis will concentrate on the Canadian case.
2. The assignment is to provide an exploratory study. The report summarized below is not a fully-fledged research product, as no original research was conducted and sourcing, interviews and the processing of literature and material were limited by time constraints.
3. The main features of the report are four:
 - o the context of market integration in the US and in Canada
 - o a comparative description of seven 'barriers' within the two Internal Markets
 - o an assessment of the market fragmentation caused by each 'barrier', and its costs, where possible
 - o an assessment of the (net) economic benefits of North American market integration, especially for Canada.

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4. The context of market integration in the two countries studied differs considerably from that of the European Community today, or even from the EC in 1993. It is also important to appreciate essential contextual differences between the US and Canada. The report highlights a number of non-economic factors, such as demographic and geographic determinants of market size, some essential historical, constitutional and legal characteristics, and key political values. Although the factors are not elaborated, it is crucial to take them into account before any possible lesson is drawn from the assessments.

5. The Internal Markets must also be placed in a wider economic context before a proper evaluation of the nature and degree of market integration and fragmentation can be made. The allocative function of government - exercised by the choice between the market mechanism on the one hand and the options of regulation and intervention in markets on the other hand - is not fully centralized in the two federations. However, the degree of delegation of allocative functions to the market and the degree of decentralization of regulation/intervention interact with two other economic functions of government: redistribution and macro-economic stabilization. The nature and degree of market integration depend on this interaction, and not solely on allocative decisions.

6. Both Canada and the US have centralized their macro-economic stabilization policies. They each have one money and the federal government's budget carries a large weight in the national economy. There are no internal exchange controls and the money and capital markets are fairly well-integrated. Nevertheless, fiscal policy is not fully centralized and this gives rise to both macro-economic and allocative issues. The federal governments also assume certain general redistributive functions both directly and via (co-)financing welfare programmes at subcentral level. In both countries this central function is closely linked to labour mobility as citizens anywhere in the nation are always entitled to equal and free access to social security and related benefits.

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7. The seven categories of 'barriers' were selected in prior consultation with the Commission in view of their prominence in the White Paper and their expected importance in the two countries. 'Barriers' are defined as impediments to or artificial encouragements of economic mobility between States or Provinces. For a discussion of the concept used, the reader is referred to section 4.1. The seven categories of barriers selected are: (in) taxation, public aid, discriminatory public procurement, (in) financial services, technical barriers, (in) labour mobility and (in) transport.
8. An elaboration of these barriers for both countries is not possible in the executive summary. Nonetheless, without some basic description, the assessment cannot be explained at all. A compromise is presented in Table EX-1, providing a highly condensed presentation of the comparative analysis in the chapters 5 and 6 of the report. The reader is warned that this material does not lend itself very well to such compression; for a proper understanding it remains indispensable to consult the main text.
9. Very little research on the quantitative economic costs (and benefits, if any) has been conducted on the intra-US 'barriers'. For Canada some simple static estimates exist. Therefore, the report discusses internal 'barriers' in the two countries almost entirely in qualitative terms. Hence a 'ranking' of barriers in terms of costs is not possible and the following impressions are inevitably partly subjective.
10. In Canada, the most costly 'barriers' are likely to be excises on alcoholic beverages (including the restrictions of provincial liquor boards); the administrative burden on road haulage flowing from the enforcement of the destination principle in fuel taxes; provincial subsidy competition; and the administrative burden on road haulage flowing from provincial entry regulation and registration fees. It is uncertain whether discriminatory public procurement is so costly to the economy. Interprovincial tax competition in Canada is unimportant in the retail sales tax and personal income tax and more

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TABLE EX-1
THE INTERNAL BARRIERS IN CANADA AND THE US:
a summary of facts and costs

'barriers' or sector	CANADA	USA
1. <u>taxation</u> - sales	provinces levy retail sales tax; rates vary from 0% to 12%; Ontario 7%; Quebec 9%, distances prevent major distortions; fiscal cross-border shopping is exceptional.	states and local authorities levy retail sales tax; rates (incl. local) vary from 0% to 9%; many states exempt various basic needs, but often in different ways; certain states tax services, others don't; geographical distribution and distances prevent major distortions; only few identifiable cases of fiscal cross-border shopping.
- excises	excises differ among provinces but the main issues are with alcoholic beverages and motor fuel; local preferences through liquor boards' rules are combined with restrictions to minimize cross-border shopping; wine and spirits excises can be much higher than in the US; fuel excises differ also but the major concern of provinces is that miles travelled by trucks in a province are roughly proportional to fuel bought locally (via extra administrative controls).	states levy excises especially on cigarettes, alcoholic beverages and motor fuel; state cigarettes excises vary from 2 cents a pack up to 29 cents; large scale cigarette bootlegging is a federal crime; individual cross-border shopping is accepted and can be substantial; spirits excises differ enormously from \$1.50 to \$6.50 (often combined with state monopoly systems); random checks on cross-border shopping of all alcoholic beverages; state motor fuel excises vary from 8 cents to 19 cents a gallon, with cumbersome fuel use administration for trucks (per state).

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- corporate provincial rates vary from 10% to 16%; federal tax collection agreement for 7 smaller provinces (i.e. identical base); there is uniformity for multi-provincial firms in apportioning tax revenue among provinces. state (marginal) rates vary from 0% to 11,5%, ignoring all kinds of special cases; however, states compete via exemptions, too; 5 states have no corporate tax; unitary taxation is not forbidden, though strong pressures discourage it somewhat; altogether, interstate corporate tax competition has reduced average state corporate tax revenue below 5% of all state revenues.

- personal income rates vary somewhat among provinces; base is harmonized through federal tax collection agreement (exc. Québec); progressivity structure is similar; provincial tax credits may differ but not much. rates vary considerably among states, the highest marginal rates ranging from 10% to 13,5% in nine states and lower in other (before the recent tax reforms; to be reduced to four) states; seven states have no personal income tax and three levy only a tax on interest & dividends; state/local income tax is deductible for federal income tax purposes (reducing the impact of interstate tax competition); federal and states' tax base not harmonized.

- 2. public aid
 - subsidies vigorous subsidy competition among provinces; no federal supervision via Ottawa or the Supreme Court; great variety of instruments, frequently 'off-budget' (via 'crown' corporations or special funds); subsidy competition is reduced via federal regional programmes. all states have inward-investment promotion activities, but direct state aids are very modest, major instruments are infrastructural, easier access to capital and various tax exemptions; many states' laws forbid production subsidies; commerce clause enforcement is another major constraint.

 - tax breaks numerous; limits (for corporate tax breaks) are set by the federal numerous; especially on construction, initial outlays for plant and

collection agreement for physical capital; also the 7 smaller provinces, excise and income tax (for but not for the three immigrating business bigger ones (as they opted executives) exemptions are out) used.

3. procurement

- formal

complete constitutional freedom for provinces to purchase preferentially; provincial laws usually set maximum price differences for tendering procedures. around 20 states have preference laws (up to 5% price differential in bids); states as purchasers are normally not constrained by the commerce clause.

- informal

the formal leeway is materially reduced by interprovincial sensitivities and tax payers' consciousness; nevertheless, numerous informal local content requirements or 'understandings' are reported. (Note: the provincial purchases are small compared to EC Member States, as major purchase categories are private in Canada or federal). there are many anecdotes about informal pressures; tax payers' consciousness in the US is very high, however, and blatant discrimination (if costly) can be politically damaging (Note: state purchases are small compared to EC Member States as major purchase categories are private in the US or federal).

4. financial services

- banking

nation-wide operations with, however, quite some provincial regulation; no nation-wide freedom to supply cross-border banking services; efficient national clearing; different banking functions were regulated at federal level (banks) and provincial (near-banks and securities); recent deregulation upset this system somewhat; the capital market is truly nation-wide and open to the world; there are 4 stock exchanges in the country; the banks are few banks can be chartered at federal or at state level; most supervision is federal, but assigned to a handful of institutions in a complex setting (savings and loans as well); fragmentation arises out of crippling branching restrictions: there are many thousands of 'unit' banks with no branches at all; interstate branching is forbidden, with groups of states sometimes allowing exceptions; intra-state branching prohibitions still exist in a number of states. For the many complexities this

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in number (5 big ones attract most business) but competition is fierce.

6.2.2. Pressures to reduce this fragmentation are strong: they originate from financial stability concerns, technology, business strategies and consumer sources. The costs of fragmentation have probably decreased for consumers due to technology, but financial instability costs are still high.

- insurance

most regulation at provincial level; some at federal level; far-reaching harmonization between provinces has been achieved via uniform laws proposed by the Association of (provincial) Super-intendents of Insurance, close collaboration between industry and regulators at federal level, and delegation of the control of the financial integrity of insurers to the federal Dept. of Insurance; in this way, formal provincial powers have nevertheless enabled effective market integration in insurance, with considerable standardization and mutual recognition and 'home province control' where necessary.

regulated at state level since Congress has explicitly allowed for this. Licensing of insurers and brokers per state and divergent state regulations lead to serious fragmentation, although formally the freedom of services is nation-wide. States refuse 'home state control', so supervision is expensive and duplicative. Regulation extends to rates (at times very strict), solvency, insurance products, taxes and fees, and licensing - there is reciprocity for licensing agents and brokers. Costs are further increased by almost permanent legislative drift in many states (recently again in response to the problems in product liability insurance).

5. technical barriers

formally, provinces have substantive regulatory powers; yet, apart from road haulage and a few instances in agriculture, there appear to be few problems in technical regulations. Standards are mostly nation-wide; so is certification.

although standard writing is (privately) organized in an extremely complicated way, the issues arising are in the antitrust area, not so much in differences among states regulations themselves, or the standards they refer to.

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Standards are nation-wide. The major exception is in the building codes. Nevertheless, the commerce clause should not be considered as preventing differences in technical regulations from arising at all, and this can be costly in individual cases.

6. labour mobility

- general access to labour markets	constitutional rights to travel and to migrate; recourse to provincial social security/services; nation-wide public pension; incomplete portability of private pensions; some cases of preferential provincial hiring of labour.	constitutional rights to travel and to migrate; recourse to state social security/services; fairly strict case law to prevent preferential hiring.
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- professions	extensive regulation of professional licensing at provincial level; sometimes the local professional organizations decide on admission; minimum residence requirements are rarely costly (but some are); barriers are serious for lawyers, pharmacists and surveyors, as well as for certain skilled craftsmen; university education is to federal standards in many cases (although restrictions exist in the medical field).	extensive regulation of professional licensing at state level; dependent on state and professions, restrictions can vary from trivial to very serious; however, higher education in many cases is federally oriented or to federal (university) standards (yet, some states require local exams in some professions); mutual recognition exists in some cases, not in other - there is no general rule.
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(Note: mobility is actually substantial).	(Note: mobility is actually substantial).
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7. transport

- registration	At provincial level; until '82 license plates for every province; now there is 'home-province control' with mutual provincial recognition of the home	At state level; registration reciprocity is widespread; registration 'fees' competition is reduced in 'compacts' (more than 30
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- plate, with an inter-provincial clearing based on miles travelled per province (i.e. an administrative burden).
- states), with fees shared acc. to miles travelled (i.e. an administrative burden).
- fuel fuel taxes differ among provinces; the real problem is the destination principle; fuel tax revenues are shared out among provinces according to miles travelled in the province(s), which imposes cumbersome administrative requirements for road haulage. as in Canada, the destination of the fuel tax revenue is the key issue; truckers are held to fill tanks proportional to miles travelled in the various states (or pay the excise anyway), and file forms and accounts proving this; random checks are regularly held.
 - other licensing before entering the road haulage sector takes place at provincial level (stricter regulations for out-of-province truckers are sometimes validated by the Supreme Court, which reduces the cabotage right). 43 states have not deregulated on intra-state transport incl. entry barriers and 'fair competition' rules which can be peculiar; they can create some costs for firms operating nationwide; property taxes and sales taxes on trucks differ; on axle/distance taxes, there is even tax retaliation among certain states.

NOTE: For a proper evaluation, this list of barriers should be read together with the assessment in the text. The economic context, the benefits and minor costs are not indicated in this summary. Details are ignored.

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pronounced for corporate taxes. Financial services present some complications but in reality, fragmentation has been largely prevented. The costs of having formal provincial powers in insurance are negligible as harmonization is almost complete. There are hardly any problems with securities, but near-banks cause regulatory and supervisory costs. Technical barriers are exceptional in Canada. Migration for the professions can be onerous in some cases; uncertainty exists because of local admission procedures.

11. In the US, the most costly 'barriers' include interstate tax competition in general, interstate branching prohibitions in banking, state regulation in direct insurance and administrative burdens connected to interstate road transport arrangements.

Interstate tax competition is so fierce in the US that it covers almost any conceivable tax, including death taxes and gambling taxes. In sales taxes there is only a moderate spread of rates, but this is likely to be related to transaction costs for non-marginal cross border shopping, given the absence of fiscal frontiers (so, one could argue that sales tax competition is also fierce but restrained by open borders). In excises, competition is stronger, and complemented by non-fiscal (f.i. administrative) measures to secure tax revenues for the state of consumption. These measures even lead to cooperation among the States and, in cigarettes, to federal law enforcement for the States' purposes! In corporate and personal income matters, tax competition is strong; in corporate taxes, exemption policy and other tax breaks play a role as near-subsidies. State subsidies are of trivial importance and public procurement discrimination seems only marginally more costly. Technical barriers in interstate commerce are effectively minimized (if not removed) by commerce clause case-law but, to some extent, state technical regulation and their differences may still lead to higher costs for multi-state business; standards and certification present few problems, however. Interstate mobility of the professions sometimes seems to be hampered by overly strict regulation, including licensing and supervision. Since national standards for professions and university education are well-accepted, mobility costs are generally not increased more than marginally.

12. Finally, in both countries incidental 'barriers' can be identified outside the selected group of seven categories. They remain outside the scope of this report (for an impression of this problem, see sections 5.1 and 6.1).
13. A cost/benefit perspective of the fragmentation and integration of the internal markets of the US and of Canada requires, however, a broader set of criteria. Looking strictly to 'barriers' as impediments to access to state/provincial markets or as artificial encouragement of inward economic mobilities might provide a singular emphasis on 'costs'. From this angle, 'benefits' would be identified only for sectoral or regional interests, with the national economy presumably suffering an overall welfare loss. Given the nature of the Commission's research project 'The costs of Non-Europe', this report does not address the benefits of sectoral groups.
14. The problem is quite different with regional interests. Of course, at regional level sectoral lobbies will attempt to present their case in terms of 'regional' benefits. If and only if this is all there is to the political economy of 'barriers', the mere concentration on costs to the national economy would be proper. But in federal countries, this cannot always be correct. It is conceivable to design a model federal country where market integration is complete, and where subcentral governments are only involved in purely regional expenditure and regulation (with no spill-over effects to other subcentral economies). Neither the US nor Canada fully respond to this model. Since they do not, 'barriers' must be presumed to generate certain 'benefits', as elements of political support to the federalist structure of government.
15. If there are 'benefits' of plurality, variety or diversity, two questions emerge in the context of this report:
 - (a) given the constitutionally assigned powers and politically agreed division of labour between the central and the subcentral governments - i.e. the 'benefits' - are these powers utilized in such a way as to achieve the highest degree of market integration?

In other words, given the 'benefits' of a federal structure, are the 'costs' of fragmentation minimized?

- (b) The 'benefits' of diversity may include more than the satisfaction of having one's own regional government with some powers to satisfy local preferences. To what extent, then, do regional regulation and intervention (in the US and Canada) yield benefits to the national economy, that are not captured by the focus on their distortive nature as 'barriers'?

16. If the immaterial, but genuine, 'benefits' of a federal structure are expressed in regional competences with a market-fragmenting potential, the issue is one of cost minimization. A variety of approaches are used in the two countries.

- o federal judicial review on the kind of measures, allowed to affect market integration; in the US the commerce clause case-law goes very far in protecting interstate commerce from state measures; in Canada, the interprovincial economic mobilities are also protected but there is more attention to preserve the effective economic powers of the provinces (the 'benefits').
- o a complementary factor in both countries is the threat of federal preemption, possible under the constitution but not utilized so as to increase the 'benefits' of decentralization. The threat tends to become more credible as the costs of fragmenting subcentral measures increases, thereby having the effect of curbing local protectionist pressures. In the insurance market in the US, states can only retain current powers if they find mechanisms keeping the costs of fragmentation acceptable, so that federal pressure to preempt does not build up. In the US banking market, interstate branching prohibitions in federal laws have been threatened a number of times; in the distant past, new measures bordering on the problem have been used as palliatives (federal deposit insurance being one); during the last few decades more and more routes of evasion have been agreed or condoned at federal level, leading at state level to a measured relaxation of the prohibition as a response since 1985. In Canada, the federal government delegated road transport regulation to the provinces in the early 1950's and the mounting

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irritation about the costs of fragmentation (against the backdrop of a constitutional debate on an 'economic bill of rights' guaranteeing market integration) forced the provinces to reduce these costs in the early 1980's.

- o cooperation among the States or Provinces. For subcentral governments this has the advantage of retaining powers (and, whenever relevant, tax revenues), while reducing fragmentation, duplication or harmful competition. Both countries have developed legal techniques that greatly reduce costly differences in regional laws and procedures: the major instrument is Uniform Law Codes, but sometimes uniform insurance policies exist or identical procedures. Cooperation may extend to 'mutual recognition' (e.g. licensing insurance brokers in US States) but not frequently (e.g. rarely in licensing insurers). Mutual recognition is approximated, however, in cases where national standards (technical; diploma's) are used as references in regional laws; some costs remain in such cases, as licensing procedures may still be required. Cooperation is also developing in joint institutions (cf. solvency investigation of non-US insurers by the NAIC, seeking licenses in a State), in interstate compacts (sharing truck registration fees, for instance, or, allowing limited reciprocal interstate bankbranching) and in joint lobbying organisations (promoting federal-subcentral cooperation so as to reduce fragmentation or enhance 'harmonization'). Cooperation can go as far as delegating administrative execution (tax collection agreements in Canada; some insurance controls in Canada) or enforcement power (checks on cigarette bootlegging in the US) to the federal government. In the case of administrative execution this increases uniformity as a condition to the federal task (e.g. a uniform tax base). In the case of cigarette bootlegging, however, it has reduced the constraint of (illegal) cross-border trade, thereby increasing the freedom of the States to raise excises.

17. Are there other benefits of regional powers to the national economy, that are not captured by the focus on their distortive nature as 'barriers'? If so, they would have to be weighed against the 'costs'

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of barriers. The report does not discuss this question in any detail. For a good understanding of how Canadians and Americans perceive the cost/benefit issue, it is nevertheless valuable to identify briefly these other benefits. This may well have some relevance to the Community's own assessment of costs and benefits of the 'remaining' fragmentation of its Internal Market.

- o under appropriate conditions, the combination of a high degree of market integration with some remaining subcentral powers generates the benefits of 'competitive federalism'. The idea is that citizens and firms can signal dissatisfaction with taxes, public goods and services and regulation by interstate/provincial migration. Subcentral governments may also compete with respect to the nature and intensity of interventions in the goods and services markets, setting different objectives or imposing different costs for given targets. More generally, subcentral government performance is subject to competitive challenges from other subcentral governments, and this may prompt policies to be more responsive. In the Padoa-Schioppa report this idea is echoed as 'competition-among-rules'. The benefits flowing from such competition cannot be available when central powers are the alternative. On the other hand, for the benefits to materialize, a fairly high degree of market integration must be achieved (especially for factors of production) for migration to serve as a disciplining factor. This applies, *mutatis mutandis*, to product and services market integration. In other words, in the EC context, the completion of the White Paper is essential before this benefit could be enjoyed. Note that neither in the US nor in Canada competition among rules, among tax regimes and public goods has led to a removal of diversity, or to overall 'low standards' of whatever activity. For instance, tax competition accentuates diversity while at the same time finding a minimum standard in the desired ability everywhere to provide good infrastructure, certain merit goods and certain public goods.
- o decentralization fosters innovation, which may or may not spread according to its attractiveness. This is a longstanding argument against coordination or centralization. The argument is used to rationalize powers which currently carry some costs in terms of

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fragmentation. However, it cuts two ways. The mobility of the professions in the US regulated stricter than necessary, due to rapid interstate imitation of 'innovations', thereby having made interstate mobility more costly. On the other hand, where deregulation is proving successful, a possibly beneficial side-product of spreading regional deregulation is improved market integration (cf. banking in Canada, led by Québec; road transport deregulation in the US).

- o finally, and not surprising for federalist countries, in a number of policy areas, the mere avoidance of central policies or regulation is perceived as a benefit, worth some costs of fragmentation. In Canada this point is related to the peculiar economic geography of the country (chapter 2 and section 5.1), which causes federal sectoral policies to benefit certain clearly identifiable provinces at the expense of other equally clearly identifiable ones. However, in both countries, there are also political objections which fall outside the scope of this report.

18. The recently signed but still not ratified US-Canadian free trade agreement is discussed in the last two chapters.

Three questions are addressed. First, was the expectation borne out that the negotiating parties would move beyond mere free trade to a kind of common market, possibly the only case comparable to the White Paper? The answer is clearly no. Although from a GATT perspective, the agreement is ambitious and may be a helpful exercise for the Uruguay Round, it falls far short of virtually all the major dossiers of the White Paper. Trade in services is not tackled, merely the 'right of establishment' combined with 'national treatment'. The direct investment regime, especially on the Canadian part, is conditional and has significant exceptions. What exactly will happen to the mobility of the profession is unclear. Even in product trade certain restrictions have been 'grandfathered' (i.e. accepted), notably for beer, and others have been relaxed only conditionally and incompletely. On subsidies, no agreement was reached but new rules are nevertheless announced as a basis for 'binding' dispute settlement; however, all this has to be agreed in the next five to seven years. In other words, there are reasons to be sceptical about

Congress's willingness to give up its power of countervailing duties before March 3, 1988 (the deadline of the 'fast track' procedure) without having the slightest idea about the principles and the rules on subsidies.

19. Second, the North American free trade area (NAFTA) negotiations called forth the question whether states and provinces would give up regulatory and subsidy powers for the sake of bilateral economic intercourse, although these powers are on the whole seen as essential to federalism. The short answer is that subcentral governments, especially in Canada, have informally influenced the negotiations in such a way that competences have hardly or not been undermined. Possibly, NAFTA may force provinces and states to exercise their economic powers in a less costly fashion. Thus, it is conceivable that the cost minimization, discussed in para. 16 (infra), is facilitated by bilateral or multilateral liberalization, if only it is stringent enough. However, it does not imply that the assignment of economic competences to the two levels of government in both federations is called into question.
20. The third reason to study NAFTA is the rich Canadian economic debate on the impact of the enormous market enlargement it implies for Canada. The economic methodology as well as the orders of magnitude found are of obvious interest to the 'cost of non-Europe' project. Methodological issues are especially important as Canadian economists have published path-breaking work on NAFTA, using general equilibrium models with economies of scale and imperfect competition (here: price collusion behind protection). This also enables to break out of the narrow confines of traditional partial-equilibrium estimates (based on 'welfare triangles'), which are known to yield too low estimates of welfare effects of trade liberalization, given their assumptions.
21. Chapter 8 discusses in some detail (adapted) partial equilibrium estimates, general equilibrium model estimates and those from large macro-econometric models, including some methodological issues. For the purpose of this study it is important that these different approaches produce empirical estimates much larger than the simple

traditional approaches. Nevertheless, the empirical problems are considerable: general equilibrium model estimates vary but go up to a high of 9% GDP increase, whereas the macro-econometric estimates (after 10 years) move between 1.9% and 3.3% GNP increase (as well as different employment increases). Amongst a number of empirical puzzles one has to solve when using these models, the proper calculation of the 'height' of 'non-tariff barriers' in the product market - not to speak of services or factors - and the assumed reactions on their removal stand out as particularly difficult. All in all, the work on the economic impact of NAFTA on Canada supports the methodological direction of the 'Costs of Non-Europe' project with respect to the goods markets and the empirical results for Canada lend plausibility to the range of estimates on the EC of 1992.

1. WHY CANADA AND THE US?

The paper attempts to broaden the Community's perspective on the problem of completing the Internal Market. In particular, the focus will be on the Canadian Internal Market, the US Internal Market and, whenever relevant, on the issues in the negotiations on the US/Canada free trade area, linking the two Internal Markets. Of course, among developed market economies more examples can be found of (con-)federal states where issues of market integration play a role, e.g. Switzerland and Australia. Even inside the European Community, Germany is a federation and Member States such as Spain, Belgium and Italy and, again in a different way, the United Kingdom may be characterized as 'non-unitary' polities.

The arguments to select the US and Canada relate to constraints and focus. The constraints of time and human resources effectively preclude a large scale research project, comparing many Internal Markets. The problems already encountered in a merely exploratory paper about only two Internal Markets constitute a warning not to overreach and to be extremely prudent in enlarging the geographic scope of such comparisons. A naive or careless juxtaposition of seemingly similar 'barriers' or 'distortions' would only create or reconfirm the kind of misunderstandings, inadequate assessments or prejudices, this project is precisely supposed to avoid. The constraints assume even more significance in the absence of a well-accepted framework of comparative analysis. Inevitably, the economic assessments must be firmly integrated into a wider, interdisciplinary appreciation of how these federations work.

There are distinct reasons for the focus on Canada and the US. From the literature on comparative federalism it can be inferred that Canada appears to have a 'less completed' Internal market than Australia, the US, Switzerland and Germany, not to speak of the other 'non-unitary' Member States of the EC. Not surprisingly, the Internal Market debate in Canada is lively and may be more instructive for our discussion on the White Paper and its effects than internal queries in the other countries. This is not to say that market integration is 'complete' in other federations. Rather, the point is that questions of the 'degree' of market

integration' matter to the Community, because the EC moves from a lower to a distinctly higher degree of market integration and hence might reach a stage where lessons from Canada would be most instructive.

The selection of the United States is based on more pragmatic considerations. Ever since the early 1950s, or perhaps earlier, the United States has been utilized in Europe as an example to look at, not so much to copy it in European integration but to increase awareness of how a big common market can be organized and what benefits it brings. The Spaak report of 1956 even contains explicit references to it. There is a considerable stock of legal, institutional, political, economic and administrative literature on the US-EC comparison. However, most (not all) of this literature compares the US with EC countries, rather than with the EC. Comparisons with the EC proper tend to be highly specialized. In less specialized debates, as well as in political discussions, however, the inclination to look to the US has created two tendencies that unconsciously play a role in the 1992 debate:

- o when advocating the benefits of a given approach to a particular issue in the EC Internal Market, the US solution in its Internal Market is loosely referred to as instructive but often completely out of context or in an ill-informed way; issues in road haulage and taxes are examples but other 'barriers' treated in this report have occasionally be referred to as well;
- o when resisting specific solutions to achieve one EC economic 'area without frontiers' (Single Act, Art. 8), loose references to the US or totally unrepresentative examples of some remaining barriers to interstate trade or exchange are given without putting them in context and without indicating the cost/benefit aspects of it; examples include the highly exceptional physical barriers for citrus fruit imported into California, certain odd technical regulations differing among States and the restrictions on the mobility of professionals (without indicating the strictness of the regulation and the context of overall labour mobility).

2. COMPARING FEDERATIONS:SOME KEY NON-ECONOMIC FACTORS

The USA and Canada are both federations, yet they are remarkably different countries. A crucial question for the purpose of the present paper is therefore the following: is their being both federations sufficient for a stylized comparison of their Internal Market regimes? The answer is no. There is a compelling case to grasp first the key non-economic factors and some basic facts, that might be ignored by Europeans focussing purely on unifying economic regulation and the scope of fragmentation. A good understanding of the barriers remaining and their actual economic significance requires the knowledge of behavioural and contextual elements, explaining political and institutional preferences and (in-)tolerances of various practices.

This paper does not pretend to offer appropriate contextual analysis. A number of highlights may nevertheless heighten the understanding of European readers sufficiently to prevent major mistakes in interpretation. These highlights are presented comparatively in Table 1.

TABLE 1
A summary comparison of the US and Canada

ASPECTS	CANADA	USA
historically	<ul style="list-style-type: none"> - never war of independence - some features of colonial status far into 20th century - nationhood and unity feelings distinctly weaker 	<ul style="list-style-type: none"> - war of independence - strongly nationalist attitude early on - no right of secession (e.g. civil war)
constitutionally	<ul style="list-style-type: none"> - enumerating the exclusive powers of the Provinces (i.e. constitutional protection of <u>economic</u> powers of provinces is strong) - residual (and some specific) powers assigned to federal level 	<ul style="list-style-type: none"> - reserves residual powers to the States - 'delegates' powers to federal level (while prohibiting some powers to the States)

	- no 'upper house' with link to provincial elections	- Senate (and House) represents regional interests
	- parliamentary system	- presidential system
key federal powers (selection)	- defense	- defense
	- legal system (with some specifics for Quebec)	- legal system (with some specifics for Louisiana)
	- currency	- currency
	- taxing and (deficit) spending	- taxing and (deficit) spending
Court	- stresses the preservation of both federal and provincial powers (sometimes at the cost of market integration)	- built up functional and impressive case-law on the basis of 'interstate commerce clause' (and 'due process'), yielding almost unhampered access and mobility throughout the USA
market size	- 25 million inhabitants	- 240 million inhabitants
	- geographic size like US	- geographic size like Canada
	- strong concentration of population near US border, and in two provinces	- population spread over the country and less concentrated in a few States
	- economic market size of Benelux	- biggest market in the world (with the EC roughly on par)
internal trade	- East-West trade among Provinces (excluding neighbourhood trade) small	- intra-US trade is preponderant
	- trade with US ('North-South' trade) important	- trade with Canada ranks first in foreign trade, but has a small weight in GNP
(political) values	- quite some European influence and affinity	- melting pot
	- considerable attention for redistribution and welfare	- less attention for redistribution; low levels of social security & welfare
	- considerable tolerance (if not, inclination) to intervene in the economy	- a weakening tolerance to regulate and little tolerance to intervene financially in the economy

NOTE: The elements mentioned are merely highlights for European readers.

3. COMPARING THE FEDERATIONS: THE ASSIGNMENT OF ECONOMIC FUNCTIONS

The comparative study of the Canadian and the US Internal Markets, in particular the remaining internal barriers to economic mobility, cannot be restricted to allocative issues of public intervention and regulation. In reality the three public economic functions - allocation (through market integration, or the lack of it), redistribution and macro-economic stabilization - interact in complex ways. This interaction differs somewhat when comparing the US and Canada, but, in both cases, contrasts sharply with the separation in the EC of major allocative functions at EC level (namely, the Internal Market, competition policy, trade policy, etc.) from redistributive and macro-economic stabilization functions at Member State level. To the extent that market integration is facilitated by the central exercise of the other two functions, North America's market integration is not fully comparable to EC market integration.

But one should not overplay the incomparability of the EC and North America, since comparative studies of federations have shown that there are many ways to design a viable federation. Beyond a few basic prescriptions on how to assign economic powers to the two levels of government, careful studies are required before establishing the necessary conditions for the EC in terms of stabilization arrangements and in terms of (what kind of) redistribution, so as to achieve and maintain a 'completed' Internal Market after 1992. It is conceivable that forms of economic confederation may be stable without having to be congruent with existing federations such as the US or Canada.

3.1 Macro-economic stabilization

Both the US and Canada have central powers for macro-economic stabilization. Before a closer look will bring out some refinement of that statement, it is crucial to realize the fundamental difference with the EC, even in 1993. In the 'completed' Euromarket of 1993, economic agents are not certain that cross-frontier economic transactions are subject to perfect exchange rate fixity. There are good arguments to design policies for stability of exchange rates in a common trading area.

But the more the perspective shifts to the longer run, the less satisfactory mere 'stability' will be. For long run investment commitments, cross-frontier mergers, financial services implying long run commitments (pensions, mortgages, etc.), the certainty of one currency is bound to increase incentives to take an interregional perspective for all major economic decisions. Moreover, commitments of mere 'stability', i.e. minimizing exchange rate realignments without outlawing them are hard to combine with both a 'completed' Internal (capital and money) Market and the retention of Member States' assignment of macro-economic stabilization. As long as no firm legal commitment on joint stabilization is assumed, the danger of reversibility in the form of intra-EC restrictions (e.g. on capital flows) hangs like a sword of Damocle above the 'completed' Internal Market. Since this danger is absent in the US and Canada, the economic case to centralize macro-policies in these countries is too overwhelming to be questioned.

Monetary and exchange rate policy is executed at federal level both in the US and in Canada. Neither country has a direct credit line for regional governments with the central bank (and the US not even for the federal government). But the actual implementation of federal monetary instruments may be constrained by the assignment to states/provinces of powers to regulate financial institutions or certain social statutes (see Courchene, 1986, for Canada). In Canada, four constraints to federal monetary & exchange rate policy can be distinguished. First, near-banks are regulated by the provinces and were traditionally not obliged to hold cash reserves with the Bank of Canada. Since the chartered banks loom large in the financial system this potential constraint on the leverage of monetary policy was not considered a serious one as late as the mid-1970's. In 1980 the Canadian Payments Association was enacted in the revised Bank Act, with the requirements for all banks and near-banks to maintain minimum cash-reserve deposits with the Bank of Canada. Typically the provinces (and the near-banks themselves) objected to this requirement as unconstitutional since it would make provincially regulated institutions subject to federal legislation. Ottawa then dropped its subtle distinction between the cash-reserve requirement being a federal question and regulation of near-banks remaining a provincial one, and accepted a compromise. Membership of the CPA is now optional: if

a member, clearing is direct but the cash-reserve requirement has to be accepted; if not a member, clearing has to take place via a CPA member, thereby exerting an indirect influence on the minimum reserve requirements of that bank.

Second, problems can be foreseen, were monetary policy to be pursued by means of credit controls, i.e. rationing the volume of credit. In Canada (and the US) this is not currently a relevant issue as the approach is oriented towards the costs of credit, hence is more 'market oriented'. Nevertheless, attempts to pursue credit controls beyond moral persuasion - for example, via the federal parliament in Ottawa - would probably be contested by the provinces as a violation of the constitutional assignment to them to regulate near-banks.

Third, exchange controls would of course hamper the provinces in borrowing abroad but, since this is not a matter of interprovincial economic intercourse, they would be constitutional (and, obviously, there is no such issue as provincial exchange controls, like one or the other EC Member State might still temporarily revert to after 1992). It is significant that such exchange controls must be nation-wide. Fourth, the competence of wage and price controls as an anti-inflationary device is controversial in Canada (not in the US, where it is clearly federal). After a Supreme Court ruling the federal competence is unquestioned in case of an emergency. If emergency is not clearly referred to, federal powers are unlikely to reach further than the (federally controlled) public and quasi-public agencies.

If in a federal country market-oriented views prevail few political obstacles towards functional centralism will be met, hence such a country can 'afford' to be centralist in macro-economic policy where functionalist arguments are compelling. The latter thesis clearly applies to the USA. The pursuit of monetary policy is not hindered by questions of assignment to the States in any appreciable degree. The Federal Reserve and the Treasury have all necessary powers. The only problem in US monetary affairs is that the almost complete prohibition of 'branching' of banks (interstate, sometimes even intra-state!) has led to financial instability issues. To the extent these issues can be solved by supervision and deposit-insurance, the problem shrinks to that of unequal competitiveness of banks inside the US and affects but marginally overall monetary policy (see section 6.6.2).

Fiscal policy is less completely centralized in Canada and the US than monetary policy. In comparison, Canada is more decentralized in this respect than the US. Whereas in Canada the federal share in 'own-source' revenues of all government has declined from 64% in 1950 to around 44% in 1985 (and from 60% in 1950 to around 32% in 1985 in terms of revenues after transfers), the US federal share in 'own source' revenues of all government was 70% in 1949, declining only to 65% in 1974, but returning to 70% for all years of the period 1981-1986; in terms of revenues after transfers, the dominance of federal revenues does not disappear and the decline over time is small, to wit, from 66% in 1949 via a low of 56% in 1974 to a share of 61%-63% in the 1980s. The development in Canada is not due to decreased federal spending but rather to a more rapid increase in provincial/local tax and spending activity. Note however, that, if the need would be politically credible (as in the case of war or emergencies), the Canadian federal government would have almost 'plenary' powers to pursue fiscal policy.

On the expenditure side, the Canadian federal government can and does extend its leverage via conditional grants and via large-scale projects, frequently co-financed by provinces. Therefore, a significant measure of fiscal coordination supplements the direct federal expenditure available. It follows that provincial budgetary policy cannot really cross the cyclical policy pursued by Ottawa. Moreover, a large share of non-federal spending is not suitable for anti-cyclical variation, e.g. health and primary education. Unemployment insurance is federal in Canada, whereas the 'welfare' programme is provincial but with a 50% contribution from Ottawa, and (like in the US) subject to an entitlement of every Canadian to such benefits without discriminatory (residence) requirement. This complexity has allocative (migration!) and interregional redistributive consequences but does not seem to affect the stabilization function at federal level very much.

In contrast to Canada, the US, ever since 1980, has no revenue sharing via unconditional ('equalization') grants. All federal grants are grouped in specific 'block grants', sometimes with discretion for the States, sometimes with conditions, or matching requirements. Similar to Canada, non-federal spending is largely a-cyclical, as it concentrates on

'welfare', education and health, the only major exception being highways. Therefore, anti-cyclical variations of public expenditure can be pursued at federal level without great problems. Indeed, before the Reagan administration, the federal grants-in-aid tended to be varied anti-cyclically so as to compensate for the States' incapacity to conduct anti-cyclical policy.

Of course, spending variations also depend on tax income and the resulting balance. Both Canada and the US have no federal constitutional prohibitions or constraints on budget balances. In fact, however, the States themselves (except one) have imposed 'balanced budget' rules on their legislatures, with different degrees of stringency with respect to short-term borrowing or borrowing for long run investment. Canadian provinces are under no legal constraints and may even revert to the world capital market.

On the tax side, complications are greater. Both the US and Canada have fairly decentralized tax systems. The difference between the two countries is the degree of harmonization of the decentralized tax policies: in Canada, there is far-reaching harmonization compared to the USA in the taxes relevant for stabilization, to wit personal income and corporate taxes, although the actual impact of this difference is probably mitigated by the generally lower rates of taxation in the US, and the lower share of subcentral taxation in overall US public revenue.

In Canada the income and corporate taxes are 'joint' taxes under the 1962 Tax Collection Agreements. The exception is Quebec, which has "competitive" taxes on personal income and on corporate income. All other provinces let the federal government collect both the federal and provincial personal income tax, with significant gains in administrative simplicity for all tax authorities (and at no financial costs to the provinces) and tax payers. In return, the provinces must accept the federal structure of income taxation down to considerable detail; the provinces are free to fix their own rate and can introduce tax credits under conditions of administrative simplicity, compatibility with the federal tax system and with the 'efficient functioning of the Canadian economic union'. Nevertheless, these tax credits are a cause of some

concern in Canada because they tend to distort (if not impede) the free flow of products and factors in the common market. There are important allocative differences between the Quebec and the federal income tax, but whether they are of more than trivial importance for stabilization purposes is unclear. Apart from Quebec the federal government has considerable scope for tax manipulation for anti-cyclical purposes, since it can define income and some deductions. Yet, in the crucial case of a cut or hike of the rate, the cooperation of the provinces is not a priori guaranteed. There are currents at provincial level arguing for a more active fiscal stance of the provinces as a 'supplementary stabilization thrust'. Thus province A could choose to neutralize at least the direct impact of a cut in the federal rate by a matching increase in its own rate, or the other way around. In this context it ought to be noted that provinces can run deficits but cannot monetize them via open market operations or otherwise, so that their borrowing capacity is determined essentially by credit ratings.

Corporate taxation is less harmonious in Canada because three provinces (Ontario, Quebec and Alberta) have opted out of the tax collection agreements. Unlike the US, all Canadian provinces adhere to a uniform procedure for allocating the profits of multi-provincial corporations across the provinces - this typical common-market issue reduces tax competition and may so help overall stabilization policy. The leverage of the federal government in corporate taxation is primarily determined by its own rate since the seven provinces adhering to joint collection generate only one-quarter of the corporate taxable income in Canada. The assessment of the arrangement hinges on the extent to which federal stabilization is undermined by the diversity. The even greater diversity in, for instance, the US - although at lower rates and yielding relatively little revenue (see section 6.4) - serves as a reminder that uniformity or centralism is not imperative. Indeed, there is nothing in the Canadian constitution that forbids the provinces to alter course and massively opt out of the joint collection of (direct) taxes at federal conditions. Surely, this would reduce the efficacy of Canadian fiscal policy, still apart from likely deleterious effect in this common market. In any event, the interesting lesson from the Canadian arrangements is that, within limits, these questions can be discussed in terms of (economic) costs and (political) benefits.

In the US the predominance of federal taxation is such that the leverage of federal fiscal policy is very considerable. Various forms of interstate tax competition (see sections 6.3 and 6.4) may result in effective taxation constraints on the States and so prevent a possible future reduction of federal leverage. However, there is some controversy with respect to 'unitary taxation' of multi-state corporations' profits and this could perhaps create difficulties for stabilization policy at the margin. Therefore, state taxation typically generates issues of horizontal equity and of allocation in the US common market, much less does it raise problems for stabilization.

3.2 Redistribution

The functioning of the North American Internal Markets is generally facilitated by interpersonal and interstate/interprovincial redistribution. Of course the two are economically related if only because interregional redistribution will enhance the capacity of the poorer regions to provide income security programmes. There is a tax side to interpersonal redistribution, too: to the extent that federal progressive taxes tend to burden rich regions more than poor, an interregional mitigation of income differentials will result. This brief section is on expenditure, however.

Redistribution is more ambitious in Canada than in the USA. Notwithstanding the complexity and frequent shifts in the actual division of powers with respect to the social programmes, the latter and the equalization payments have the effects of converging across Canada income, welfare and social (health and education) levels as well as the provincial capacities to provide other public services. The virtually unhampered and unconditional potential access of all Canadians to the social and other public services and to income maintenance creates a situation very different from the one underlying the completed Internal Market in the EC in 1993. The EC will have no free and equal access to national social security and income maintenance programmes for mobile citizens. It is true, as some economists argue, that the Canadian social programmes reduce the incentives for labour mobility across Canada, in

other words, that the functioning of the Internal Market would not singularly improve but on some accounts suffer from rigidities. It might mean that the programmes encourage people to remain in low-employment areas. Such an objection implies a judgement on optimal support levels, which this paper will not address.

With respect to interpersonal redistribution, (see Courchene, 1986) the federal government has exclusive jurisdiction over, inter alia, unemployment insurance and old-age security; the provinces have exclusive jurisdiction over workmen's compensation and the pension plans if they do not join the Canadian Pension Plan (only Quebec), whereas joint jurisdiction exists for the Canada pension plan, regulation of private pensions and the Canada Assistance Plan (for 'welfare').

It should be realized, however, that the assignment of jurisdiction is only one of several criteria for assessing the degree of (de)centralization. Whether federal grants are conditional or not, and what percentage of the programme Ottawa pays may well be decisive. Conditional grants of 50% are provided by the federal government for hospital insurance, for medicare (one condition being the 'portability' of benefits across Canada), for post-secondary education and for 'welfare' (one of the conditions being that provinces can not impose lengthy waiting periods for eligibility).

Interprovincial redistribution is enshrined in the 1982 Constitution Act as follows: "Parliament and the Government of Canada are committed to the principle of making equalization payments to ensure that provincial governments have sufficient revenues to provide reasonably comparable levels of public services at reasonably comparable levels of taxation".

However, the equalisation programme actually started in 1957 already. Courchene (1986) takes the view that the initiation of equalization payments was mainly motivated by the broad desire after the war to return to the provinces a greater autonomy in taxation. Both the equity and efficiency grounds have probably played a role as well. In the political discussion they were mixed (as shown in the quotation from the Constitution) with a federalist rationale (match provincial responsibility

with sufficient access to funds) and a 'nation-hood' rationale (a nationally desired level of public services should be available for every Canadian, and if the provinces have to deliver them, they ought to have the funds). The efficiency argument relates directly to the proper functioning of the Internal Market. Recent discussion (Boadway & Flatters, 1982; Oates, 1983; Courchene, 1986) turns around the notion of 'net fiscal benefits': the utility derived from the level of public services in combination with taxes. Net fiscal benefits may differ among richer and poor provinces, with resource-rich provinces as an especially attractive case. Efficiency in the common market would be reduced if migration would occur in response to net fiscal benefits, rather than market income. By making net fiscal benefits more or less equivalent, efficiency would thus be increased. A possible objection to this argument is that net fiscal benefits may become capitalized in land prices or otherwise. The objection might be important because, in contrast to Canada, the US does no longer have an equalization programme since 1980, and had a very modest one before. The Canadian equalization is not comparable to the 'Finanzausgleich' in the Federal Republic of Germany, where rich Länder directly 'equalize' with relatively poor Länder. In Germany there is virtually no discretion and certainly not at federal level, which guarantees the economic effectiveness of the equalisation. The contrast with the US is sharp because its programme in the 1970's was fully discretionary at federal level and, in 1980, scrapped overnight. The Canadian Constitution makes this impossible, but some federal discretion exists. Ottawa provides unconditional transfers to improve vertical and horizontal fiscal balance in the federation. The Atlantic-Eastern provinces raise their own-source revenue (per capita), ranging around 59%-66% of the national average, to revenue-plus-equalization, ranging around 83%-84% of the national average. Except for resource-rich Alberta, all provinces cluster between 90% and 106% of the national average if all transfers are taken into account.

The redistribution functions exercised in the US federal system have always been more modest than those in Canada. Interstate redistribution, say via equalization payments from the center (Canada) or via interstate sharing-out arrangements (Finanzausgleich in Germany), does not take place. A modest revenue sharing programme existed between 1972 and 1980.

There is no constitutional obligation for interregional equalization like the one in Canada. Therefore, the redistribution system employs only specific purpose grants. Under the 'new federalism' of president Reagan one idea was to consolidate the more than 400 grant programmes (most of which were highly specific categorical grants and projects with case-by-case control, with a lot of federal involvement) into very few block grants ('broad purpose grants'). The objectives pursued were three: a) to reduce the federal spending together with certain tax rate decreases, and hence provide room for the states to fill the gap according to their own preferences (actually, this objective may well result in less redistribution, but not necessarily so); b) reduce federal tutelage and pervasive conditionality, hence restoring the 'regulatory balance' between the states and the federal governments; c) reduce the heavy administrative costs of these programmes (regulatory relief). There are essentially two types of grants in the US: one group (mostly 'welfare') finances entitlements of individuals and the administration is done by states and local governments; the other group of grants goes to states (and ultimately to local governments in a lot of cases) and relate to education, health and highways.

Since the federal deficit became so preponderant a problem after 1983 and since the early block grants consolidations had led to severe cuts in federal aid to states (for fiscal 1982, a 23,5% reduction for the funds administered by states, and a 38% reduction for the funds directed to states!), the new federalism proposals eventually got stuck in Congress (see Williamson, 1986). In particular, the 'swap and turnback' proposals would radically shift interpersonal redistribution back to the states (namely, by half), except for health care for the needy, while leaving some transfers in block grants as before. This was never accepted politically and the radical decentralization of interpersonal redistribution did not occur.

The facts are that federal grants-in-aid fell continuously as a share of state/local general revenue from own resources: from 34,4% in 1976 and 30,4% in 1980 to 21,8% in 1985. The shares of education, public highways and 'welfare' in this federal grants programme have not changed much since 1979 and have actually increased a little for 'welfare' (as well as

for urban renewal). Thus, the cuts in real terms have been spread over these categories and have otherwise fallen much more heavily on health and 'other' federal grants. It is unclear whether this has significantly influenced redistribution (ACIR, 1987, p. 58).

Finally, the 1986 federal tax reform does not seem to have more than marginal effects for redistribution. In general, de facto progressivity is increased and this may have some additional redistributive effect.

4. IDENTIFYING INTERNAL BARRIERS

After explaining briefly what is meant by 'barriers' for the purpose of this report, this section will identify the 'barriers' in seven categories. These seven categories have been selected in prior consultation with the Commission, given their prominence in the White Paper and the expected importance in (one of) the two countries. The identified 'barriers' are compared in an extremely condensed form in Table 2. This presentation should serve the reader as a quick reference. It cannot and does not serve as a summary because the sections 5 and 6 have already been compressed to virtually irreducible size. With a further shortening too much information would be lost, the danger of misunderstanding would augment and enriching insights might be foregone.

4.1 On 'barriers' and 'distortions'

For the purposes of the report, a 'barrier' is defined as an impediment to or an artificial encouragement of economic mobility among the US States or the Canadian provinces. The impediments may completely block access of goods, services, or factors of production to a state's or provincial market, or they may only raise the costs of access. The latter will lead to a discriminatory effect on prices of goods, services or factors coming from out-of-province/state. In describing the 'remaining fragmentation' of the US and the Canadian Internal Market (and between the two, in the North American market), the majority of measures dealt

with are 'barriers-to-access'. In some cases, however, States/provinces artificially encourage economic mobility, which also hampers the proper functioning of internal markets.

An economic assessment of costs and benefits, is normally based on the concept of 'distortions'. A distortion can only be meaningfully defined if one agrees about what is being 'distorted'. In the present context, economic analysis would look at the allocation of resources resulting from the functioning of the (internal) market. The allocation of resources can be 'distorted' by government action in many ways, and not only through barriers-to-access. In other words, distortions refer to a much broader category of regulatory or financial interventions, including barriers-to-access. A simple way of classifying different distortions for present purposes would be to distinguish domestic (i.e. state or provincial) ones, federally-induced ones, barriers-to-access and artificial stimuli to economic mobility among states/provinces. Since the report concentrates on the latter two distortions, 'barriers' is utilized as shorthand.

In the normative terms of 'welfare economics', a distortion causes the allocation of resources to be such that the resulting income remains below potential. The potential income is normatively defined as the income resulting from the 'undistorted' allocation of resources, with the proviso that after the removal of the distortion compensation can, in principle, be given to losers so as to keep their income steady. Removing a distortion would lead to a potential income that, after allowing for compensation, is still higher than in the 'distorted' situation. Maintaining fragmentation through 'barriers' therefore has a 'cost' for the economy as a whole.

Whether there are benefits to such state/provincial intervention is harder to answer. Using standard micro-economics, public intervention can only yield 'benefits' if markets fail to allocate optimally. Such market failures are usually corrected by 'domestic' (federal) intervention and do not concern us here. Only where market failures are dealt with at subcentral level and in different ways (e.g. safety regulations) is there a possibility that 'barriers' arise. If differences would be costly for

interprovincial/interstate economic intercourse, the 'benefits' of overcoming market failures could in principle be kept constant by maintaining the objective of the intervention, while the 'costs' could be decreased through approximation or harmonization.

But in federal countries such as Canada and the USA, the 'benefits' of expenditure or regulation at subcentral level also refer to advantages that cannot be captured in a standard microeconomic framework. Such benefits are perceived to consist in political and economic advantages of 'decentralization'. The present author has refrained from attempting to assess qualitatively, let alone 'measure', these benefits to the US and to Canada. Nevertheless, no matter how elusive the advantages might be thought to be, they are genuine to Canadians and Americans and enter the cost/benefit calculus in these countries, implicitly or explicitly. They lead to maintenance of what are called 'barriers' in this report, although they are frequently felt to be 'benefits of diversity'. A singular focus on 'economic costs' without taking these benefits into account might be misleading. For instance, if certain subcentral powers must be considered as given, it might be more insightful to study cost minimization of the resulting fragmentation and compare it with the 'benefits'.

However, analyzing these and other aspects of immaterial 'benefits' would greatly extend the scope of the report. In any event further study is required before lessons can be fruitfully drawn. Only occasional references will therefore be made. Some of the most important considerations have been summarized in the paragraphs 13 through 17 of the 'Executive Summary and Conclusions'.

4.2 Comparing barriers in the US and Canada

The seven selected categories of barriers at inter-state/provincial level are: (indirect) taxes, corporate tax breaks and subsidies, procurement, financial services, technical barriers, labour mobility barriers and transport. In this paper I repeatedly warn against possible misunderstandings that may arise if attention is solely focussed on enumerating 'barriers' inside the Canadian and US internal markets. Table

2, bringing information together in shorthand, is susceptible to misinterpretation. Superficial reading of the Table might give the impression that economic mobilities inside the two federations are seriously hampered or discouraged. Such a reading of the Table would certainly be incorrect. The broad thrust of it is, rather, that states/provinces have kept a number of powers, whose use will lead to barriers-to-access or distortions, without on the whole causing the internal markets to fail in their integrative effects. The political benefits of this decentralization carry economic costs which will be indicated qualitatively where possible; the scant quantifications will also be given. In the few areas where 'barriers' are inducing relatively higher costs they are controversial and tend to be evaded. For the rest, there is little doubt that the 'fragmentation' is politically tolerated.

TABLE 2
Identifying internal 'barriers' in Canada and the US

'barriers' or sector	CANADA	USA
1. <u>taxation</u> - sales	provinces levy retail sales tax; rates vary from 0% to 12%.	states and local authorities levy retail sales tax; rates (incl. local) vary from 0% to 9%; exemptions of basic needs differ considerably.
- excises	excises differ among provinces; esp. alcoholic beverages and motor fuel; administrative burden (destination principle) and provincial sales restrictions.	states levy excises especially on cigarettes, alcoholic beverages and motor fuel; random checks and administrative burden (destination principle).
- corporate	provincial rates vary from 10% to 16%; federal tax collection agreement for 7 smaller provinces (i.e. identical base).	state (marginal) rates vary from 0% to 11,5%; states also compete via special cases and exemptions; 5 states have no corporate tax.

- personal income	rates vary somewhat among provinces; base is harmonized through federal tax collection agreement (exc. Québec).	rates vary considerably among states, the highest marginal rates ranging from 10% to 13,5% in nine states (before recent tax reform; to be reduced to four) and lower in other states; seven states have no personal income tax and three levy only a tax on interest & dividends.
2. <u>public aid</u> - subsidies	vigorous subsidy competition among provinces; no federal supervision via Ottawa or the Supreme Court.	all states have inward-investment promotion activities, but direct state aids are very modest.
- tax breaks	numerous; not harmonized.	numerous; not harmonized.
3. <u>procurement</u> - formal	complete constitutional freedom for provinces to purchase preferentially.	around 20 states have preference laws (up to 5% price differential in bids).
- informal	the formal leeway is materially reduced; informal local content requirements or 'understandings'.	many anecdotes about informal pressures; tax payers' consciousness in the US is very high, however.
4. <u>financial services</u> - banking	nation-wide operations with, however, quite some provincial regulation; no freedom of banking services; national clearing; capital market is nation-wide and open.	banks chartered at federal or at state level; fragmentation arises out of crippling branching restrictions: interstate branching is forbidden, with complex exceptions; <u>intra</u> -state branching prohibitions may exist.
- insurance	most regulation at provincial level; some at federal; far-reaching voluntary harmonization and delegation of administrative controls to federal level.	regulated at state level; licensing of insurers and brokers per state and divergent state regulations lead to serious fragmentation, although formally the freedom of services is nation-wide.

- 5. technical barriers
 - few problems in technical regulations. Standards are mostly nation-wide; so is certification.
 - Numerous small, few major differences among states regulations; commerce clause constraints; standards and certification are nation-wide. The major exception: building codes.

- 6. labour mobility
 - general access to labour markets
 - constitutional rights to travel and to migrate; recourse to provincial social security/services; nation-wide public pension; incomplete portability of private pensions.
 - constitutional rights to travel and to migrate; recourse to state social security/services; federal rules for employee pension.
 - professions
 - extensive regulation of professional licensing at provincial level.
 - extensive regulation of professional licensing at state level; no general rule on mutual recognition.

- 7. transport
 - registration
 - at provincial level; until '82 license plates for every province; now there is 'home-province control' with mutual provincial recognition, with inter-provincial clearing.
 - at state level; registration reciprocity is widespread; registration 'fees' competition is reduced in 'compacts' (more than 30 states), with fees shared.
 - fuel
 - fuel taxes differ among provinces; destination principle imposes cumbersome administrative requirements.
 - as in Canada, the destination of the fuel tax revenue, leads to administrative burdens.
 - other
 - licensing before entering the road haulage sector takes place at provincial level.
 - 43 states have not deregulated on intra-state transport; property taxes and sales taxes on trucks differ; on axle/distance taxes, there is interstate tax retaliation.

NOTE: The 'barriers' identified here are described in the chapters 5 and 6. These chapters also discuss costs and benefits whenever possible.

5. BARRIERS IN THE CANADIAN INTERNAL MARKET

5.1 General Issues of Canadian market integration

5.1.1 The federal framework

Art. 121 of the Canadian constitution stipulates that agricultural and industrial products of one province should be admitted freely into others. By virtue of this provision, tariff barriers do not exist, nor do border controls. The 1982 Canadian Charter of Rights and Freedoms secures very broad mobility rights, with individuals being entitled to move to, take up residence and work in any province. Thus, physical barriers in the sense of the Commission's White Paper are not in place.

What about Canada's constitutional regime on 'non-tariff distortions' to interprovincial trade? Art. 91(2) of the Constitution confers to the federation the competence to regulate interprovincial trade and commerce. On the face of it, this disposition could be seen as being roughly equivalent to the US interstate commerce clause which has proved to be a very powerful instrument to combat state-induced distortions in the American internal market (see section 6.2). Unlike its American counterpart, however, the Canadian Supreme Court has given a narrow presentation to the federal trade and commerce powers with a view to preserving the autonomy of the provinces (cfr. Table I in chapter 2) because Art. 92 of the Constitution provides them with certain exclusive powers. As Canada's Supreme Court, rather than adopting a consistent market integration stance, wished to safeguard the balance of powers between federation and provinces as envisaged by the writers of the 1867 British North-America Act, provincial regulatory and budgetary decisions giving rise to non-tariff distortions of the Canadian internal market have often been validated. In some, admittedly rare, cases the Court has even upheld provincial provisions that discriminate explicitly on the basis of provincial origin!

On the political scene, provinces recognize the internal market fragmenting consequences of their far-reaching policy autonomy, but retort that federal legislation distorts the Canadian common market even more. The most significant examples of such federally induced distortions

relate to the National Energy Policy, the external tariff, the federal tax system and freight rates. The National Energy Policy, adopted in 1980 and revised in recent years, keeps energy prices in Canada below world market prices and subsidizes energy exploration. Although mutually offsetting effects are at play, there exists the general conviction that the energy-importing provinces of central Canada gain at the expense of energy-rich provinces of the West like Alberta. As they are the home of the better part of the country's manufacturing industry, Ontario and Québec are also the chief beneficiaries of the common external tariff and the voluntary import restraints on cars and clothing. The other and in particular the Western provinces lose consumer surplus, being the importers of industrial goods.

Conversely, the federal manufacturers' sales tax (not to be confused with the provincial retail sales tax), imposed on all manufactured goods consumed in Canada, tends to modify the interprovincial terms of trade to central Canada's detriment. The subsidization of freight rates (by way of the Crowsnest Pass Agreement of 1897 superseded by the Western Grain Transportation Act of 1983, the Maritime Freight Rates Act and the Atlantic Region Freight Assistance Act of 1970) has favoured Prairie grain growers and Maritime firms engaged in interprovincial business.

One should realize that the 'winners' and 'losers' are so clearly identifiable in these cases because Canada is characterized by a very great overlap of product specialization patterns and regional specialization patterns. In the US and the EC this overlap is on the whole much smaller, which implies that product-wise interventions do not or not nearly so much lead to geographically identifiable beneficiaries and losers.

In the provinces' view, Ottawa better overhaul its own legislation first before calling on the provinces to pay more heed to the common interest. There is evidence in the economic literature, indeed, that the federally induced distortions harm Canada's welfare more than the existing interprovincial barriers. However, the provinces are clearly divided over how Ottawa should alter its policies, and understandably so in the light of the just mentioned examples, since provinces will be affected

differently by changes in federal policies. The current provincial discord on the desirability of the US - Canada free trade agreement provides an excellent case in point.

5.1.2 A paradox

In a number of areas where the EC is still confronted with significant obstacles to trade between Member States, barriers also exist between the Canadian provinces. Altogether, these hurdles seem impressive. Several of the interprovincial barriers to trade in goods, services and factors of production would doubtlessly be ruled illicit in the EC even under the present 'acquis communautaire'.

The number and nature of the obstacles to trade suggest that considerable welfare is being foregone. Yet, the few economists who have studied these questions in some depth are more or less in agreement that the welfare costs inflicted by these province-induced distortions are marginal, lying under 1% of Canadian GDP. What might explain this paradox?

Firstly, the method of computation used in these studies is rather rudimentary. None of these calculations were carried out through multisectoral macroeconomic or general equilibrium models, but were rather back-of-the-envelope assessment of direct, static costs only. Such an approach was perhaps the only feasible one given that reliable data on any of the domains touched upon are very scarce. In the EC Commission study on the effects of completing the EC Internal Market, the brunt of the welfare gains was thought to materialize in an indirect fashion and over a fairly long time-period. Therefore, the simple static cost calculus may well underestimate the actual costs incurred by the Canadian economy.

Secondly, there are 'structural' explanations. East-West trade in Canada has never been intensive and is even partly subsidized through below market freight rates as a matter of nation-building. Canada's population is clustered along the very long border with the US, from Vancouver to Québec City. The natural pattern of trade flows in North-America is North-South. Canada-US trade is estimated to be as large, if not larger,

than interprovincial trade in Canada, in spite of border protection and differences in currencies and legal regimes. Moreover, the vastness of the Canadian territory is such that systematic interprovincial purchases (except between Quebec and Ontario and with respect to energy and raw materials) can never grow substantial. On the other hand, the economic weight of the scope for discriminatory public procurement, often thought of as a prime source of welfare losses in the EC, is also quite limited. Provincial public purchases of goods and services net of normal personnel outlays do not amount to more than 2 to 3% of GDP. In addition, an important sector like telecom is in private hands in Canada and the army is small, compared to EC countries.

The existence of trade barriers and the threat of a further uncontrolled growth - given the dearth of institutional forces towards closer market integration - has gradually become a cause for concern in public debate. One of the policy ideas raised by the Macdonald's Commission on the Economic Union and Development Prospects for Canada (reporting in 1985) was the creation of CATT (in analogy with the Geneva-based GATT) which would be designed to settle economic disputes between provinces, but apparently time has not come yet for this idea to be realized. It is significant to point out that it was only in the run-up to the negotiations with the Americans on a free trade deal that the quarterly Interprovincial Premiers' Conference paid serious attention to the barriers inside Canada. After their Edmonton meeting in 1986 the Conference committed itself to a moratorium to new barriers and a permanent mechanism to reduce existing ones. However, since then the issue has been softpedalled at the top political level and no concrete policy action has come forth yet. Issues such as the Canada-US free trade agreement, the implementation of the Meech Lake accord on constitutional reform and federal tax reform figure nowadays much more prominently on the agenda. Hitherto, the eagerness of the provinces to keep their regulatory autonomy intact seems to have prevailed over considerations of economic efficiency, notwithstanding the little 'horror' stories that every now and then catch the headlines of the newspapers.

Both the Canadian constitution and today's political climate attach great value to the 'benefits' of decentralization. In particular the Québec view is that the 'benefits' of diversity cannot be enjoyed without

provincial means of articulating variety. But even the Québec separatists, toying with secession plans in the 1976-1980 period, unambiguously wanted to retain the common market. Moreover, compared to the EC of today, Canadian 'diversity' should be seen against the backdrop of other unifying factors such as a fairly common university system, only two languages and the great informal economic and non-economic influence of a so preponderant neighbour, the US.

5.2 Provincial Taxation

Canadian provinces possess the constitutional right to impose direct taxes on private earnings and corporate income. They may also levy sales taxes and excises. These rights are not exclusive since the federal government has taxing powers too in these domains. For the taxes mentioned neither the rates nor the bases are uniform across provinces. It follows that "normal" interprovincial goods and services flows as well as the nation-wide allocation of production factors may be subject to fiscal distortions.

The existence of so-called "collection agreements" regarding personal and corporate income tax between the federation and the majority of provinces, along with the absence of fiscal borders and the substantial mobility of people, enterprises and investments in Canada, have ensured that since World War II provincial tax regimes have not diverged too much in practice. However, as provincial fiscal competences are largely unfettered by constitutional court review, even to such a degree that their exercise is allowed to cause explicit discrimination vis-à-vis products and production factors from other provinces, there is always the possibility of a return to the situation of the thirties characterized by severe fiscal competition among the provinces with beggar-thy-neighbour intentions.

i) Personal Income Taxes

Under the Collection Agreements on personal income taxes the federal authorities collect free of charge provincial revenue in stride with federal taxes under the condition that the provinces accept the federally

defined tax base and, what is perhaps more important, the progressivity structure of rates. All provinces except Quebec have entered into such an agreement with the central government. Consequently, it is a "joint" personal income tax regime prevailing in all Canadian provinces but one.

Noteworthy from the viewpoint of the present study is that provinces not having concluded a collection agreement with Ottawa can constitutionally adopt tax rules discriminating against out-of-province products or production factors and hence impair the functioning of the internal market. Since 1979, for instance, Quebec permits residents to deduct from income taxes (up to a predetermined amount) the purchase of new shares in Quebec companies (and not those from other provinces).

The Tax Collection Agreements with the federal government are contractual and therefore provinces can opt out if they so wish, for example on grounds of different progressivity preferences or the desire to promote local business interests. Recognizing that a general renunciation of such agreements could give rise to fiscal pluriformity among provinces prompting distortions of normal goods, investment and migratory flows inside Canada, the central government has sought to convince provinces to stay in by reducing the "cost" of respecting the Agreement: provinces have been granted increasing elbow room to define their own tax credits provided the latter do not discriminate against other provinces, with Ottawa drawing the line between what is permissible and what not.

Recently, upon threats of withdrawal, significant concessions to provincial demands have been made in this respect (cfr. the British Columbia housing and employment bond tax credits operative since 1983).

ii) Corporate Taxes

To strengthen local economic activity, regional authorities having the power and the means to do so, often strive to attract private sector investment from elsewhere by offering fiscal incentives (or by awarding explicit public aid, cfr. 5.3).

To the extent that such investment would not take place were it not for the favourable fiscal treatment, disparities in the corporate tax regime may trigger overinvestment in one area and underinvestment in another,

causing a reduction of efficiency for the national economy as a whole. However, provided the economy in question has free access to the international capital market, the underinvestment aspect of the problem should in principle not apply.

To prevent capital flows within the Canadian internal market from being lopsided due to fiscal factors, tax collection agreements regarding corporate taxes have been put in place as well. Compared to those on personal income taxes, the corporate tax collection agreements provide provinces with relatively more room of manoeuvre to specify their proper fiscal regime. This is so because local taxes are imposed before (rather than after) the federal rate structure has been applied. This enables provinces for instance to vary rates according to the size of the firm.

Yet, despite this greater leeway, the system of corporate income tax agreements is devoid of much significance as only seven smaller provinces adhere to it. The three foremost provinces, Ontario, Quebec and, Alberta (since 1981) collect their own corporate taxes as they felt the agreements tied their hands too much. As in the case of personal income taxes, the absence of an agreement leaves provinces free to implement policies with a discriminatory effect on other jurisdictions. Examples of such practices include special incentive schemes to promote the creation of provincial venture capital firms, as in Quebec (the so-called SODEQ tax credit) and in Ontario (the SBDC scheme).

The general provincial tax rates on corporate income prevailing in 1985 ranged from 10% in Alberta to 16% in neighbouring British Columbia. The two major and most industrialized provinces have closely similar rates.

Although none of the three most important provinces have entered in a tax collection agreement with Ottawa, they do participate in the scheme, also operated by the central government, to apportion the provincial shares of the tax revenue collected from companies having permanent establishments in several jurisdictions. Without such commonly accepted allocation rules, there would arise an obvious risk of either tax avoidance or double taxation (as in the US). It should be stressed that provincial fiscal collaboration of such kind is entirely voluntary and could therefore be halted at any time.

iii) Provincial Retail Taxes and Excises

Wholesale sales taxes belonging exclusively to the competences of Ottawa, provinces can levy retail sales taxes and excises on gasoline, tobacco and alcoholic beverages. Most provinces have a closely common general retail sales tax rate hovering around 8% (Ontario 7, Quebec 9%). However, for some specific goods differences may be appreciable as a result of different rules on exemptions for extra-levies on specific items. The notable exception to this general sales tax proximity is Alberta, which in principle does not charge any.

Sales taxes on interprovincial traded goods are, like in the European Community, subject to the destination principle. But because fiscal borders between the provinces do not exist - a situation also envisaged for the EC by 1993 - this principle is often flouted in practice, except for imported motor vehicles whose ownership must be registered with the provincial government. When buying out-of-province, consumers tend to pay the local tax and neglect to notify their purchase to their own fiscal authorities, applying in effect the origin principle. Given the economic geography and in particular the sheer vastness of the country, shoppers will not find it profitable to exploit systematically retail sales tax differences, save in the few populous border areas such as Ontario-based Ottawa and its suburb Hull, which belongs to Quebec. To our knowledge, the literature has not produced any evidence yet on the magnitude and economic effects of fiscally-induced cross-border shopping in Canada.

A more serious threat to fair competition among producers and retailers could be posed by an increasing reliance on mail order firms, because this way the distance factor is eliminated. Since provinces cannot as a rule tax extraprovincially, purchasing via out-of-province mail order firms may even enable one to evade retail sales taxes altogether. expect).

Provincial excises also vary considerably, and in the case of liquor and wines are imposed discriminatorily to advantage local distillers and wine growers. Differential excise treatment does not form the only instrument provinces employ to favour local producers of alcoholic beverages. Since the sale of the latter is under their tight control, provincial authorities have additional means to fragment the internal market. For

instance, the consumption of beer is restricted as a general rule to that brewed in the province or imported from abroad. Interestingly, the concentration in the beer industry is quite high; many plants, however, have a suboptimal size. Better advertising support, superior positioning in liquor outlets and discriminating packaging requirements are further ways in which provincial liquor boards promote local suppliers. Some provinces even limit private purchases of spirits from other provinces through an outright quota system.

5.3 Provincial Aid to Industry

The Canadian constitution has conferred no powers to central government to supervise provincial aid. Given the precept that in principle they can use at will the money raised through their own taxes, provinces are not legally constrained in their provision of public aid to industry. As a result, for the sake of promoting perceived local interests state aids have been awarded by provincial authorities or quasi-governmental organizations (e.g. crown corporations) to attract new investments or to keep afloat ailing enterprises. This inevitably has led to at times fierce provincial rivalry and the crippling of the Canadian internal market.

One of the prime causal factors behind interprovincial friction over public aid which has sometimes degenerated into a spiralling mutual outbidding process, is the desire to overcome regional disparities in income and employment opportunities. Therefore, by obviating such regional concerns through its own policies, the federal government could in principle provide itself with a powerful instrument to prevent interprovincial subsidy "wars" from occurring. To combat regional inequities, Ottawa basically disposes of two kinds of regional policies.

The first has a purely redistributive intent and is embodied by the interprovincial equalization scheme discussed under 3.2. The second has a developmental aim and has taken shape in the operations of the federal Department of Regional Industrial Expansion and its precursors. However, the activist policy of the federation has been called into question repeatedly and been criticized as to its objectives and instruments.

The provinces have awarded investment aid to industry by availing themselves of the investment funds and financial institutions they control and by imposing restrictions on the placements of pension funds.

Most provinces have at their disposal two types of investment funds: on one hand, the public trust funds, generally financed by natural resource revenues, and on the other hand the specific provincial development corporations which, because of the attendant benefits, are as a rule established as crown corporations.

In order to ensure that a large part of provincial earnings are invested locally, several provinces have set up special funds fed by their natural resource revenues, after the example of the 1976 Alberta Heritage FUnd. These funds, especially the Alberta one, have rapidly grown very sizable. They tend to be employed, at least in part, for the financing of provincial "strategic" investment projects which may fail to generate the normal market rate of return (in the case of Alberta, 10% of total assets or about 1 billion Canadian dollars were given that destination in 1981). Another important use to which these funds are put is to provide grants and loans on soft terms to the numerous provincial crown corporations, being public enterprises (e.g. utilities) that are exempt from federal and provincial corporate income tax. Crown corporations most of interest in the present context concern the development corporations, like the Ontario or Manitoba Development Corporation or the Quebec Industrial Development Corporation, which constitute in many provinces the main vehicle for an activist industrial policy.

Such development corporations are public investment companies providing assistance to private industry by way of guaranteed loans or loans at preferential interest rates, and equity participation. Their role does not stop at mere financial aid and advice, but also involves helping companies to develop new products, promoting rationalization and mergers and attracting business from out-of-province. In their operations they enjoy considerable discretion.

In addition, provinces owning thrift institutions have in the past used the latter to orient savings to provincial investment priorities. This happened in the beginning of the eighties to the publicly owned Quebec

Caisse de Dépôt et de Placement which - not without stirring controversy - granted cheap loans to public enterprises and private firms deemed "crucial" for the Quebec economy.

For similar purposes the same province has restricted the investment options of the Quebec Pension Plan, which has gradually accumulated very substantial funds. In fact, the assets of the QPP are held and invested by the just mentioned Caisse with clear priority for the economic development of the province.

Beside investment aid, provinces dispose of a wide array of general financial assistance programs. In this respect Trebilcock et alii (1983) noted that the "diversity of what may be generally termed industrial subsidies is staggering, including not only the more direct and obvious forms of assistance such as grants, loans, and loan guarantees, but also indirect forms of assistance through government provision of support services and infrastructure either across an entire industry or on a selective basis to individual businesses. Provincial government activity in the areas of business counselling and research and development, provision of transportation facilities and development of export markets stand as typical examples of the latter". They state furthermore that an overview of the various provincial industrial subsidies programs would approach a hundred pages!

Be that as it may, the available literature does not permit one to obtain an accurate picture on the actual size and importance of general and investment aid conferred directly or indirectly by Canadian provinces nor on their distortive economic impact on the functioning of the Canadian internal market.

5.4 Provincial public procurement

From the viewpoint of Canada's constitution, purchasing is an exercise of provincial contracting powers analogous to spending powers. For the same reasons (Art. 92(2) of the Constitution) as why they are virtually

unconstrained to confer state aid (see 5.3), Canadian provinces are basically free to contract as they wish. They are therefore free to adopt discriminatory public procurement policies in favour of local suppliers.

In the recent past, most Canadian provinces have exhibited a growing tendency in this direction. Preferential purchase policies have either been enshrined in provincial legislation or ensue from the discretionary practices of procurement officers. The methods usually employed include selective or single instead of public tenders, insufficient publicity on bidding opportunities, and explicit preference margins for local producers. Purchase preferences concern not only the provincial administration proper but are also applied by local public utilities - active for instance in the fields of energy or transport - schools, hospitals and by the resource industries in which the provincial government holds a stake.

On the basis of legislation passed in 1977, the Québec government opts for the lowest bid from a Québec firm even when it exceeds that of an out-of-province contender under the proviso that the offer of the Quebec enterprise furthers so-called 'provincial industrial development objectives'. British Columbia has a policy of paying up to a 10% premium on provincial content. In addition, the procurement authorities may take account of regional or sectoral unemployment as well as the general state of an industry rather than focus exclusively on costs. In Alberta, local preference will only be granted if provincial enterprises enter bids that can emulate approximately that of outsiders. However, the fact that over the years more than 90% of contracts have been awarded to Alberta firms, notwithstanding the relatively limited size of the province, may point to a difference between proclaimed policy and practice. Ontario is about the only province that does not apply a discriminatory system as such. It advocates a general 'buy Canadian' policy, but this is hardly surprising as it hosts more than half of the country's manufacturing base. Furthermore, there have been important contracts in the past for which purchase officers have made exceptions to this general rule to the benefit of Ontario-based corporations. The six smaller provinces also pursue preferential purchase policies but these tend to have but a

negligible internal market fragmenting potential. For many, especially capital or research-intensive goods and services, the smaller provinces depend anyway on out-of-province companies for want of local firms.

Whalley (1986) has produced an estimate of the 'static' efficiency gains to be derived from the elimination of discriminatory provincial government procurement policies. As provincial outlays on goods and services net of ordinary personnel expenditures amount only to 2 to 3 percent of Canadian GDP, potential savings are unavoidably minor when expressed as a percentage of national income. This contrasts sharply with the situation of EC Member States. Be that as it may, the estimate presented by Whalley, to wit 0,05% of GDP or about 1,5% of total effected provincial market purchases of goods and services seems minuscule given the blatant market-fragmenting procurement policies most if not all provinces are adhering to.

(NOTE: Whalley's quantification attempt confines itself to a static partial equilibrium analysis. It therefore does not address the longer term salutary effects the removal of provincial public procurement could spawn under the form of reinforced competition in the sectors dominated by public purchases, industrial rationalisation and greater scope for exploiting industry-wide economies of scale in the wake of increased demand.)

5.5 Financial services

5.5.1 Insurance

In insurance, there is a striking contrast between the formal decentralization of insurance regulation and the effective exercise of provincial autonomy affecting market integration (Baer, 1986). Decentralization in a formal sense goes very far, though not as far as in the US (see 6.6.1). Federal regulation is confined to issues of financial soundness of non-Canadian firms (foreign ownership varies from 60% of the firms in property and casualty to nearly 70% in life and health, with

market shares in some insurance lines beyond 50%) and of Canadian-incorporated companies which are registered federally. Provinces (can) regulate nearly all insurance aspects both for federally and provincially incorporated companies. Interestingly, the narrow federal powers are constitutionally recognized, but repeated attempts over a century to extend their scope to contract terms, insurance intermediaries or marketing have been invalidated by judicial review.

In reality, however, voluntary harmonisation has led to almost complete uniformity and negligible costs for interprovincial insurance business. The Association of Superintendents of Insurance (all provinces, and the federal Superintendent) has produced uniform laws and their provincial adoption has on the whole been unproblematic. The only possible drawback is perhaps that this harmonization tends to lead to some rigidity, delaying certain innovations in insurance policies (e.g. no-fault car insurance benefits). The fact that innovation takes the form of a deviation from agreed uniformity acts as a constraint. Another factor promoting effective market integration is a close collaboration between the insurance industry, with its expertise, and the regulators. Thus, whereas, since 1944, rating bureau's in the US risk conflicts with the federal anti-trust authorities (so that special federal law and state regulation had to be devised), the Insurers' Advisory Organization of Canada (a leading nation-wide rating bureau) and other industry organizations are viewed by all provinces as useful to improve information and objectivate pricing questions. In contrast to the US, the monitoring of 'rating' by provinces has been avoided. A third factor preventing market fragmentation is the delegation of the formal supervisory activities with respect to the financial integrity of federally incorporated (and foreign) companies to the federal Department of Insurance. This delegation may be formally complete (Nova Scotia) or controlled via exemption in provincial licensing requirements. For the relatively modest share of interprovincial insurance contracted by provincially-incorporated companies reciprocal arrangements exist, that in fact apply the principles of 'home province control' and mutual recognition (which is easy given a high degree of uniformity). All that provinces do is controlling the solvency aspects of provincial companies, based on essentially similar laws throughout the country.

5.5.2 Banking

Three important features distinguish the Canadian regime from that prevailing in the US or in EC countries. First, financial intermediaries are regulated differently - at least until very recently - according to their main business. The precept of enacting separate rules for each of the four identified types of institutions (in Canada often denoted metaphorically as the "four pillars") led in principle to a sharp segregation of branches as the performance of the core activity of each "pillar" was reserved exclusively to the firms belonging to that branch. The four pillars distinguished were banks, near-banks (i.e., mortgage institutions, trusts, credit unions, caisses populaires etc.) insurance companies and securities firms.

Second, this institutional partitioning corresponds with a distribution of supervisory competences between the federal government and the provinces, which, however, is far from perspicacious: some financial institutions resort under the exclusive control of either Ottawa or the provinces, whereas for other sorts of intermediaries the two levels of government share regulatory power. The regulation of banks is in the purview of the federal authorities. Near-banks fall generally under provincial legislation although they may be incorporated federally. In any case, near-banks also qualify for coverage by the deposit insurance scheme which, save for the Quebec thrift and morgage institutions, is run by the federation. The insurance (largely) and securities pillars are within the competence of the provinces. Thus, the jurisdictional overlay to the four pillar framework is quite complex, providing ample scope for potential friction among the provinces and between them and the federal authorities.

Third, the segregation of branches and the prominent role of the provinces in the regulation process has not gone hand in hand with a circumscription of the geographical mobility of financial institutions inside Canada's internal market. Unlike in the US, where for example banks are not permitted to branch out at will across state borders, financial service companies are capable of operating on a nation-wide basis provided they meet the relevant, often province-specific,

regulatory requirements. Near-banks, and securities houses thus face a situation inside Canada amounting to what in international trade discussions is often termed the "national treatment" regime. Firms foreign to the province can establish local subsidiaries, but the delivery of services from out-of-province is prohibited (Observe that in the US banking market, the branching is outlawed but that out-of-state customers may be served if they wish).

This decentralized, somewhat peculiar set-up provided financial enterprises in Canada for a long time with a stable environment in which they could perform what was commonly held an efficient intermediation function in the Canadian economy and stay competitive on world markets.

However, since the second half of the seventies, but in particular over the last few years, financial services markets all over the Western world have undergone dramatic changes in the train of technological progress in the information and telecommunications field, the securization of debt, the rapid internationalization of activities and the deregulation of the market undertaken by various leading OECD countries. Canada, as an open economy, evidently did not escape this trend.

These sweeping changes generated what proved irresistible market forces toward the (sectoral) integration of financial activities, eroding the very foundations on which the Canadian regime of financial service regulation had always rested, to wit the segregation of subsectors. With the pressures for a profound reform to accommodate the developments in the direction of "universal banking" building up over the years, leading on to the start of the deregulation debate in Canada early 1985, the four pillar regime eventually collapsed de facto in June 1987. Banks, trusts and insurance companies were empowered to obtain a major stake in the equity of securities firms. Most noteworthy in the context of the present study, the traditional division of regulatory competences between the federation and the provinces also tended to become unsettled by the demise of the four pillars.

5.5.3 National treatment, deregulation and the internal market of financial services

Financial institutions subject to provincial regulation and supervision are allowed to establish subsidiaries in any province. Subsidiaries must abide by local rules and cannot supply services across provincial frontiers. The application of this "national treatment" principle is motivated by the desire that producers of financial services can operate on an equal footing as far as regulatory requirements are concerned. Depositor and investor protection also play a role. Formally, there is an endeavour to avoid that the existence of different jurisdictions gives rise to competitive distortions. Nevertheless, the fragmentation of the national market into provincial segments may mean that consumers are faced with varying market conditions. The ban for provincially incorporated financial enterprises on the interprovincial sale of financial services probably inflicts productive inefficiencies which tend to reduce welfare for Canada as a whole. Such inefficiencies could arise from imperfectly competitive markets within single provinces or from the cost-augmenting effects of the adaptation to the varying regulatory requirements imposed by authorities of the respective provinces.

Outside insurance, few attempts have been made yet in Canada to proceed from "national treatment" to the mutual recognition-cum-home-province control principle whereby a common domestic market for finance would be achieved in which interprovincial discrimination of consumers would no longer apply.

Canada's regulatory system traditionally distinguished between types of enterprises, specializing in distinct financial products, which were separately regulated and supervised. With the blurring of these specializations, firms with distinct regulatory "origin" may now offer identical financial products. This creates serious supervisory problems and equal treatment may become difficult to achieve. However, a radical overhaul of the regulatory setting is also very hard because it is inextricably linked with the assignment of economic powers to the two levels of government in Canada. In other words, the blurring of financial

services specializations should not be expected to generate a shift of regulatory power to the federal level so easily. The product-wise integration of financial activities poses therefore a potentially serious danger to fair competition between firms in Canada.

The obvious response in order to avert competitive distortions would be to shift from regulations on the basis of institutions to regulations on the basis of functions or markets. The latter approach would imply that one and the same firm would be controlled by both federal and provincial authorities, but this would squarely conflict with the existing division of powers between the federation and the provinces. In addition, the functional approach would run up against certain limits in its own right. For instance, solvency, one of the most prominent concerns prompting regulation, relates as a rule to the company as a whole and not to the various activities or departments of the firm separately. Similarly, even if solvency problems would loom for one single area of business, problems may spill over into other dealings of the company in question as the news of the difficulties gets in the public domain. To prevent a domino-effect from occurring one may need an "umbrella" supervisory body monitoring the operations of the entire company. These considerations would tend to favour a more important federal presence in financial services regulations.

5.6 Technical barriers

If complaints or received literature serve as indicators for the prevalence of a barrier, the inescapable conclusion is that Canada does not suffer much from interprovincial technical barriers. In the more than 20 research volumes for the Macdonald Commission, dealing with economic aspects of the federation, hardly any reference to technical barriers will be found. The authoritative source on barriers in Canada outside this Commission work (namely, Trebilcock et.al., ed.s., 1983) provides only a few references to different technical regulations in road haulage (provinces differ as to permissible truck weight, axle spacing and length) and agriculture (for example, different grading systems for potatoes). During interviews complaints about technical barriers were scant.

There are a number of federal laws which prevent diversity from arising: weights & measures, rules on pesticides, car safety and pollution standards and almost all packaging & labelling rules (except a few minor linguistic items) are federal, for instance. Reference to federally agreed standards is common in provincial laws. Thus, although every province has a Chief Inspector for matters of electrical safety, they rely on the generally accepted Electrical Code of the (private) Canadian Standards Association which makes for uniformity apart from adaptations having climatic reasons. The National Building Code of Canada (produced by the National Research Council) is also adopted by all provinces, be it with more variations than under the Electrical Code. With respect to health & safety in the workplace, the federal Hazardous Product Act and close federal-provincial coordination have prevented serious problems from arising.

In contrast to the extremely complex organization of standardization in the USA, standard writing in Canada is done by only few organs. The umbrella organization is the semi-public Standards Council of Canada (also ISO-member). Its aim is to promote national standards. Ignoring the case of the building code, there are five standard writing bodies. By far the largest one is the (private) Canadian Standards Association, a nation-wide body with some 1000 committees in 36 sectors. Access to committees is open; for instance probably up to one-fifth of the committee experts are Americans. Two specialized private bodies include the Canadian Gas Association and UL (Underwriters LTD) of Canada (for fire protection). The only provincial body is the Bureau de Normalisation de Québec, which frequently aligns with national and ISO standards and seems not to be considered as a source of divergent standards. It also writes standards on agricultural machinery and, f.i., septic tanks. Finally the federal government sets de facto standards through purchasing via its General Standards Board: this has had a major impact in textiles and paints, for example. Participants in the standardization process claim that the approach to standards in Canada is functional: the consensus method (including government officials) works well and there is a permanent effort to avoid needless duplication or overlap.

Certification was concentrated, until recently, at the Gas Association and UL of Canada (for gas and fire protection standards) and the Canadian Standards Association for electric and many other products. For plumbing products, certification has recently become competitive as the production firm Warnock & Hersew (!) has entered the field next to CSA. However, provincial approval requirements are usually based on national certification bodies and seem to cause few problems.

The unproblematic nature (if not, absence) of technical barriers inside Canada is a result of the economic self-interest of almost all economic agents, given the smallness of Canadian provinces and the relative weight of interprovincial and American market outlets, not least the protection against liability suits. However, it is not without interest to note that the Constitution or federal lawmaking do not guarantee or impose this harmony. Standards can be set for products sold within the province (according to several paragraphs of section 92 of the Constitution), provided they do not infringe upon the federal power to regulate interprovincial or international trade and commerce or upon the federal criminal power. In other words, much of the harmony is based on voluntarism of the provinces and any province can abrogate agreements (like Quebec did for tomato packaging) or discontinue to accept national codes. The Supreme Court's judicial review does not provide clear guidance on what is 'substantially local' (Silzer & Krasnick, 1986, pp. 175/6) as it is not consistent. Nevertheless, for 'clearly' interprovincial matters, the federal government's legal basis disposes of the competence to intervene, which has proven to be effective.

5.7 Interprovincial labour mobility and licensing of professions

Since the coming into effect in 1982 of the Canadian Charter of Rights and Freedoms (in particular section 6 thereof) mobility rights have been firmly established to individuals within the Canadian federation. Canadians are fully entitled to move, take up residence and work in the location of their liking. However, Supreme Court rulings relative to the Charter have not made it clear yet whether these broad mobility rights take precedence over provincial legislation that expressly discriminates

against outsiders on private as well as public employment matters. The most prominent instance of such legislation concerns the preferential hiring dispositions existing in several provinces, which in effect impose local hiring restrictions on private employers. Two well-known examples in this respect are the 1978 regulation under the Newfoundland Petroleum and Natural Gas Act stipulating that persons granted leases for exploration or exploitation of oil or gas in Newfoundland shall give preference in their hiring practices to qualified residents of the province, and the 1977 regulation under the Quebec Construction Industry Labour Relations Act which effectively shuts out outsiders from the Quebec market for construction workers. Apart from preferential hiring provisions destined for the private sector, provincial authorities also advantage local workers through their public procurement of services (cfr. 5.4) thereby impairing in yet another fashion the functioning of the Internal Market for labour. In the European Community, discriminatory legislation of such kind would in all likelihood be deemed incompatible with Community law which holds that the right to take up employment on an equal footing with nationals is applicable to all jobs and occupations except those strictly connected with the exercise of official authority.

In order to enjoy true mobility rights individuals ought to be able to have recourse to a reasonably comparable level of social services in the new location and to preserve the pension rights accumulated earlier. The Canadian social security does not constitute in any significant way an impediment to interprovincial labour mobility (see also 3.2). Unemployment benefits are regulated and paid for federally. By virtue of the Canada Assistance Plan, federal funds cover partly provincial income assistance and welfare programmes, provided provinces do not impose a period of residence as a condition of eligibility to financial aid. Similarly, the Canada Health Act confers federal cost sharing for provincial medical care expenditures if and only if provincial health care systems allow for full portability of benefits and full accessibility for residents of the province.

The Canadian pension regime, however, turns out to have a far greater potential to impact negatively on intra- as well as interprovincial - labour mobility, owing the lack of portability of private plans.

Portability of Canada's two public pension plans (Canada Pension Plan and Quebec Pension Plan) pose no problems but it is private schemes that create difficulties on account of the inability or costliness (in terms of foregone pension rights) to carry paid-in pension benefits from the previous employer to the new one.

The market fragmentation having to do with occupational licensing stems from a lack of uniformity of provincial requirements and the absence of mutual recognition of licensing and certification procedures. Sometimes barriers are directly attributable to the conduct of the provinces, sometimes it is the local professional organisations who decide on the provincial recognition criteria.

As far as the professions are concerned, barriers do not appear important except for a few like lawyers, pharmacists and surveyors. For a number of professions a minimum residence condition is imposed. For example, British Columbia's Notaries Act requires a three-year residency period prior to application for licensing.

As to trades, more than one third of Canadians active as skilled craftsmen are subject to licensing and certification. In order to obtain a license a craftsman trained in another province is often required to return to school and requalify before he can resume his career. Such would be the fate for instance of a dental technician immigrating into Ontario, as the latter province refuses to recognize qualifications other than a period of four year apprenticeship in Ontario! Some progress towards the liberalization of the market for skilled labour has recently been made by the establishment of a federally sponsored countrywide professional certification programme (the so-called 'red seal programme'), but this program exists merely on a voluntary basis. Quebec, for instance, decided not to participate. It is also primarily this province which thwarts the provision of services from out-of-province by either charging higher license fees or by simply refusing licenses to non-residents. This applies, for example, to taxi driving, travel agencies and insurance policy sales.

The above description of the various barriers to interprovincial labour mobility might suggest that the resulting suboptimal allocation of the Canadian workforce causes significant efficiency losses depressing real income for the country as a whole. Yet, as in the case of public procurement, the only available estimate, again provided by Whalley (1986), is sobering, at least in the eyes of Europeans. Whalley, studying six different occupations and ascribing interregional wage differences to quota-type restrictions to labour mobility, reckoned that the removal of barriers would raise overall national efficiency by some 22 million Canadian dollars in 1981, or about 0.005% of GDP. Admittedly, Whalley assumed away the possibility that such quota-type restrictions trigger rent-seeking behaviour on the part of the protected labour force, but even with modifications of the hypotheses in this direction, the estimate would be likely to remain trifling.

5.8 Interprovincial road transport

The regulation of interprovincial transportation of goods by motor vehicles lies, ex. Article 92(10) of the Canadian Constitution, in principle within the jurisdiction of the federal government, whereas the provinces are competent for exclusively intraprovincial transport matters. With the aim of avoiding confusion and overregulation that could possibly ensue from a duplication of rules, but also because it felt at that time that its administration was not adequately equipped to assume federal powers in transport, the federal authorities decided, however, by means of the 1953 Motor Vehicle Transport Act to delegate to the provinces the power to regulate interprovincial haulage. This delegation has set the stage for a significant fragmentation of Canada's internal market for road transport, in particular on account of the administrative complexities the current policy regime has given rise to and which truckers find expensive to comply with.

Compared to the existing situation in the EC, the Canadian internal market appears at first sight much more liberalized, given the absence of road transport quota and the right of cabotage. But the administrative burden placed on economic agents is - as yet - less onerous in the

Community. The Canadian case shows clearly that it is costly to substitute extensive administrative arrangements, emanating from fiscal revenue and fair competition concerns, for costly border controls and discriminatory national regulations.

5.8.1 Registration requirements and fees

Because provinces exercise the competence delegated to them over interprovincial trucking and because transport regulations differ from province to province and are not, as a rule, mutually recognized, a haulier wanting to conduct interprovincial business needs to obtain a licence in each province he passes through and pay the attendant fees. Regulatory discrepancies do not only concern entry into the profession, but also weights and dimensions of lorries, and safety aspects. Adjusting to divergent professional and technical demands, along with the fees, obviously discourages interprovincial trucking, the more so as the Supreme Court in a 1972 ruling upheld the view that provinces can subject carriers from out-of-province to more stringent regulations than local transporters. Translated into the EC context this would mean that one could in the fixing of domestic regulations discriminate on the basis of nationality!

The provincial registration obligation also implied up to April 1982 that licence plates had to be obtained from each province through which transport occurred. Since that time, the Canadian Agreement on Vehicle Registration (CAVR), to which all provinces adhere, has been in force. By virtue of this agreement, only one single licence plate is necessary, namely that of the home province of the carrier. A clearing scheme distributes this licence plate fee to the other provinces on the basis of distance travelled within that other province. This agreement clearly reduces direct registration expenses for road hauliers, but it complicates the latter's administration as they need to report all interprovincial journeys undertaken. Moreover, the implementation of the clearing scheme absorbs public service resources. The agreement pertains only to licence fees proper. They do not cover other specific requirements individual provinces may impose, such as regards vehicle and load insurance. Notwithstanding the CAVR, supplementary costs due to

regulatory differences may therefore still have to be borne. This is not to say that actions other than the CAVR have not been undertaken. They have in the framework of the Canadian Conference of Motor Transport Administrators - an ad hoc association of provincial and federal civil servants responsible for road haulage and as such epitomizing 'executive' federalism - and they have met with some success. However, given the purely voluntary nature of this conference, the efforts cannot lead to a durable harmonization of legally binding provincial regulations; they will achieve a reversible acceptance of the mutual recognition principle at most. As long as Ottawa is not prepared to reassert its constitutional rights and step in to lay down federal rules on interprovincial trucking, Canada's internal market for road haulage stays liable to fragmentation.

5.8.2 The collection of fuel taxes

Unlike the situation in the Community where fuel tax is paid in and accrues exclusively to the country of the petrol station (at least up to 600 litres), which in effect boils down to an application of the origin principle, Canada's taxation regime on fuel for lorries is predicated on the destination principle: for the sake of fair competition among hauliers and fiscal equity among provinces, fuel taxes are expected to fully benefit the province where the fuel is consumed, i.e. where the distance is travelled.

Aside from the fact that, like in the case of retail taxes (cfr. 5.2), this principle is sometimes offended in border areas by "cross-border trucking", its practical implementation can lead to important administrative costs for interprovincial road transporters. Each time truckers pass a provincial boundary, they have to pay fuel tax and the documents to be filed, for instance those to get the reimbursement of excess tax paid, are quite detailed. Such procedures make truckers' bookkeeping highly intricate.

Two steps to alleviate these burdensome procedures have been taken recently. The three Maritime provinces have set up a fuel tax apportioning system which bears close resemblance to the aforementioned CAVR scheme for registration fee collection and distribution. Instead of

clearing continuously and with each province separately, truckers pay the tax of the province where they purchase the fuel. The tax proceeds are allocated subsequently among the provinces, again following the distance travelled. The second improvement has been the acceptance by all provinces of a common form for declaring the stretch and hence for calculating the tax payable. Be that as it may be, the common document must still be filled out in every province interested, so that remaining red tap is still lengthy.

6. BARRIERS IN THE US INTERNAL MARKET

6.1 General issues of US market integration

In contrast to Canada, intra-US trade is much larger than - indeed, a multiple of - its foreign trade. A second major difference with Canada is that the 'fragmentation' of the US internal market is not a topic which arouses much interest in politics or even in the business world. Judging from interviews and other reactions, the term 'fragmentation' is felt by many US citizens to exaggerate the nuisances flowing from a federal structure. These nuisances appear to be broadly accepted as an inevitable product of decentralization, and greatly overcompensated by the benefits of the federation.

Despite the superficial impression that Table 2, and the discussion in the rest of this chapter may convey, the integration of the US internal market has reached a very high degree. Its scope is comprehensive, interstate economic mobilities are substantial and their responsiveness to new opportunities or decline in one State or the other is considerable. Market integration is facilitated by integrative judicial review, based on the interstate commerce clause (see 6.2), reducing the levels of interstate barriers. Moreover, the scope of barriers not constrained by commerce clause application is relatively narrow. Nevertheless, sections 6.3 through 6.9 below show clearly that at least some barriers are not trivial and that the costs of today's fragmentation is likely to be high enough to merit attention.

The seven 'barriers' discussed below have been selected in the light of the White Paper. They do not provide an exhaustive picture. Other barriers are either highly specific to a State or relate to special products: they tend to be of trivial importance for market integration. For instance, the US has no internal customs barriers and States have no customs officers. Yet State laws can lead to phytosanitary import prohibition, so as to prevent certain fruit diseases. Thus, the highly exceptional controls on citrus 'imports' from Arizona into California leads to checks of persons travelling by car. Another, less exceptional example are random controls of cross-borders shoppers on purchases of alcoholic beverages, be it for tax purposes or because the county (not the State) is 'dry'. Interstate cigarette trade is frequently controlled by federal law enforcement agents (see 6.3). Also, State regulation or State anti-trust policies may create differences in competitive conditions in certain product, services or (segments of) the labour markets. Relocation of firms is costly due to social 'exit' provisions, which differ. Finally, federal laws and policies may sometimes distort or frustrate interstate economic mobilities but, unlike Canada, this is not a serious issue (quota's or 'set aside' of land in agricultural policy has such an effect; oil price regulations below world prices up to 1980).

Like in Canada, to discuss barriers only in terms of 'costs' without paying attention to the "benefits of diversity" would amount to a failure to understand federalism. The US federation uses a complex institutional and legal structure to minimize the costs of diversity by enabling far-reaching market integration, while carefully upholding political, fiscal and regulatory instruments at state level sustaining a capacity to supply local public goods in response to local preferences. The so reaped benefits of diversity sometimes flow from public policies having protectionist effects or otherwise distort market integration. This is particularly the case where populist local pressures (i.e. preferences) are dominant or cultural divergencies play a role; there is also a remarkable tolerance of the interstate export of the tax burden through severance taxes in the cases of oil or raw materials.

That fragmentation is rarely very costly, the diversity notwithstanding, is also the result of other factors. These other factors play only a minor role in the EC and make the Community less comparable with the US

(at least, today). English is spoken everywhere and cultural affinities or origin of citizens hardly influence differences in policies among States. Communication networks and transport infrastructure have fostered market integration; nation-wide investment in both have been decisively influenced by national defence considerations (for instance the national interstate highways system is still formally linked to defence). Higher education is not under federal control but is private or financed by State or local government; yet, competition and the right of mobility have long led to nation-wide standards for many skilled workers and the professions (see also 6.8.2). Together, such factors provide a socio-economic context in which "diversity" becomes a highly relative concept; in European eyes it amounts to little more than a desire of selective differentiation from what otherwise is perceived as similarity or uniformity. The sense of competition, the acceptance of challenge as well as potential and observed economic mobilities constrain the actual divergencies and their costs enormously. It is against this background that the rest of this chapter should be read.

6.2 The interstate commerce clause

The USA is a federation with power divided between a national government of enumerated powers and state governments of residual power. The enumerated powers of the federation itself include all powers necessary and proper for carrying out the enumerated powers. The states have residual powers (often termed 'police powers') to provide for the health and safety of state citizens, for questions of public morality and more broadly 'general welfare'. The problem is therefore how and to what extent the states can utilize these powers, and, as a consequence, how and to what extent this leads or can lead to incomplete market integration.

The simple clue to that question is the interstate commerce clause of the Constitution, reading as follows: "The Congress shall have the power..to regulate commerce with foreign Nations, and among the several States ..". This clause has been regarded almost right from the beginning, especially by the Supreme Court as essential to the unity of the USA, to the "more

perfect union" succeeding the original confederation in 1787. A telling quote from Justice Cardozo indicates this inclination: the commerce clause "... was framed upon the theory that the people of the several states must sink or swim together, and that in the long run prosperity and salvation are in union and not in division" (quoted from Kommers & Waelbroeck, 1986, p. 170). In other words, the interstate commerce clause is not merely an assignment to Congress but also a strict limitation of the States' powers so as to preserve market integration. The functional interpretation has therefore been allowed to prevail as becomes clear from today's general definition of interstate commerce "to include every species of travel, communication and movement of any kind across state lines, whether for profit or not, as well as every species of commercial negotiation which will involve sooner or later an act of transportation of persons or things, or the flow of services or power, across state lines" (idem, in footnote 12).

This comprehensive definition is leaving little scope of the fragmentation of the US internal market. Compared to the situation in Europe (despite the integrative case law of the Court of Justice of the EC, ex. Art. 30, EEC) and that in Canada, the limitation of the powers of the States imposes an orientation to genuinely local economic activities. Otherwise, State interventions are trivial in economic significance beyond the State's border except for financial services and a few other instances where Congress has preferred to leave regulation to the States or has introduced federal laws leaving some scope for exercising State powers. Given the political legitimacy of this integrative view of the commerce clause, the Supreme Court of the US has effectively assumed the responsibility for "negative market integration", that, in Europe, has been much more the joint product of the legislator (the Council) and the judiciary (the Court, helped by the Commission), with the second being dependent on the former given the fairly precise demarcations of Community law in a number of respects. A crucial difference between the US and the EC remains, of course, that the comparability breaks down in the cases of services and factors of production. The commerce clause applies to services whereas the EEC Treaty ties the freedom of financial services to capital market liberalization and explicit directives of the Council while the freedom of transport services forms a part of the

construction of a common transport policy. In fact, however, the US situation is not so radically different since Congress has used the clause as a basis for federal laws in financial services, leaving ample scope for State regulation, which in turn has fragmented the US internal market. With respect to interstate transport, Congress adopted a federal law a century ago empowering the Interstate Commerce Commission (and, for air transport up to 1984, the Civil Aviation Board) to pursue a kind of common transport policy with entry and rate regulation as well as routing restrictions. Deregulation of road haulage has altered the substance, not the 'commonness', of the policy.

In the case of factors of production the differences between the EC and the US are too great to make a comparison useful (but see sections 3.2 and 6.8.

The force and scope of judicial review on the interstate commerce clause is perhaps best understood by comparison with the EC in three key domains of product market integration, excluding services or factors so as to increase comparability.

EC judicial review (to repeat: on products!) is sometimes even more centralized than the US. However, in other respects it is incapable of being applied given the considerable 'reserved' powers of the Member States. Following Kommers & Waelbroeck (1986) we look at three domains of regulation: health & safety, taxes, and environmental and consumer protection legislation.

health & safety: after establishing whether state regulations fall within the scope of 'police powers' (US) or Art. 36, EEC (and this is done restrictively, i.e. the mere "incantation of a purpose to promote the public health and safety .. does not insulate a state law from commerce law attack" (US), or, the burden of justification in the EC falls on the Member State to show that the 'general interest' grounds of Art. 36, EEC apply), two tests are applied; first, a 'burden' or proportionality test seeks to determine whether the impact on commerce is excessive in relation to the benefits derived from the regulatory scheme; second, an alternative measures test seeks to establish whether the purpose could not be achieved by means that would imply a lesser impact on the free movement of products.

In this context the Cassis-de-Dijon ruling has to be placed, which says that products having "... been lawfully produced and marketed in one of the Member States" cannot justifiably be restricted on the general interests grounds of Art. 36, EEC. Read as such and in isolation, this sentence neither represents EC case law properly nor is comparable to the US. The latter point is important as Cassis-de-Dijon is frequently referred to as an effective rule for "negative market integration", similar in impact to the commerce clause.

The Cassis-de-Dijon criterion is only applied after a comparability test on the health or safety objectives pursued: if the exporting EC country pursues 'comparable' safety (etc.) objectives, the Cassis-de-Dijon criterion will outlaw import restrictions (although a weak obligation, say, of labelling may still be imposed). In the US, not the 'comparability' of objectives plays a role but the burden on interstate commerce. If the burden test is made severe, an effective reduction of safety & health standards down to the lowest (state) level will take place unless Congress preempts. Should Congress fail to preempt for political reasons, a "regulatory gap" may emerge (Heller; 1986) as the "price" of a more complete market integration. The gap emerges as states are not allowed to legislate and Congress is unwilling or incapable.

taxes: It is crucial to see that the Supreme Court deals with numerous tax issues, whereas the Court of Justice of the EC deals merely with product taxes (i.e. excises and VAT, and near-perfect substitutes). Both apply equal treatment - absence of discrimination between imports and domestic goods - criteria to state tax structures. The EC Court goes very far in that a tax structure benefitting a typically national drink (e.g. cognac, grappa, akvavit) as against alcoholic beverages of a substituting nature (imported or not) is held as discriminatory. The Supreme Court would not be expected to use more than a practical 'fairness' test, leaving a greater leeway for the States. Note however that the US has no internal frontiers which de facto restricts the freedom of States to impose discriminatory tax structures, a restriction of freedom that in Europe is achieved by the judiciary. In this respect it may be interesting to have regard to absolute tax levels on products as they determine in large part the incentive to arbitrage among (state) markets. Thus, the cases of cognac, etc. struck down in Europe all formed very substantial discriminations in price in absolute money terms.

environmental/consumer protection: Essentially matters are similar to health and safety, except that environment & consumer protection are not explicitly mentioned in Art. 36, EEC. The Court decided that they could be brought under the Article by using the criterion of "overriding considerations of general interest", with (as before) the burden of proof on the Member State. In the US, a curious distinction is made by the Supreme Court between the State as regulator (when the usual strictness of the commerce clause applies) and the State as entrepreneur or market participant. In the EC the latter would fall under Art.s 37, EEC and 90, EEC and particularly under Art. 37, EEC there is substantial case-law promoting non-discrimination and market access; Art. 90, EEC case-law has not developed very much because of political inhibitions with public firms and because of the ambiguous language in its text. In the US state activities as a market participant have been discriminatory without having been struck down by the commerce clause. Be that as it may, it is noteworthy that such cases remain marginal in the economy. Unlike in Canada and some EC countries, state distribution systems hardly exist with the exception of spirits; unlike the EC, public firms are rare in the US. The US Supreme Court has also displayed, perhaps more than in Europe, sensitivity to local interests with regard to state legislation designed to protect the environment, to control quality or to conserve energy. There is even a tendency in the Supreme Court to take into account that "parallel state legislation" (i.e. cooperative federalism) may go together with preemption of Congress and hence that in such an event state legislation should not be shot down very easily.

6.3 Interstate tax competition

6.3.1 Introduction

The US Constitution is not clear about taxation assignments, except that customs duties are strictly a federal competence. Unlike in Canada, where the provincial and the federal level levy a number of competing taxes and where provinces have the retail sales tax as an exclusively provincial tax, the US developed a tradition up to World War II whereby states financed expenditures by means of indirect taxes and the union by direct

taxes. This historical assignment has become somewhat unbalanced ever since the war expenditure necessitated the federal government to raise direct taxes considerably. Later, educational, health and social expenditures at state level led to a 'counter increase' of indirect tax rates and since this is very hard to do in a non-coordinated way in a true common market, states began to look to other types of taxes. Therefore, today's fiscal structure in the US is shaped by historically grown assignments and by fierce tax competition among the states. The latter is in tune with what one would expect from the theory of fiscal federalism (which assumes a perfect common market underlying the federation): a single state is constrained in raising taxes as this may lead to exit of mobile factors, hence to a weakening of economic activity and of the taxable base. Before discussing interstate tax competition below it is useful to point out that the focus merely on the tax aspect is mistaken. Taxes are imposed in order to provide public goods and services. In as far as factor mobility is a response not to fundamental economic forces but to state action, it is the utility derived from the public services level in combination with taxes that is the relevant determinant to look at.

In comparing the USA with the EC in 1993, problems of incomparability therefore arise. Whereas the EC will then have a common market which is beginning to resemble the US common market, the latter is overarched by redistributational and taxation instruments facilitating in turn the mobility that integrates the 50 state markets into one (see section 3). Thus, direct taxes (personal and corporate) are levied at two levels in the US, but only at Member State level in the EC; approximation of corporate or personal income taxation is not included in the White Paper. With respect to indirect taxes, the EC substitutes negotiations at Council level for the pressure to approximate or not to diverge too much that would arise from the lack of fiscal frontiers the US is used to live with. While the comparability of indirect taxes is less of a problem between the US and the EC, focussing only at indirect taxes and only at state level merely because the EC does not touch national fiscal sovereignty, introduces a too narrow and biased perspective. In section 6.3.2 indirect taxes will be discussed whereas fiscal competition with respect to business will be reviewed in section 6.4. How important the

linkages between the two in a true common market with mobility of products, services and factors of production are, will be discussed in section 6.4. But this has to be seen in the context of the overall revenue needs of the states in the longer run. As Table 3 makes clear, over the last three decades, sales tax & excise revenues, license fees and other tax revenues (such as severance taxes on the extraction or sales of non-renewable resources, property taxes at state level (normally a local source of revenue) and death taxes) have all decreased as a percentage of state revenues, to the benefit of state income taxes.

Among the states, tax structures can differ enormously, and conclusions should not be drawn too rash. Tax competition takes many forms and tax structure as well as exemptions are at least as important as the rates. A few examples may provide an idea of the virtues and drawbacks of the great tax autonomy US states have. Delaware is known in Europe especially because of relatively lax regulatory regime with respect to corporations, but it also has the highest per capita income tax of all US states (1985). On the other hand, it has no sales tax. There are five states without a personal income tax, four states without a sales tax, seven states without a corporate income tax and there is one without a death tax (Florida attempts to attract the rich elderly by a constitutional prohibition of death taxes). If one uses per capita tax burden data one has to be careful, too: Alaska has by far the highest overall tax revenue per capita, but (1) Alaska has no sales and personal income taxes, and (2) shifts roughly two-third of its entire tax burden to other states via a severance tax on its oil and gas exports to the rest of the country and a corporate income tax burdening virtually only oil companies. Note that severance taxes, although clearly export taxes inside the common market, have been upheld against the commerce clause. Other states with severance taxes enjoy the same effects but in a much less radical way. For Wyoming, half of its tax revenue is derived from severance taxes, for Oklahoma, Montana and New Mexico one quarter, for Louisiana and Texas one fifth. Typically, Texas and Wyoming have no corporate income tax and no personal income tax, Montana no sales tax. There are no value-added-taxes on products in the US, but Michigan repealed its corporate income tax and replaced it by a kind of special VAT on business.

6.3.2 Indirect taxes

Sales and use taxes fulfil roughly the same function as the VAT in the EC. A retail sales tax falls on the ultimate consumer and is stated as a percentage of the purchase price. It is applied to products, some services (dependent on the state) but rarely realty. There are general and specific sales taxes. State general sales taxes in 1987 range from non-existent in five states, via a low of 3% (4 states) and a US median of 4.75% to a high of 6% (6 states), of 6.5% (Washington) and a top of 7.5% (Connecticut; however, note that Connecticut has no tax on personal income, except for dividend and interest). The range widens a little if local sales taxes (that may or may not exist) are included: from a low of zero for the five states, as before, via a bottom inclusive-rate of 4% to a high of 8.25% (several places in New York State, including New York City) to a top of 9% (New Orleans) (Source: ACIR, Significant features of fiscal federalism, 1987 edition, Washington DC).

The economic differences between a VAT and a sales tax are well-known: the sales tax will also burden the product-inputs for final goods production and hence yield a pyramid of taxes included in the final purchase. This pyramid may be conceived of as a kind of capital tax, especially for complex and capital-intensive production. Vertical integration, in avoiding the tax for intermediate supplies, might be artificially encouraged this way. Another disadvantage is that the pyramide differs quite arbitrarily between one good and another. Very few states exempt from the sales tax the purchase of equipment used to manufacture goods (typically, Michigan with its industry does). An overall exemption for inputs exists nowhere. For the ordinary citizen, on the other hand, lots of exemptions exist, again varying among the states: 29 states exempt food from sales taxes (a few don't, but give a tax credit to low-income tax payers instead); 44 states exempt prescription medicines; 32 exempt private purchases of electricity and gas; 6 exempt clothing; and 20 states do not or hardly tax services.

Whether interstate differences in sales taxes lead to artificial encouragement or discouragement of trade flows, given absence of fiscal frontiers, requires a conditional and complicated answer. The

comparatively low rates (compared with our VAT rates, which however, do not contain or lead to double taxing) can be explained in part by the commercial and fiscal drain large differences in sales tax rates would give rise to among states. But one should not lose sight of the fact

Table 3
Shares of tax categories in US state revenues
(1957 - 1985) (in %)

<u>Year</u>	<u>sales/excise taxes</u>	<u>income taxes</u>	<u>license fees</u>	<u>other</u>
1957	58.1	17.6	15.1	9.2
1967	58.2	22.4	11.4	8
1977	51.8	34.3	7.1	6.8
1985	48.8	37.8	6.3	7.1

Source: Book of the States, 1986-87 edition, p. 262, Council of State Governments, 1986 (Lexington, KY).

that a crucial characteristic of the US (as well as Canada) is the geographic size of the country. Ignoring the five zero-rate states, the highest spread is 4.5%, and 5% with local taxes included. Therefore, the only problematic cases are (a) where zero-rate states border high sales tax states; (b) where large metropolitan areas overlap two or more states with either a large spread or different exemptions. The first category creates few actual problems: Alaska is obviously a non-issue; Oregon is surrounded by four states with Idaho having 5%, California 4.75%, Nevada 5.75% and Washington 6.5% - this leads to few problems because of great distances in these sparsely populated states or border zones; Montana (itself very large and sparsely populated) is surrounded by big states with tiny populations and having sales tax rates of 3% and 5%; New Hampshire might perhaps be thought to keep neighbouring sales tax rates no higher than 5% (Mass. and Maine); it is only tiny Delaware, caught in the Northeastern megapolis between Washington DC and New York, that might cause some problems as Maryland has 5%, and Pennsylvania and New Jersey 6%

- one indication of the potential cross-border shopping might be the fact none of the three neighbouring states have local tax additions to the state's sales tax.

The second category includes Delaware again but also for instance New York City. New Yorkers pay a state/local rate of 8.25%, which differs little from that in New Jersey (6%), except with respect to New Jersey's clothing exemption. But these two examples can hardly be multiplied, which may be seen as a confirmation that the absence of fiscal frontiers keeps the spread from growing too large (i.e. more than a few % or at most 5%). Indeed, in and around the big cities in the US rates rarely differ very much.

A special consequence of the sales tax, under the destination principle, is the so-called 'use tax'. Because suppliers may directly supply buyers from outside the states, sales tax evasion would be easy. Buyers in state A purchasing from suppliers in B are obliged to pay the 'use tax' which is equal to the sales tax, unless the supplier from B has 'sufficient nexus' in A (the word is from the Supreme Court); if so, the supplier is obliged to collect the use tax and any practical difference with the retail sales tax vanishes. Compliance can be achieved via registration requirements (for cars) and business accounts. For individual purchases the effort is simply not made. This has created a problem with mail order purchases because they usually have insufficient 'nexus' in other states, hence do not have to collect so that the individual buyer will evade sales taxes easily.

States also raise revenue by means of excises. The three most important instances are cigarettes (sometimes a wholesale tax on tobacco), alcoholic beverages and motor fuel excises. Cigarette state taxes (ignoring local taxes) have gone up considerably recently for two reasons. First, anti-smoking campaigns have created a more favourable political climate to exploit the low price elasticity of demand for cigarettes for revenue purposes. Moreover, the success of the campaign has reduced smoking which also induced pressure to raise tax rates so as to keep revenue from falling. A second reason is the success of combating cigarette tax evasion: states feel less inhibited to raise the excise as

interstate smuggling has become more difficult and risky. In 1960, the excise ranged from 2-6 cents a pack in all states, except in two tobacco states (Virginia and North Carolina) and in Oregon, where no excise was levied. The range had widened in 1970 to 2-18 cents and to 2-21 cents in 1976. In the US there is a great deal of practical tolerance of casual smuggling by the individual; formally, a number of states enacted strict laws which were only rarely enforced however. It is estimated that at around a 10 cents differential, profit opportunities begin to attract organized crime. During the early and mid 1970s, cigarette 'bootlegging' became a serious problem: revenue lost to states was estimated to amount to \$ 400 million in 1975; thousands of wholesalers and retailers in high-tax states had gone out of business; corruption crept in. A federal cigarette tax was rejected as a solution; instead, a federal law in 1978 made it a crime to engage in large scale cigarette trading without tax indicia (stamps) of the relevant state. Federal law enforcement subsequently led to such an increase in risk that systematic smuggling has almost disappeared (source: ACIR, Cigarette tax evasion, a second look, 1985; Washington DC). In 1977 14 states were identified as having a serious bootlegging problem; in 1983, only Connecticut and West Virginia could be placed in this category, and most losses there are probably due to casual smuggling, including cross-border shopping. Two interesting side effects of the federal law are now: first, states have economized on resources devoted to enforcing state cigarette laws (because the federal Treasury does it); second, the upward tendency of the cigarette taxes, and their interstate spread, has been reinforced. In 1980 there were three states with the top rate of 21 cents, whereas in 1986 there were 15 states with higher rates, ranging up to ± 29 cents for Hawaii (calculated from a wholesale tax) and 27 cents for Oregon (with North Dakota going to 27 cents in 1987), whilst Kentucky has still 3 cents and North Carolina 2 cents. It should be noted, finally that the federal government levies a tobacco tax of 16 cents per pack as well.

Excises on alcoholic beverages differ enormously, too. A complication is that seventeen states have monopoly systems for distilled spirits; one has it on a county basis; some counties in various states still maintain complete prohibition of any alcoholic beverage. Beer frequently is taxed differently or on ordinary sales tax rates; wine (or beverages below 14%

alcohol) may escape heavy taxation. Given the lower value/weight ratio (compared to cigarettes), systematic smuggling seems to be less of a problem. With cross-border shopping occasional random checks sometimes occur in some states. In 1986, the spirits excise in dollars per gallon (= 3.79 liters) in different states ranged from \$ 1.50 to \$ 6.50, with a number of caveats about exceptions or special surcharges plus additional wholesale taxes.

Motor fuel excises display a smaller spread, because even oil-producing states tax the use of motor fuel. In 1987 they ranged from 8 cents per gallon in five states to 19 cents in Utah; Florida maintains a 4 cents excise but this is topped up by local taxes to a range of 5-10 cents (apart from a sales tax that is also included). As section 6.9 will discuss, interstate trucking is subject to precise motor fuel reporting, limiting cross-border purchases. Observe that diesel and gasoline taxes may differ in some states, and if so, diesel is always taxed more.

6.4 Interstate tax competition and state aids

In times of recession (if not always), local and regional governments may be sensitive to cross-border mobility which adversely affects the local or regional economy. Stronger, they might actively seek to induce inward mobility of factors in order to boost the local or regional economy. The latter strategy will largely be a zero-sum game among the states if imitated by all. To the extent this game employs tax incentives, there is a serious risk that the state's tax basis is eroded to the detriment of the provision of public goods and services. There is a strong current in the US, maintaining that a state's manipulation with business-relevant taxes does not but marginally effect location decisions of firms, even in the absence of interstate imitation.

Although this discussion might be said to echo some of the debates about regional policy in Europe, the comparability is weak. First, some 20% of state expenditures is actually paid by the federal government: this transfer alone is roughly double the entire EC budget. The main items concern welfare, education and highways; this does not include some \$ 25 billion welfare expenditures directly paid by the federal government. The

bloc grants-in-aid to the states result in unequal shares of the federal programmes in state/local welfare expenditures, in part due to income disparities. Thus, low income states attract (c.p.) more federal aid, reducing the tax burden for that state. Whereas the average federal share is 56%, Southeastern states have an average of 69% and Southwestern states 59%. Second, after-tax incomes differ less among states than pre-tax incomes because of progressive federal taxes. Third, there is no federal regional policy comparable to the EC Regional Development Fund.

There are solid reasons to expect factor mobility to respond to fundamental economic factors such as long run developments in population, real wages, availability of skills and agglomeration economies. To the extent states might be able to influence the determinants of factor mobility, this is

- (1) almost certainly going to be marginal
- (2) possible with both fiscal and non-fiscal means
- (3) not independent from adequate public services and the quality-of-life including proper education.

A 1981 study (ACIR, Interstate tax competition, Washington DC) concluded that above all fundamental economic forces, and tax competition at most marginally, determine mobility. Such forces include lower wage rates, population and local market growth, technology improvement (air conditioning!), the natural resource base, the improved interstate highway and air transport system and the end of racial discrimination. The indices for manufacturing wage rates are quite telling: in 1929 the Southeastern states were at 67% of the US average, in 1960 84% and in 1976 87%. Population shifts were not large, except to the Far West and (less strong) to Southwestern states. Nevertheless, the Great Lakes and the Mid-East together comprised 42.5% of the US population in 1950 and only 38.6% in 1977. This relative decline still continues.

The study found that the competitive enactment of tax and other incentives has largely neutralized their effects, even if marginal, and most of the problems are now with the neighbouring states of a region. It found that firms rarely leave a state so as to settle in another one: 554 instances were identified on an initial population of 140000

establishments (with 20 persons or more) for the period 1969-1976. Analyses of the birth of new firms shows that virtually no state in the US exhibited strong signals of stagnation, but that the Southeast, the Southwest and Far West regions obtained a larger share of the births of major new manufacturing establishments than proportionally.

The doubts of effectiveness are confirmed by other economic literature although recently the consensus is breaking down (McGuire, 1987 for a survey). In any event Table 4 shows that States feel compelled to join the competition: both interstate tax competition and interstate competitive bidding for investment via financial assistance has markedly increased in the 1960s and the 1970s.

One has to be prudent in interpreting this table as the label 'exemption' covers quite different arrangements. It is also inadvisable to assume a too 'European' perspective at the list of instruments of public aid to industry. For instance, in 1984 the average state budget for Industrial Development Agencies was \$ 7.8 million (includes salaries) and the US total was \$ 360 million (Clarke, 1986, p. 23). After personal and promotion costs, this leaves hardly any money for financial assistance. Bond financing exploits a loophole, causing states to take a 'free ride' on the federal government by shifting the interest tax deductions to federal taxes. This practice, increased enormously, is curtailed by the 1986 tax reform.

The effectiveness of tax competition is greatly reduced by two fiscal rules currently still in effect. One is the allowance of state and local tax payments as a business expense for income tax purposes. The second consists of the deductibility of state/local income, property and sales taxes for federal individual income tax purposes. So, interstate tax differentials are, de facto, much lower. A study in the late 1970s (ACIR, '81, pp. 20-22) showed that state/local tax burdens for individuals earning \$ 50,000, ranging in different states from 53% to 163% of the US average, narrowed to 90% - 113% of the US average if the federal income tax was taken into account. The 1986 tax reform reduces somewhat the possibilities for federal deduction of state taxes, which will render high-rate tax states more exposed to interstate tax competition.

Table 4

Number of states employing state and local tax incentives for industry, selected years, 1966, 1970, 1978

	1966	1970	1978
Corporate Income Tax Exemption	11	21	21
Personal Income Tax Exemption	15	20	19
Excise Tax Exemption	5	9	10
Tax Exemption of Moratorium on Equipment, Machinery	15	21	28
Inventory Tax Exemption on Goods in Transit (freeport)	32	39	41
Sales Tax Exemption on Raw Materials Used in Manufacturing	32	39	44
Sales/Use Tax Exemption on New Equipment	16	26	33
Accelerated Depreciation on Industrial Equipment	9	14	25
Tax Exemption or Moratorium on Land, Capital Improvements	10	17	23

Number of states employing state and local financial assistance for industry

State-sponsored Industrial Development Authority	25	29	32
Privately Sponsored Development Credit Corporation	31	36	34
State Revenue and/or General Obligation Bond Financing	10	16	22
City and/or County Revenue and/or General Obligation Bond Financing	28	43	45
State Loans for Building Construction	11	13	19
City and/or County Loans for Building Construction	8	5	8
State Loan Guarantees for Building Construction	11	11	14
State Financing Aid for Existing Plant Expansion	14	26	29

Source: ACIR, Interstate tax competition, 1981, (p. 25)

In recent econometric work (Papke & Papke, 1986) the measure for a comparison of tax burdens is the 'net after-tax rate of return on a marginal investment in alternative locations'. The study is restricted to business tax differentials and hence ignores personal income taxes and non-tax factors of location. The authors found that states with lower tax levels (higher after-tax returns) attract more investment: e.g. a positive difference of one percentage point in the industry after-tax rate of return (say from 10 to 11%) increases capital investment per worker by \$ 515. Of course, traditional cost differences remain influential for location but tax differentials are not necessarily

irrelevant, although \$ 515 is only a small fraction of capital investment per worker in most sectors. Another study (Genetski & Chin, 1978, as quoted in ACIR, '81, pp. 55/6) found a positive relationship between relative economic growth and changes in state/local tax burdens, lagged by three years.

Since the Supreme Court dislikes to step in, as became clear in the Moorman case (1978) on Iowa's blatantly discriminatory apportioning formula for the corporate income tax (not on sales out of state; not on property and payroll), and since the federal level advocates a 'new federalism' with presumably more initiative and manouvability for the states, interstate tax competition is likely to stay, if not intensify. With the recent US federal tax reform, the federal corporate tax rates have reduced, probably having induced another round of intensification of interstate tax competition.

In one respect, the logical end of interstate tax competition is the avoidance of taxing corporations at all at state level. In fiscal year 1985 state corporate income tax accounted merely for 4.8% of the total state revenue on average, with a high of 9.2% in Michigan.

6.5 State procurement

There is little systematic knowledge about discrimination in state procurement. The topic has simply not attracted much analytical attention. In a rare example of economic analysis, Craig & Sailors (1986) concentrate on formally legislated degrees of discrimination. Between 1965 and 1980 thirteen states have (or had) so called 'percentage preference laws', allowing an in-state bidder a preference of between 2% and 5% over all out-of-state bidders. Another nine states had 'percentage preference laws', allowing preferences for in-state bidders only when a competitive out-of-state bidder resides in a state where a 'percentage preference law' exists. The authors 'empirical work yields an estimated 3% average additional spending (per capita) for states having 'percentage preference laws'; there is no demonstratable effect for the reciprocal laws.

This result calls for some comments. First, the outcome is based on a cross-section analysis with a dummy variable for states having formal preference laws, and not on an analysis of procurement directly (which, admittedly, is very difficult). Hence one has to be prudent in accepting these 'costs' of procurement discrimination. Second, unlike in Europe, US citizens and firms have a highly developed tax payer consciousness. The National Association of State Purchasing Officers' official position is that the costs of discriminatory state procurement greatly outweigh any benefits and that preferences should be removed. Despite these values in public debate, however, numerous colourful anecdotes are heard in the USA that seem to be little different from those in Europe. This suggests that, the strict states' tendering procedures notwithstanding, in many states there is still discretion for in-state preferences. Third, the economic scope for preferential purchasing is not comparable to that in the bigger EC Member States, due to the small size of many US states. Whereas the EC has three Member States with populations significantly below 10 million inhabitants, the USA has 44 states with less than 10 million inhabitants, and still 36 with less than 5 million. Given the greater interindustry specialisation in the highly integrated US market (see Horiba & Kirkpatrick, 1981; Hufbauer & Chilas, 1974), these small sizes must imply that states frequently cannot rely on local suppliers because of unavailability. All in all, focussing on formal procurement discrimination may understate the costs of actual preferences; at the same time, one ought to recognize that there are natural constraints as to the scope of procurement discrimination at state level.

More generally, a juxtaposition of US States with EC Member States may be misleading as far as procurement is concerned. Key problem expenditures in Europe such as armaments and space are, in the US, at federal level; telecom is private in the US; also in higher education and health services, privatization is more extensive in the US than in Europe. Therefore, not only is the scope for preference moderate on the supply side, the sums of expenditure at State level are incomparably lower than for EC Member States, hence the total are likely to be significantly lower than in the Community.

6.6 Financial services

6.6.1 Insurance

The US internal market for insurance services is complex in combining multi-variate fragmentation with elements of integration. First, in the US insurance regulation is almost entirely concentrated at state level, with incomplete parallelism among state laws. Second, there are continuous changes in state laws and frequently not minor ones. In short, it is a 'legislative and regulatory morass' (Prybutok, 1982, p. 79).

In a formal sense, the interstate commerce clause applies ever since a famous ruling of 1944, reversing a tradition of the Supreme Court going back to 1868, held that insurance across state lines constitutes interstate commerce. Typically, however, the greatest concern after that ruling was not the access to state insurance markets, but the fact that economic transactions in interstate commerce are (also) subject to federal antitrust jurisdiction.

Indeed, by the ruling of 1944 the South-Eastern Underwriters Association was considered as an illegal price-fixing mechanism. The Supreme Court did leave an opening, however, for regarding at least some 'rating bureaus' (even if run by business) as being the result of "state action" and hence not subject to (federal!) anti-trust law. This led to the McCarran-Ferguson Act of 1945 which de facto invited states to legislate because, to the extent they didn't, federal jurisdiction would apply.

The paradox of the US Internal Market is the following

- o free trade in insurance services across states, in a formal sense
- o chartering of firms and licensing of agents doing business in a state; the authorization process materially limits the 'free trade' a lot by raising costs and imposing other constraints
- o the 'regulatory morass' generates strong pressures for
 - the industry to 'innovate' around the law (but innovation is throttled in many other ways through the regulatory burden)
 - the state governments to face 'competition among rules' and

hence respond to innovative challenges from other states (but this leads to frequent changes in the laws, after almost every election or even annually)

- o the limits of avoiding Washington DC are in sight, because the National Governors' Association has now asked Congress to preempt state product liability laws by enacting a federal uniform product liability law (given the crisis in the insurance industry and the extreme uncertainty about what risks are to be covered how high; the fragmentation led to - different - uninsurable risks in a number of states).

The differences in state regulations are costly and may also 'indirectly' restrain trade in insurance products which cannot be easily authorized (in some States). A brief enumeration of the problems:

1. The politicization of insurance matters in state politics is strong and causes a permanent legislative drift, in consultation with but also often in opposition to the State insurance Commissioners. "The responses of American regulators and state legislators to problems are typically far more pragmatic and less legalistic than those of their European counterparts. This has the distinct advantage of allowing experimentation, flexibility and quick action in the face of perceived emergencies but it also tends to generate piecemeal legislation having little coherence or structural consistency and to create a wide diversity of laws among the states and territories" (Prybutok, p. 84).
2. Practically all States regulate the rates of insurance policies. In life and accident and health insurance, rates are normally not regulated although State Commissioners usually have disapproval power if the benefits of a policy are unreasonably low for the premium charged. Regulation is stricter for rates of automobile insurance, fire and casualty insurance and workers' compensation.

Rate regulation differs enormously among the States. Illinois is the only state having no rate regulation. Competitive rating also occurs under a 'use-and-file' system (although commissioners may suspend).

A little more stringent is 'file-and-use': it refers to open competition laws, except that if the commissioner suspends the rate, a roll back can be ordered (may lead to refunds). A number of Eastern states maintain 'prior-approval' systems, implying tacit approval of priorly filed rates before use ("tacit" means that approval periods lapse automatically); the criticism on this system is that it encourages uncertainty through discretion. Six states still maintain state-made or mandatory bureau rates in one or more insurance lines of business.

3. Solvency regulation is also quite disparate. The main problems here are the absolute refusal of "home state control", so that every state where a company conducts business must reach its own determination regarding solvency (irrespective of findings in another states) and the discretion (and hence implicit disparity) in asset valuation and assessment of loss reserves. Apart from the obvious costs this gives rise to, the (cooperative) guaranty associations (obligatory in all states) have great difficulties in coordinating over state borders in cases of insolvency. Related to solvency are minimum deposit and minimum statutory requirements which also differ among States. Tax breaks promote instate investment from the portfolio of local companies, thereby distorting capital flows among States.
4. Product approval takes place in a number of states. There is a risk of throttling entrepreneurship. What is important for the purpose of this study is that the interstate commerce in insurance is clearly impeded in this way, unless policies are sold directly (without agent or broker).
5. Chartering of firms and licensing of agents or brokers causes a de facto fragmentation of the US Internal Market for insurance services. There is little doubt that the regulatory (and inspection) costs could be lowered enormously but pressures to do that are low because the 'costs' are considered part of the system and can be shifted to users and consumers. The balkanization is so deeply

entrenched that out-of-state firms are referred to as 'foreign' (!) and non-US firms as 'alien'. Observe however that the scale of business can be very small e.g. a one county mutual.

The licensing practice may lead to reciprocity but also to retaliation among states; reciprocity seems to work reasonably well for agents and brokers; retaliation may be implicit in tax and fee rules but also entry requirements (like capital).

Licensing of insurers is linked to the approval of products if there are exit restrictions, as occurs in homeowner and in automobile insurance. The exit restrictions are not identical among States.

The US insurance industry is not concentrated. At the end of 1986 there were more than 2300 life insurance companies (not counting agents) and more than 3500 companies in the property/casualty insurance segment. There is little doubt that the numerous small insurance firms, with often only a local presence and few lines of business, represent a major interest lobbying for the status quo, that is, regulation at State level. The States themselves have their own interests as well: they have become accustomed to the regulatory power and resist to lose it, but above all, they cannot miss the revenues from the premium taxes they levy. In 1985 States received \$ 4.5 billion from insurance premium taxes, representing more than 2% of all state-tax revenues. The insurance industry assumes an ambivalent attitude as it prefers not to be subject to federal anti-trust law, yet complains about the unnecessary costs of nation-wide business.

Assessing the costs of fragmentation is a herculean task. The greatest costs have been removed by the adoption of over a hundred model laws by the National Association of Insurance Commissioners and other common services of the NAIC. However, the acts are not always adopted by State legislatures, and if so, frequently with many changes. Some approximation also results from the following of 'leader' States in regulation and from the permanent fear of federal preemption. There is a case to regard the diversity in regulation as a benefit, made possible by federalism. Thus, the States argue that the US internal market for insurance services is not only not costly, but actually offers the best of both worlds: parallel model legislation and 'competition among rules' promote the

desired uniformity, hence reducing costs, while state licensing and specific rules 'customize' insurance to fit the needs of the individual States. This plea is seriously weakened, however, by the permanent legislative drift discussed above.

It should also be noted that the federal government is not entirely absent as a regulator (by means of pension and welfare laws) and administers a number of specific nation-wide programmes such as deposit insurance (see 6.6.2), export credit insurance and very special kinds of insurance (crop; nuclear damage; oil pollution; political risk).

Finally, it ought to be stressed that co-insurance (through so called surplus and excess lines) is subject to less rigorous public supervision: they are called E & S carriers, usually to be found on 'white lists'. Apart from licensing, there is virtually no regulation for 'reinsurance'. The key economic arguments are the absence of the need for consumer protection (as in the EC; Court of Justice of the EC) and the serious risk of unavailability in case of strict regulation.

6.6.2 Banking

Like insurance, banking services emerged out of the 19th century as a typically state-regulated activity. Congress did not 'regulate commerce' nation-wide but delegated regulatory authority to the states already in the National Banking Acts of 1863 and 1864. The states used this authority to prohibit interstate branching. A number of states went even further and limited intra-state branching as well; this led to so called 'unit banking', banks with only one seat. Variants existed such as city-branching or a quantitative restriction on the number of branches. Unlike insurance, however, the effective impossibility of interstate banking has always been politically controversial and economically problematic.

In the 1980's yet another wave of proposals to permit interstate banking has generated a heated debate. This time new technology, financial innovations and market pressures were added to the consequences of a conspicuously large number of bank failures, including the 'bail-out' of

the big Continental Illinois bank (more on Continental, below). The complexity of the issue is therefore much greater than a century or even half a century ago: both regulatory and market developments have to be discussed and both are in a state of flux.

Regulation of the US banking services market has erected

- o geographic barriers to entry
- o sectoral barriers to entry.

Although we are interested in the geographical barriers to entry, (de-)regulation of financial products and hence the separation, or conversely the blurring, of product-lines dealt with in separate commercial institutions has also been of some importance. The Glass-Steagall Act forbids commercial banks to underwrite or to deal in corporate debt and equity, although banks can invest in ('hold') corporate debt. The National Banking Act and state statutes prevent commercial banks from investing in equities. But this means, in effect, that commercial banks and investment banks hardly compete with one another.

Before interstate banking can be set out, it should be known that the US has a 'dual banking' system. The chartering of banks can take place at federal or at state level. A federally chartered ('national') bank is subject to federal examination given federal prudential rules, but other regulation applicable is largely that of the state.

The geographical barriers in the mid-1960's were determined by:

1. The Mc Fadden Act of 1927, prohibiting national banks from branching across state lines
2. The Banking Act of 1933 permitted intra-state branching for national banks if the state law also permitted state-chartered banks state-wide branching.
3. The Douglas Amendment to the Bank Holding Company Act of 1956, prohibiting bank holding companies to buy banks in other states unless the laws of the state(s) expressly permit it; the few bank holding companies that had already developed interstate operations (of course no direct interstate banking, like deposit-taking, etc.) were 'grandfathered', but could not expand into other states without explicit legal state provisions.

Not surprisingly, these geographical barriers throttled the interstate flow of banking services. Observe however that the branching prohibition does not preclude the 'interstate commerce' of banking services: there was and is free payment across state borders and banks deal with out-of-state customers if they find them; nation-wide interbank markets developed, inter alia, via so called 'correspondence banks', taking deposits from banks in the region and hence serving as clearing agent for checks transferred among banks; a federal funds markets developed as an intermediary to facilitate and possibly finance all kinds of payments and other transactions among the numerous banks that did not (have to) know each other. The central point is that retail banking remained extremely fragmented. There are some 14.000 banks in the US! Many of these are very small unit banks in small, rural towns, frequently with a limited number of services (and by definition, no automatic reach to large networks) whilst being entirely dependent on local deposits and the creditworthiness of local loan debtors.

Since the barriers are so strict and the need for a greater variety of services, greater quality and more facilities for consumers has continued to increase during this century, incentives to get around the barriers have always been strong. During the last ten years or so, a truncated manifestation of interstate banking can be observed.

The first way around the branching prohibition is of course the legal one. There are two important variants, one getting around the notion of what a 'bank' is; the other circumventing what a 'branch' is. Both problems relate to the Mc Fadden Act where section 36 forbids interstate branch activity and section 81 limits the out-of-office activity of national banks. Section 81 essentially says that the 'general business of banking' outside the home state is not permitted. Case-law is somewhat confusing here. In a major reversal (see Freeman, 1986), the Court recently defined the 'general business of banking' as the performance of any task that could have been carried out by the bank at its main office. Obviously, such definition may encompass almost anything a bank does. There are currently four types of interstate activities of national banks:

- calling officer programmes: loan officers visiting business so as to get new clients or gather information on creditworthiness

- loan production offices: retail facilities to solicit loans and to fill in loan applications; the main office considers and provides the loan, however
- representative offices: discuss business with out-of-state customers, gather local information and disseminate the banks' information
- trust representative offices recruit trust business & customers.

Clearly, these offices may significantly facilitate banking services across state lines on the initiative of the customer. Outlawing them via judicial review increases the obstacles to interstate banking (unless national banks convert to 'state chartering' because then the Mc Fadden Act does not apply, while the commerce clause would probably forbid state restriction of this kind of offices).

What a 'bank' is has become crucial since the Bank Holding Company Act of 1956. Holding companies could acquire banks in several states and, although not directly utilizing a branching network, facilitate in a number of ways interstate banking. The Douglas Amendment prohibits these holdings to buy banks in other states unless the relevant state expressly permits it in legal provisions. This amendment was weakened a little in 1970 when certain 'non-bank' activities of holding companies were permitted interstate. The non-bank activities reflected the spirit of the Glass-Steagall Act (separation of banking and general commerce, because a 'shoemaker ought not influence the provision of loans to his competitor, or, for that matter, his companion') in that they had to be closely related to banking. Major activities were thereby freed for interstate banking, be it through holding companies: mortgages, finance companies, industrial bank and loan operations, trust companies and credit card operations. The difference with the case-law on branching is that this kind of offices of a bank from another state are illegal (if the Supreme Court sticks to its new doctrine), but they can stay if they are offices or activities of a bank holding company.

As if this was not enough, a 'non-bank bank' was invented by only taking deposits or only making loans, so escaping the restrictions on interstate banking by holdings (because a bank had to do both). This 'loophole' has now been closed in the Competitive Equality Banking Act of 1987.

The second way has to do with international banking. Foreign banks in the US had fewer branching restrictions than domestic banks until the early 1980's. National banks can set up corporations to conduct international banking under the Edge Act of 1919. To eliminate the competitive disadvantage of domestic banks, the national banks' Edge corporations were allowed to go interstate but of course only for international banking. Nevertheless this kind of business may be indistinguishable from information gathering and even loan solicitation, for domestic purposes, now outlawed by case-law as being 'branches'.

Third, technology has played a role. A great inconvenience of the US banking system is the cashing of a check of a non-affiliated bank. Given the many thousands of banks, this is daily business for millions of citizens and businesses. Three, four or five endorsements on a check are far from exceptional. Time, handling costs and interest foregone must be costly, no doubt. Credit cards and automated teller machines (ATMs) have radically improved the clumsy payment operations in the US. Credit cards are of course interstate and have greatly reduced the 'float' (waiting time for cashing checks) for smaller payments. ATMs are not interstate as they are 'branches' according to the Court. But there is no problem if ATMs are linked in large interstate networks for information on services and for payments, as long as they are not used for deposits (they are obviously incapable of making loans and already substitute the cashing of checks, so these two functions are irrelevant). A combination of ATMs and credit cards (legal, if pursued via holding companies under the 1970 amendments of the Bank Holding Company Act) also exists: machines may provide cash to a credit card holder, which is an almost perfect substitute for cashing a check (if not better because it is not subject to interstate restrictions). Electronic banking may induce other upheavels yet.

Therefore both at industry level and for the individual consumer, problems with interstate banking have greatly reduced. This is not to say that these problems no longer exist. The attention seems to switch from the excessive costs and delays of interstate banking services or from the difficulty of enjoying the latter at all, to the overriding objective of a safe and sound banking system. Another objective, always lurking in the background, is the efficiency as promoted by bank competition.

Thus, the fourth way to get around interstate banking prohibitions was opened by the Garn-St Germain Act of 1982 (amidst a financial crisis). In case of failing banks or saving and loan associations, bank holding companies from elsewhere may buy them (upon Federal Reserve approval). This 'purchase-and-assumption' agreement has advantages: it is cheaper to the federal insurance institutions (FDIC for deposits; the Federal Savings and Loan Insurance Corporation (FSLIC) for savings and loans associations and mutual saving banks; the National Credit Union Share Insurance Fund (NCUSIF) for credit unions which make personal loans to members), it is less disruptive for the regulators (the Comptroller of the Currency, Treasury Dept, for national banks; the Federal Reserve Board for state-chartered member banks and bank holding companies; the FDIC for state-chartered federally insured banks which are not members of the Fed; the Federal Home Loan Bank Board (FHBB) for federally insured savings & loans; the National Credit Administration NCUA for federally insured credit unions) while also providing discipline to management (Horwitz & Selgin, 1987, p. 13). The law has led to interstate take-overs such as Citicorp's entry into the Illinois savings market (obtaining 62 branches in one stroke).

The fifth way is also prompted by issues of soundness and of efficiency. States themselves have finally accepted that the drawbacks of prohibiting interstate banking were too great to be continued. A peripheral state frequently experiences serious difficulties to draw in enough capital for the desired development of the state's economic or infrastructural activities. Prompted by development motives, Maine used the Douglas Amendment to the Bank Holding Company Act to expressly permit the entry of out-of-state holdings in 1975. In 1982 Massachusetts followed but with the proviso of New England regional reciprocity (hence not New York!) and New York State enacted national reciprocity. A wave of regional liberalizations followed (be it that they all use the holding company route), especially when in 1985 the Supreme Court stated that regional 'compacts' did not imply impermissible discrimination of other states, hence were constitutional.

The situation is now far too complex to present in detail (see Savage, 1987; NGA, 1986) In any event, 77% of all federally insured US commercial banks in early 1987 are located in states that have enacted interstate

banking laws (via holdings); these banks hold more than 91% of all US domestic banking assets. 37 States have enacted such laws but few of these laws are fully comparable. Regional preferences (sometimes inconsistent in terms of reciprocity), reciprocity or not, and other special provisions make for an intricate 'patchwork', still throttling interstate penetration enormously. Ignoring all transition periods for a moment, only 28% of all possible 2550 combinations in the 37 laws is actually exploitable for expansion (Savage, 1987, p. 83).

While benefits are few, even for the small, local communities, the costs of the interstate branching prohibition are very considerable. Undoubtedly the most conspicuous cost item is the (ceteris paribus) greater financial instability, caused by relatively undiversified portfolios and a relatively high exposure to risk. A banking system with instability properties can be very costly to the economy at large and to individuals and firms. Whereas financial instability is not really an issue in Canada or in EC countries, where bank failures are very exceptional, the US has been plagued by systemic bank crises for more than 150 years up to the mid-1980's (Horwitz & Selgin, 1987). Such crises usually included a fall in output (regionally, in a few States) and prices (especially on the stock market) and bank runs, causing liquidity problems. Since objectives such as a stable banking system and protection of depositors are prominent in banking regulation, another way of making the same point is that market failures have been replaced by government failures under the disguise of 'federalism'.

A disproportionate number of bank failures in the 1980's have occurred in typical farm States or oil States (like Texas and Oklahoma). Numerous unit banks solely rely on local prosperity or decline; the alternatives of diversification or help via a branching network over many States are not available; closing branches, so as to concentrate activities while guaranteeing depositors their money, is impossible, too.

Other benefits of branching are also foregone in the US, to the extent branching is still forbidden or roundabout. They include a reduction of 'float', less need for reserves (as banks unknown to each other frequently have to include some reserve payments when clearing larger

checks), less need for a federal funds market (as banks would know each other better), more appropriate incentives for acquisition of banks (as noted, acquisition is possible under the Garn-St. Germain Act when banks fail, but not when banks are still healthy and perhaps merely in need of better management; observe also, that very small troubled banks do not even fall under this Act) and more competition in banking in terms of the scope of services.

Finally, and not unimportant in the light of the purpose of this study, the costs of interstate mobility of travellers, workers and firms is lowered by interstate branching as all would benefit from the ability to use the same bank in different States. Name reputation of banks would facilitate search; in turn, this would force local banks to engage in networking too and to remain competitive over a greater range of services, at a high(er) professional standard.

The counterarguments of the more than 13.800 small banks relate to the 'lack' of local affinity and familiarity of out-of-state banks and the fear of excessive concentration if not a 'money monopoly'. These arguments do not cut deep. Local branch managers need not differ in any relevant aspect from local bankers. With respect to concentration, it should be mentioned that US banking is much less concentrated than in Canada or Europe. Moreover, a serious flaw in the counterargument is that, today, regulatory protection causes numerous local monopolies that are hardly or not contestable (see also Freeman, 1986, part IV).

6.7 Technical barriers

From a European Community perspective one might hope the category of interstate technical barriers to provide instructive lessons for the EC programme up to 1992 or beyond. However, such hopes should not be set too high. The early national orientation of producers and the strict application of the interstate commerce clause have effectively eliminated almost all of the 'costly' technical barriers in the US Internal Market. These two fundamental factors have been strengthened by the national organization of standardization and certification. The complexity of the US situation creates certain problems but they do not primarily affect interstate economic intercourse.

The three (potential) technical barriers - technical regulation, technical standards and certification - will be dealt with in separate subsections.

6.7.1 Technical state regulations

As is clear from section 6.2, on the interstate commerce clause, states have few effective possibilities to regulate the technical properties of a product or service in a fashion that would negatively affect interstate commerce. This is even true for intra-state economic activities under certain conditions. In the event this might lead to a 'regulatory gap', Congress should 'preempt'. However, Congress sometimes refuses to act as it may perceive state powers as politically justified, or it may be incapable of reaching the necessary majority for a specific bill. Numerous acts have been legislated since Congress became more active in the late '30 such as the Consumers Product Safety Act, the Public Health Service Act, the National Manufactured Housing Construction and Safety Standards Act, the Occupational Safety and Health Act and the National Traffic and Motor Vehicle Safety Act. Of course there are many more such federal laws like the Clean Air Act, the Federal Fungicide, Insecticide and Rodenticide Act (on pesticides), the Federal Communications Act (inter alia, on radio frequencies), the Food, Drug and Cosmetic Act, the Federal Aviation Act and a number of laws on hazardous waste. Many of these and other federal laws have their counterparts in EEC directives, although there may be great differences in substance and implementation. A number of federal laws do not or not fully 'preempt' state legislative activity and even when they do, certification or inspection may still be delegated to the States. It would require a major research effort to find out to what extent federal and state laws with respect to technical regulations exist in parallel, and where this might lead to extra costs permitted under the commerce clause or those laws themselves.

A well-known case is the Californian exhaust emission standard for cars which is exempted under the Clean Air Act of 1966. In the first decade and a half after this law came into force, the US car market became 'fragmented' into California and 'the rest' with respect to emission standards. Although no cost studies are known the fragmentation was

generally regarded as initially expensive. An offsetting benefit is sometimes argued to have been that California acted as a 'natural laboratory for testing emissions control innovations' (Crandall et al., 1986, p. 88). Since the cost/benefits ratio for the car emission standard programme in the US is bad, and competitiveness was greatly hurt (see Crandall, pp. 159/160) this off-setting benefit is low. Because technology has since greatly improved and federal regulations actually have become more stringent, the differences between California and the rest are either trivial now or have no impact any more on exhaust equipment designs. When safety (in contrast to environmental) regulations for cars became an issue, however, the typical response of the US car industry was to lobby for uniform, federal rules taking precedence over the patchwork of state vehicle regulations (source: Ludvigsen, first report to the Cecchini group). In the National Traffic and Motor Vehicle Safety Act of 1966, federal regulation was made to supersede any and all state vehicle laws with respect to safety regulations. Thus there are no state safety laws for cars (although there are a few States with laws on recreational vehicles and or their components). A similar nation-wide approach was taken when fuel economy standards for cars were introduced in the US in the mid-seventies (see Crandall et al., Regulating the Automobile, Washington D.C. (Brookings), 1986).

State technical regulations for products are numerous. A comprehensive data set, kept by the National Bureau of Standards (an agency of the Dept. of Commerce) could in principle be exploited as the basis for discovering potential cost-raising barriers to trade (see Breitenberg, ed., 1987). But again, commerce clause judicial review limits cases of more than trivial importance to exceptions that must have specific grounds or must have been explicitly exempted in (otherwise) preempting federal legislation. In the large majority of cases State laws employ "reference-to-standards" and those standards are almost always national. They may also require certification and/or inspection and there is an appreciable degree of reference to nationally respected, yet private, certification bodies or (if state officials inspect) uniform rules.

Nevertheless, it remains true that, dependent on the product, differences among States may exist because

- some states have laws on the product, others not

- inspection/certification may or may not be required, and may be executed by designated private agencies or by state organs
- some states may impose labelling requirements, others not
- some states may impose registration requirements, others not; or special certificates, etc.

It may also happen that federal programmes are voluntary but with the aim of achieving uniformity in state practices.

The author is in no position to assess the potential or actual barriers in all these state laws. There are strong arguments to believe that the costs are kept low, if not by the interstate commerce clause, then by uniform laws, national standards, interstate cooperation and compacts or by the lack of enforcement. But as Slot (1975, ch. 7) reminds us in his detailed description of the 'trade wars' among the States in the late 1930's, all these mechanisms go only some way towards eliminating trade barriers, and a true 'national' (i.e. combined federal-states), attack has never been accepted as the proper solution, not even in the worst period. The relative disinterest in the US in the problem may be the best indication that today's costs are bearable.

A notorious example of interminable trouble are the building codes that differ (in exceptions and special requirements) not only from state to state, but also among counties and even municipalities. Another problem having stirred controversy is differential state technical regulation with respect to cable television, despite the presence of the Federal Communication Agency.

6.7.2 Technical standards

Standardization in the US is largely privately organized and occurs mostly nation-wide. Although this prevents a number of difficulties, familiar to Europeans, from arising, it is far from clear that the US 'system' is efficient and effective in promoting standards for the general welfare of the US economy. Two prominent questions are (1) the enormous splintering of standards bodies, often with historically grown divisions-of-labour, creating high information barriers (though not or rarely along state lines, as in the EC), and (2) the great discretion

these bodies de facto appear to have had (or still have), causing preoccupations about procedures, openness, transparency, redress and anti-competitive conduct.

Apart from the building codes and possibly isolated cases, there is no explicit regional differentiation in standards in the US comparable to the EC. Pressures to organize nation-wide are not only strong for commercial reasons but also because engineers education is to some extent coordinated nation-wide, in turn facilitating mobility of skilled and highly skilled personnel using and applying the standards.

6.7.3 Technical certification

Certification takes place at three levels: private, state and federal. The NBS is currently preparing an overview of state certification requirements - at the moment of writing, this survey was not available to the authors. The crucial question is to what extent state certification requirements act as a cost-raising barriers to interstate trade and economic intercourse. As has been stressed before, the interstate commerce clause and the reference to nation-wide standards as well as recognition of (private but nation-wide) certification bodies is likely to reduce such barriers to nuisance levels in most cases. Furthermore, state legislation frequently replicate either legislation in other States (by imitation or through the 'uniform laws' approach - see NBS Handbook 130, Uniform laws and regulations, ed. C. Brickenkamp, 1987, on weights and measures, packaging, labelling, sales methods, unit pricing, dating and type evaluation) or federal regulations which are not mandatory, for intra-State commerce purposes. Nevertheless, even though methods may be similar or identical, requirements may still lead to licencing or permits or mandatory seals which complicate trade. The scope and costs of state certification requirements are not known, as far as the authors have been able to verify (neither are their benefits).

Although it is possible (if not likely) that there are anti-trust issues (see Federal Trade Commission, 1983), a significant fragmentation of the US market, caused by certification cannot readily be observed. This is equally true for laboratory accreditation for which there are also federal, state and private programmes

6.8 Interstate labour mobility and licensing of professions

In a common market one would expect, in principle, completely unrestricted movement of persons and any kind of labour, including the professions. In the US this is the case to an appreciable extent. The freedom of persons and workers to move interstate and to establish in a state with the same privileges as enjoyed by residents is straightforward except for the professions. It is again the Supreme Court which has protected interstate mobility. Judiciary review has made up for the fact that the 'free ingress and regress to and from any other state' - a formulation used in the Articles of Confederation - was weakened subsequently in the US Constitution of 1787.

6.8.1 Mobility of persons or workers

There are three constitutional sources of a fundamental right for persons to move freely throughout the 'union' for virtually any lawful purpose. All three do not exist in the EC, which is going no further than a (harmonized) setting of non-discrimination for foreign EC workers and some liberalization in terms of residency requirements. The White Paper moves beyond this and the US case law is instructive in teaching us about the kind of questions this raises. The first source is the right to travel, irrespective for what purpose. So, migrant workers and indigents alike also have this right; neither the states nor the federal level can alter it. This does imply free access to social security/welfare without any waiting period. The second source is the interstate privileges and immunities clause. The third one is, of course, the commerce clause.

The concrete implications for the mobility of people within the USA are as follows:

- a) no barriers or forms of discrimination can be maintained with respect to entry into and exit from states and the desire to remain. Thus, physical mobility is protected at least by the commerce clause, if not by the ('higher') affirmative right of national citizenship. Judicial review has restored the original article of the confederation; the exceptions are of trivial importance.

b) job search mobility is also unhindered in the US.

Because the Supreme Court had accepted that common resources could be a reason to allow some state protection, Alaska attempted to discriminate in hiring and firing for oil and gas pipelines (etc.) against non-Alaska residents, but also this was rejected. Fiscal disincentives discriminating against non-residents (such as a 'commuter tax'), were held to violate the privileges and immunities clause; non-residents were taxed "without representation" in the State's legislature.

c) professions (see next section)

d) welfare/medicare

Completely free access, as noted before. Only severe capacity problems leading to an incapacity to maintain facilities to those who had supported them through taxes, might perhaps lead to (weak) requirements.

e) education

In contrast to the EC Court (in a recent case against Belgium), higher tuition for non-residents and 'bonafide residence' requirements are permitted for higher education. It is viewed as a reasonable means of distributing the costs of higher education equitably between those who have and those who have not recently contributed to the state through tax payments or other expenditures. Note however that the original status of non-residence-ship cannot be required to be valid for longer than one year; after that the student is resident!

f) property

There are no serious barriers to the acquisition of property. The Supreme Court would reject the erection of such obstacles under the privileges clause.

6.8.2 Interstate mobility of professionals

The regulation of professionals takes place at state level in the USA. Over 800 occupations and professions are licensed in the states of the USA, but only about 60 are licensed in common by the majority of states. Therefore there is an obvious potential for imposing higher costs on migration of professionals. In turn, this may engender economic effects

that may weaken the proper functioning of the US common market. Costs and effects differ among occupations, among states (depending on the conditions) and among the types of regulatory restrictions. Broadly, there are three types of regulations (source Book of the States, 1986-87 ed.; F. Berry, pp. 379ff):

- o licensure is the most restrictive form of state regulation: it is illegal for a person to practice a profession without first meeting the standards imposed by the state
- o certification amounts to 'title protection' (if standards are met) but competition from uncertified practitioners is not forbidden
- o registration amounts to a mere filing obligation.

The motivation of consumer protection is, in itself, obvious but it is far from obvious that this would require licensure in so many cases rather than certification or only registration; neither is it clear that administrative procedures, examinations, controls-after-admission, ect. are optimally organized in the public interest; that differences among states have public (rather than sectoral) interest grounds. Some rationalisation of procedures seems to have taken place. Since 1980 there exists a National Clearinghouse on Licensure, Enforcement and Regulation (CLEAR), linked to the Council of State Governments; over 35 States now have a central agency for most if not all licensure boards; so called 'sunset laws' exist in 38 States, implying that occupational and professional licensing boards have to be explicitly re-enacted after certain periods; most States now place one or more public members on licensing boards (but empirical work by Schneider (1987) shows that this has had no effect on decision-making).

Economists have repeatedly shown that occupational licensing requirements restrict interstate mobility. Of the more sophisticated studies, Pashigian's (1979) statistical analysis (logit model; regressions) for 34 aggregated categories of professions shows that local goodwill does reduce interstate mobility; that licensing itself reduces interstate migration; and that, when licensing is combined with restrictions on mutual recognition among states, interstate migration reduces even further. The latter is especially clear in the dental and legal

professions. Pashigian shows that interstate mobility is lower in licensed occupations even after controlling for the importance of local goodwill. Additional tests so as to discriminate between different categories of lawyers, yield the result that human investment in state-specific laws do not appear to be the primary reason for the comparatively low interstate movements of lawyers. This outcome must be assessed against the backdrop of the well-recognized group of 'national' law schools, with eminent reputation, such as Harvard, Chicago, Stanford, Yale, Michigan, etc., excluding a comparison with the European Community of today or the 1990's for lawyers. (Of course, the incomparability with the EC is also increased by the greater differences between national legal systems and traditions, compared to the US).

White (1987) studied the case of registered nurses. This study is interesting not only because it deals with geographical mobility in a profession, but also because it analyses the spread of legislation among states over time. 'Competition among rules' in the US federation, in this particular instance, takes the form of a rapid diffusion of occupational licensing 'innovations'. This wave of imitative lawmaking led to a strong increase in restrictive regulation, to the detriment of interstate mobility nurses. White finds a relation, on the one hand, between the introduction of restrictive laws and inflows of less skilled nurses from out-of-state, and, on the other hand, between efforts to achieve (high) standardization at the national level and 'mutual recognition', reducing the negative effect on interstate mobility. The hypothesis that inflows stimulated the introduction of mandatory laws is supported at statistically significant levels; thus, mandatory licensing in a relatively weakly regulated common market is used as a barrier to access (to the state market). Apparently, policy makers have become concerned about the restrictive effects of licensure laws for nurses. Interestingly, they have not concentrated their efforts so much on the legislation of mutual recognition but on obtaining national standards via private mechanisms. Licensure examinations became standardized during the 1950's and nursing schools attaining this (national) standards were (can be) accredited by the National League of Nurses.

6.9 Interstate road transport

With the increasing economic integration of the states of the USA in the course of the 19th century, it became less and less possible to maintain that regulation of intra-state transport would not directly or indirectly affect interstate commerce. For interstate commerce, judicial review had already become quite stringent with respect to state transport laws. In 1886, a famous reversal of the Supreme Court led it to reject the state setting railroad rates for interstate transport with respect to that part of the journey within a state's borders. This prompted Congress to move in. In 1887 the Interstate Commerce Act was passed, establishing inter alia the Interstate Commerce Commission (ICC). This federal agency assumes technical and economic regulatory functions for road haulage, transport by rail and bussing.

Since approximately 1976 a gradual administrative flexibility, followed by outright deregulation in the 1980 Motor Carrier Reform Act have greatly reduced the regulatory function of the ICC (while the Airline Deregulation Act of 1978 took away the functions of the Civil Aviation Board, that was dissolved in 1984). In fact, the ICC pursued a kind of common road haulage policy up to 1980 in maintaining an approval system for (interstate) transport rates, in regulating entry barriers for new trucking companies and all kind of other restrictions restraining competition, including the allowance of collective rate fixing, restraints on wages and labour conditions and on the length and directions of hauls as well as the gateways (i.e. routings) that could be used. Deregulation has been 'partial' and some controls have been maintained.

For the purpose of this study two questions arise:

- o Has deregulation at federal level facilitated interstate road haulage, thereby fostering market integration?
- o What are the consequences of the combination of deregulated interstate road haulage with (largely) still regulated intra-state road haulage for the US internal market?

The first question can be answered in the affirmative. Widely recognized effects of interstate road haulage deregulation include an enormous increase of entry into the sector, especially by small firms; greatly

increased service of suppliers; less reliance on in-firm haulage; and a decline of rates. This success makes the second question only more important.

By early 1987 some 43 States had not deregulated intra-State transport at all. Among these States intra-State regulation differs appreciably. Thus, Oregon only allows entry after a test of 'public convenience and necessity' and Texas, besides maintaining entry barriers, even outlaws any price competition (cf. material supplied by Ernst & Whinney). This kind of regulation can sometimes lead to situations similar to the prohibitions of 'cabotage' in EC Member States. In the case of Texas there is evidence of trade deflection to neighbouring States, particularly by shifting distribution centers out of Texas. Differences in competitive conditions lead to the claim that Texan agriculture, a highly transport-sensitive business, is hardly competitive anymore outside the State. On the other hand, one has to be prudent before generalizing the Texan example. Many States have much 'lighter' regulations, creating fewer competitive distortions in the internal market. Given the prevailing market integration, Congress has a legal basis to act ('preempting' State legislation) but an attempt led by Senator Packwood to do this in 1986 died early.

In addition there are administrative and tax differences that make interstate trucking more onerous. Without the competence to register being shifted to federal level, and without a federal obligation of 'mutual recognition', states have drastically reduced the actual costs incurred by trucking companies flowing from the state's power to impose registration. Under registration reciprocity, a vehicle properly registered in one state can travel legally in any other state without having to pay additional registration fees. Such fees can vary from \$ 35 (Oregon) to \$ 2200 (in Illinois). Clearly, without such reciprocity agreements, interstate trucking would be administratively cumbersome, while competition with other transport modes (rail; air; inland shipping) would be seriously distorted. All states are now party to one or more agreement(s).

Still one could conceive of 'fee competition' among states so as to attract domicile of interstate carriers. This would be problematic also from the point of view of burden sharing of highway costs. An initial response was to erect 'fee sharing compacts' among (especially) neighbouring states. Today the IRP compact has 31 states as members (plus one Canadian province!). Under the IRP compact, the home base state annually collects the fees of the states through which the carrier expects to travel (on extrapolation basis), in proportion to their shares in the total interstate mileage of the vehicle. For the calculation, the respective (i.e. divergent) fees of the states are used, in other words, the total fee is the weighted sum of all the state fees, with the mileage shares used as weights. In case the vehicle would also travel through non-IRP states, the home base state would fall back to the normal reciprocity and collect that share itself (at its own fee).

However, fuel taxes differ among states as well, with a maximum spread of 11 cents a gallon. On average per heavy vehicle this tax yields twice the revenue of registration fees, but is not subject to sharing or reciprocity. States impose motor fuel reporting, indicating their operations in a state on a quarterly basis: if fuel purchased is less than the usage in the state, the difference (i.e. the tax foregone) has to be paid to the state motor fuel tax authorities. Property taxes on vehicles differ, too; so do sales taxes on vehicles and for both there is again no sharing. Neither is this so for weight-distance or axles-number/distance taxes, a type of tax better reflecting the purposes of expenditure (highway maintenance). To make matters worse, seven states retaliate against vehicles from weight-distance-tax states by levying a special tax. Hence, still apart from regulatory differences among states, administrative and fiscal aspects render interstate trucking complicated in the US.

7. THE US/CANADA FREE TRADE AREA

7.1 Introduction

Between May 1986 and December 1987 the United States and Canada have negotiated a bilateral free trade agreement. For the purposes of these negotiations, Congress conferred a fast-track mandate to the US Administration. This expedites the US legislative procedure as it implies that by renouncing its right to amend, Congress can only accept or reject the draft treaty as a whole and is obliged to do so in two months. A draft text was submitted to Congress on 3 October 1987 and a final version signed by President Reagan on 2 January 1988, after which Congress disposes of 60 days to ratify the agreement. Neither in Canada nor in the US will ratification be a matter of rubber-stamping. But if all goes well, a free-trade agreement between the US and Canada will enter into force in 1989, although the eventual implementation will be spread over several years.

There are three reasons to include a discussion of the prospective North American free trade area (NAFTA) in the present report for the project 'The costs of Non Europe'. The first one is that NAFTA has the potential of being the only international liberalization attempt which is, at least on certain major items, somewhat comparable to the White Paper programme. Therefore, one can utilize NAFTA as an alternative way of overcoming the question of incomparability between North America and the EC. Whereas the first six chapters of this study analyze two internal markets under the inevitable proviso that their being parts of federations reduces the comparability with the Community, this section looks at two sovereign countries under the inevitable proviso that their liberalization programme - though ambitious in GATT terms - is not fully comparable in scope and stringency with the White Paper. It is expected that insights can be had from pursuing both approaches.

A second reason is that the NAFTA negotiations are instructive to appreciate more fully the assignment of economic powers inside the US and Canada. In this sense, it complements the previous chapters. The question

one may ask is whether a bilateral free trade negotiation will 'preempt', as it were, the exercise of state/provincial powers. If the 'benefits' of diversity and decentralization are felt to overcompensate the 'costs' of some fragmentation of the internal market, can one expect these benefits to be sacrificed for NAFTA? A negative answer would imply a significant reduction of the scope of NAFTA whereas a positive answer would signify a major change of the two internal markets.

The third reason, dealt with in chapter 8, is that Canadian economists have engaged in an interesting debate about the economic impact of the enormous market enlargement NAFTA would imply for their country. The economic methodology as well as the orders of magnitudes found are of obvious interest to the 'Costs of Non-Europe' project. As a market outlet the US market is more than ten times the size of the Canadian domestic market. This is a more or less comparable situation to that existing in the EC where even for the biggest Member States the rest of the Community represents a market four times as large as the home market.

In 1986, Canada imported 74 billion US dollars in American goods, whereas it exported for 95 billion US dollars. Given its size, bilateral trade is crucial for both economies, but more so for Canada of course. More than 70% of Canadian exports are US bound, representing around one quarter of Canadian GNP. Ontario accounts for more than half of these exports. If exports to the US shrink, say by 10%, as many as 250,000 Canadians may be made redundant. About 22% of US exports go to Canada, equalling some 2,5% of American GDP. The latter figure being small, it gains prominence in view of the fact that the American interests in trade with Canada are geographically strongly concentrated. More specifically, this trade is of great importance for the Northeast-Midwest region, which accounts for about 70% of total US-Canada trade. It has recently been estimated that around 2 million American jobs rely on US exports to Canada, of which half are located in the just mentioned region. America's presence in the Canadian economy does not stop, however, at exports. American direct investment in Canada is massive, as illustrated by the fact that more than 60% of Canadian manufacturing is US owned.

7.2 Barriers to one North-American market

It would be erroneous to infer from the sheer magnitude and macroeconomic importance of these commercial and investment flows that trade between the two North-American countries is free.

Among the more important remaining barriers one finds:

- o tariffs, especially on traditional products
- o tariff exemption ('duty remission') on re-exports with a certain value-added
- o various non-tariff barriers
- o problems related to direct investments
- o obstacles to trade in services
- o barriers caused by applying so called 'trade remedy laws' in response to dumping or public aid.

Tariffs

More than 65% of US exports get into Canada duty free and an additional 20% carries a tariff of less than 5%. The corresponding figures regarding Canadian exports to the US amount respectively to 80 and 15%. Although the average level of tariffs between the US and Canada is thus quite low, some specific industries are still subject to considerable import levies, with the Canadian typically higher than the American ones, as can be gauged from Table 1 in Annex 1. The sectors for which tariffs are still appreciable along both sides of the border include textiles, clothing, footwear, furniture, glass and metal products, and electrical machinery. There are also a number of issues in agricultural trade, the most contentious ones being tariffs, quota's, meat laws and Canada's subsidies to Western grain transports to central Canada undercutting US exports. The 'duty remission' programme for cars in Canada arouses fears in the US that, under NAFTA, Japanese or Asian firms would escape origin-rules by establishing subsidiaries in Canada, enjoying first tariff-free entry for components (into Canada) and then tariff free access to the US.

Non-Tariff Barriers

American rules on public procurement frustrate Canadian exports and vice-versa. As far as military contracts are concerned, Canada and the US

work together under the Canada-US Defence Production Sharing Program which can generally be said to provide on a mutual basis fair bidding opportunities for firms from the other country. The programme does not cover all defence purchases.

The access for non-nationals to civilian contracts, which account for the better part of total public purchases is probably much more inhibited. Although recent steps have been taken to reduce their coverage, and hence their importance, the 'Buy American' discriminatory policies of the US government still pertain to about one third of total federal purchases of goods and almost the whole of services. The federal procurement code does not apply in principle to state or municipal authorities, but it binds them also when they buy goods or services with money supplied wholly or partly by the federal government. Subcentral governments, along with (quasi) public corporations, are major or the principal clients for communications and electric transmission equipment, public transport systems and electrical power generators. Due to a variety of federal Acts such as the Public Works Act, the Clear Water Act and the Surface Transportation Act, setting up federal-state cost sharing programs to finance investment in these public services, states and cities are frequently under the obligation to buy American with respect to their major purchases. Moreover, it must also be borne in mind that more than twenty states have procurement regulations advantaging local suppliers (see section 6.5).

Unlike the American situation, legal provisions prescribing 'buy Canadian' policies do not exist (Moroz, 1986). Instead, there is a multitude of administrative guidelines that have paved the way for clear 'buy Canadian' practices. Because of this intricate array of regulations and the attendant room for administrative discretion, a general complaint of US firms about Canadian public procurement is the lack of tendering information and the transparency of the adjudication process.

The Department of Supply and Services (DSS) is the central purchasing unit in that it contracts about 40% of total federal purchases of goods and associated services. The DSS discriminates in favour of Canadian bidders in two general ways. First, Canadian enterprises are given

priority during the selection procedure. If at least three Canadian-based manufacturers have entered bids, non-nationals are virtually excluded from the tendering process. Furthermore, over two third of the value of total purchase contracts concluded by DSS are adjudicated following discussions with a limited number of preselected enterprises.

Second, the DSS confers an informal premium to up to 10% for domestic content which enables Canadian suppliers to win contracts in spite of exceeding the bids from non-national competitors. For contracts valued at more than 2 billion Canadian dollars, foreign bidders are held to specify their plans for subcontracting in Canada. These DSS administrative guidelines do not only concern the federal government proper; public corporations and other federal agencies, like Air Canada or Canadian National Railways, are also supposed to respect them.

The federal purchase of construction services is in the purview of the Department of Public Works. As a rule, public construction contracts contain a clause stipulating that the main contractor will make use of Canadian inputs as much as possible. Finally, as is the case with US states, Canadian provinces, and the public corporations, hospitals and schools over which they exercise authority, apply preferential purchase rules in favour of the local firms of the province.

Technical regulations and standards do not appear to obstruct Canada-US trade in any significant way.

Direct investments

A sensitive issue in Canada-US economic relations concerns the performance conditions the Canadian government attaches to direct investment by foreign companies. As more than half of their manufacturing is in the hands of US firms, Canadians are anxious to ensure that the activities of the foreign, primarily American, subsidiaries do not undermine Canadian national interests. This prompted Ottawa to set up, in 1973, the Foreign Investment Review Agency (FIRA). This Agency was designed to examine foreign direct investment requests and, if need be, impose conditions to entry. The performance requirements the FIRA

demanded in the past have included export targets to be met by the foreign owned production unit or commitments to employ a minimum volume of Canadian inputs. Sometimes, entry conditions were not related to the specific investment project at all as foreign firms engaged themselves to purchase goods and services from any one Canadian supplier to the order of a certain predetermined amount. Such obligations have the potential to distort trade flows: the pursuit of export targets may force firms to trim their profit margins or dump outright on foreign markets; on the other hand, respecting domestic input rules may induce artificial consumption of Canadian goods and services that might otherwise be imported from the US. The present Mulroney government relaxed these regulations.

Trade in Services

For the US and Canada, freeing trade in services is, so to speak, uncharted territory and this first attempt looks set to meet with great technical problems. Getting experience in this kind of negotiations is an important reason why the US is very keen on concluding an accord with Canada. The agreement could assume a pilot-function in the inevitably complex negotiations on the same subject in the framework of the current Uruguay Round. Freeing trade in services between the US and Canada is likely to prove a strenuous undertaking for yet another reason. In both countries many of the regulatory powers affecting trade in services do not belong to the federal authorities but are vested with the American states and Canadian provinces. This explains why, despite the recent wave of deregulation the markets for various services like banking and insurance as well as transport, are still considerably fragmented within each country (see sections 5.5, 6.6 and 6.9).

Executing any substantial agreement between the two federal authorities is bound to run up against problems unless it also gains the approval of the lower levels of government. The negotiations on services thus risk being complex also on account of the sensitivities surrounding the political balance of power inside both federations.

Discussions will in all likelihood focus on financial and professional services because of their growth, international trade potential and the just mentioned regulatory issues, and advertising which touches a delicate subject in Canada, to wit that of cultural identity.

For their trade in financial services to be opened up - by relaxing the rules on the establishment of foreign branch offices or subsidiaries, and on the freedom to provide services across the border - the US and Canada will have to come to terms with essentially the same technical questions the European Community has to sort out in its endeavour to create an Internal Market. But, in the North American context these 'universal' problems are compounded by those arising from the restraints on inter-state or inter-provincial operations, of which some are likely to remain. The market access the two countries grant each other is therefore bound to be circumscribed, because otherwise foreign competitors would be able to conduct business on a more favourable basis than domestic firms. If, for example, following a US-Canada agreement Canadian banks were allowed to operate all over the US, they would enjoy a better market access than the American financial institutions themselves (in fact, foreign banks had such an advantage in the US until 1978).

A similar remark can be made with respect to the liberalization of professional services like engineering and consulting. This will involve measures in the area of occupational licensing, for which it is again states and provinces who are generally competent. Consequently, completely free access for the professionals of the partner country will not as a rule be possible for these services either. Both for financial services and professions, one route would be to agree on 'national treatment', combined with the right of establishment, a solution which is by and large the status quo in the EC before the White Paper.

For the sake of promoting its cultural identity Canada has in the past fiscally penalized its firms which place advertisements with US border TV stations and Canadian broadcasting corporations have been obliged to respect a minimum domestic content in their programs. Since cultural

protectionism, even if it introduces some economic inefficiency, is felt necessary by a large majority in Canadian politics, Canada is likely to insist on exemptions from the free trade package on services for advertising and moving pictures.

Trade Remedy Laws and Subsidies

The most important source of friction on trade matters between the US and Canada in the past has undoubtedly been the use of so-called trade remedy legislation and the provision of subsidies benefitting exports. Since 1980 the US has initiated more than 60 trade complaints against Canada, 13 of which concerned countervailing duties against subsidies. Cases in automobiles, tyres and softwood lumber have generated feelings of uncertainty about the discretionary nature of US trade policy. In retaliation to softwood lumber countervailing duties, Canada hit back with an extremely high tariff.

The Canadians have repeatedly claimed that the US makes an unfair use of their anti-dumping and countervailing duty regulations. Rather than correcting for trade distortions induced by trading partners they serve to protect inefficient domestic producers who otherwise risk losing market shares to Canadian exporters. Because such duties are levied unilaterally and their imposition is not always foreseeable, if not arbitrary, American trade remedy laws are seen across the border as a sword of Damocles hanging continuously over sectors in which Canadian exporters are successful. Although a key issue for NAFTA, this issue has not relevance for the White Paper as EC trade policy is already unified in this respect.

7.3 The Canadian-US agreement: a brief

This section will itemize the more interesting provisions of NAFTA for the purposes of this report. Wherever relevant, a short comment is provided.

(a) tariffs and related issues

- tariff removal bilaterally in three stages (typically textiles, clothing, wine and beer, agricultural products and tyres take

ten years)

- elimination of subsidies on Western grain transports to central Canada (a century ago a matter of 'nationbuilding' for Canada; now removed via external pressure)
- far-reaching liberalization of agriculture (less so for fish)
- trade in automotive products (already governed by US/Canadian Automotive Products Trade Agreement, which leaves 95% of the \$46 billion flow tariff free) will be free but the Canadian 'duty remission scheme' will be phased out and origin-rules will require 50% North American content
- removal of import and export controls on energy trade.

(b) non-tariff barriers

- for public procurement at federal level (but not at provincial/state level unless explicitly covered by the GATT Code) a 'bid protest' scheme will be mandatory and rules will apply already for purchases above \$ 25 000
- certain safeguard rules
- trade in alcoholic beverages will be facilitated (note that this has consequences for state and provincial liquor monopolies and their discriminatory marketing practices)
- on technical barriers better mutual information is foreseen (but this would seem to be much weaker than EEC directive 83/189); work is planned to harmonize product approval and to recognize each other's laboratory accreditation systems (it is unclear how strong this commitment is)
- 'culture' is exempted.

(c) direct investments

- end of performance requirements, linked to investments as such
- reduction of screening of acquisitions and divestitures; end to screening of new direct investments

(d) financial services

- the blurring of previously segmented financial services, due to deregulation in Canada since mid-1987 (see 5.5.3) and exceptions to or amendments of the Glass-Steagall Act (see 6.6.2), have

been pushed a little further by facilitating mutual access in such a way as to weaken the effects of domestic regulation

- restrictions of (federally-regulated) share-holdership of Canadian-owned financial institutions have been relaxed only marginally; size restrictions of US subsidiaries are lifted.

(e) other services

- right of establishment and 'national treatment'
- implementation differs from case to case, hence it is as yet unclear (if not doubtful) whether this will actually alter the autonomy of states and provinces and the effect in the market.

(f) trade remedy rules

- on this contentious issue there is no clarity at all. A three-track set of obligations is 'agreed' but the key element is still completely open, namely the development over a five to seven year period of mutually advantageous rules on subsidies and dumping, including a bilateral panel with binding powers. Moreover, this may exactly be the reason for Congress to refuse ratification.
(Note that dispute settlement on all other issues is non-binding).

It is crucial for an appropriate assessment to see what kind of issues were avoided or softpedalled. The highly protectionist US Jones Act, insulating the shipbuilding industry, was 'grandfathered' (i.e. left untouched). Whereas the liberalization for wine and spirits is rather unclear in its impact, the beer trade is completely left out of the Agreement. Especially in Canada, interprovincial trade in beer hardly exists; marketing and distribution restrictions in both countries (all at provincial/state level) are grandfathered. The direct investment controls have been relaxed but the Canadian concessions are circumscribed: oil, gas and uranium investments remain subject to review as before; performance requirements can still be imposed in the cases of subsidies and public procurement related to investment; many other conditions (product mandate, R&D and technology transfer requirements) can still be

negotiated; existing restrictions on foreign ownership in the communications and transport sectors are grandfathered; tax discrimination between foreign-owned and domestic firms is permitted; Canadian crown corporations are exempted from national treatment; and the review under the Investment Canada Act is not subject to the dispute settlement. In financial services, there will be no freedom to trade financial services across the US-Canadian border (this makes for a fundamental difference with the White Paper, to be sure). Finally, on subsidies no rule or discipline has been agreed at all, except if one adheres to the official Canadian view that the 'new rules' under the trade-remedy-section provide 'secure access'; as noted before these rules will have to be negotiated and their basis and principles are still undecided.

All in all, the potentially sweeping NAFTA negotiations turn out not to approximate the White Paper programme. In terms of current GATT obligations or compared, for instance, with EFTA, NAFTA is fairly ambitious. But in terms of the Community's Internal Market calendar, few similar major issues have been tackled. The effects in the product market are likely to be substantial, but in services and factor markets a large impact is improbable. A considerable number of regulatory or financial distortions affecting product trade will remain unaffected.

8. ENLARGING MARKET SIZE: ECONOMIC IMPACT STUDIES FOR CANADA

Given the dramatic increase in market size for Canadian producers and the import competition sheltered economic activities in Canada will be subjected to, the analysis of the economic effects of a North American free trade area may be instructive for the Community when assessing the costs and benefits of the White Paper. The question addressed in this section is what the nature and size of the potential welfare gains will be for Canada. In presenting the results from the literature, brief references to methodology will be made. The focus is on product markets.

8.1 Costs and benefits: a qualitative view

Benefits

First, liberalization of trade will allow Canada to exploit better its differences with the US. By freeing trade, Canada will be able to specialize its production in goods and services in which it is relatively efficient, or which employs intensively its relatively abundant factors of production, and import those goods that the US can produce relatively more efficiently. This is the familiar static trade creation effect.

Second, an improvement in a country's terms of trade raises its welfare. Depending on specific assumptions, Canada's terms of trade can move either way upon the creation of a NAFTA. However, a favourable change appears more likely. Because the size of the US market is much larger than that of its own, Canada is basically a price-taker for both its imports and its exports. The imposition of protection by both trading partners will push up the price to be paid by Canadian consumers of American imports, whereas Canadian export prices are likely to be depressed as prices for the US consumer of imports will stay unchanged. Upon the removal of such obstacles this relative pricing process is reversed, implying a real income transfer from the US to Canada.

For many industries the Canadian domestic market is too small. A secured free access to the US market, with its 240 million inhabitants, will allow Canadian industries to exploit better their potential for economies of scale. Unlike its effect under constant returns to scale, the trade liberalization for products whose costs decline as output grows larger will, through larger exports, serve to lower the price for Canadian consumers and hence raise their welfare. Moreover, since it vastly expands the size of the market, the creation of a NAFTA will also permit greater product diversity as a wider array of goods can then be supplied at competitive prices. Greater consumer choice is also a form of welfare gain.

Integrating the Canadian market with that of the US will strengthen competition in the Canadian economy and therefore constitutes a kind of anti-trust policy. The immediate impact will be on prices, but production

effect will also occur. In the face of rising import penetration the domestic industry will seek to boost productivity by restructuring. This rationalization process can take on various forms. By way of mergers, takeovers or outright closures the industry will reduce the number of firms and plants that operate at too small a capacity. Other Canadian firms will cut the variety of products on offer and concentrate instead on a few goods for which, in order to reduce average costs, they will try to expand output by capturing a larger part of demand, if necessary by selling south of the border. This horizontal specialization strategy need not imply that the domestic consumer choice is hemmed in. The product variants previously supplied domestically may now be imported and overall, variety may even increase.

For these reasons the existing trade barriers between the two North-American countries are often thought to go a long way towards explaining the fact that Canadian manufacturing labour productivity is much lower than in the US (in 1986, this difference was in the order of 26%). Hence, their removal will bring important productivity and real income gains. However, because increasing returns to scale go hand in hand with imperfect competition, it is not certain that trade liberalization will yield product and plant rationalization. Markusen (1985) (1) (notes on p. 133) has recently spelt out under what conditions this rationalization process will materialize. He concluded on the basis of available empirical literature that those conditions are fulfilled for Canada, i.e. Canadian industry is likely to respond to a free trade agreement with the US by shaping up its production.

One expects the welfare costs caused by the trade diversion effect to be small. To take advantage of the opportunities from free trade with the US, Canada will need to reorganise its production. As import-competing firms contract and export-oriented enterprises expand, factors of production will have to respond accordingly, implying movements within and between industries and regions. This raises questions about adjustment costs (see also 8.3) and the sectoral and regional distribution of the overall gains from free trade with the US.

Obviously, as industry goes through this transformation process, part of the Canadian workforce employed in shrinking sectors will become redundant and will have to resettle and be retrained. However, from a purely economic viewpoint, these short run dislocation costs should be seen as a production investment as they are necessary to realize the long run benefits for the Canadian economy. Moreover, as the trade generated by the Agreement will be preponderantly of the intra-industry type, the rationalization of production will generally involve concentrating activities on specific niches within sectors, rather than massive shifts out of entire sectors. One ought to recognize, of course (e.g. Krugman, 1987) that frictional unemployment stemming from industrial reorganization, can turn into local or sectoral pockets of longer term unemployment if workers adjust very sluggishly and real wages are rigid downward.

The fact that closer integration with the US economy may alter the income distribution between provinces strikes, though, a sensitive nerve in Canadian politics. The resource-based capital-intensive industries of Western provinces stand to gain at the expense of the more labour intensive, medium technology employing manufacturing industries of Eastern Canada. This regional income distribution aspect establishes a nexus between the prospect of North American free trade and the functioning of the Canadian Internal Market. By and large 60% of manufacturing in Canada is in the hands of US multinationals. The fear has therefore been expressed that in the wake of a free trade accord these firms might begin to repatriate their production, entailing a strong slump of investment in Canada. While this fear may be well-founded in the case of a unilateral removal of obstacles to trade, a bilateral free trade arrangement would have an uncertain impact on direct investment flows. US investment in productive capacity designed to serve the Canadian domestic market only may no longer be forthcoming, but the removal of US (non-)tariff barriers may make Canada a more attractive base to cover the whole North American market.

A fourth source of welfare costs connected with a free trade agreement with the US hinges on the fact that Canada will grow even more dependent on an economy that possesses a much vaster domestic market and that is

therefore basically impervious in its policy-making to Canadian requests or threats of retaliation. The provisions of the trade agreement itself may even impose direct constraints on Canadian economic policy with respect to matters that in principle are of an exclusive domestic nature. In exchange of circumscribing the scope of their countervailing duty laws and the common creation of a dispute settlement body, the US may demand that Canada act to reduce its state aid and revise the eligibility criteria. The restrictions on subsidies as a quid pro quo for a more predictable, more secure access brings up another link between the Canada-US free trade issue and the working of the Canadian economic union.

8.2 Quantitative economic impact studies

Quite a number of empirical studies have been devoted to the quantitative economic impact on Canada of a North American free-trade area. For the purposes of this report the focus is on the order of magnitudes found and the economic methodology applied.

The extraordinary differences in the results these various studies offer is immediately appreciated when observing that the range of estimates on welfare changes from the bilateral removal of trade hindrances goes from -1% to almost 9% of GDP. Taken at face value, such differences leave economic policy makers at a loss. Therefore the underlying modelling assumptions are spelt out and compared. Three approaches are discussed: partial equilibrium, general equilibrium models and sectoral macroeconomic models.

The simple method of partial equilibrium 'welfare triangles' was already used two decades ago. The various studies relying on the conventional hypothesis in the theory of international trade like the absence of both increasing returns to scale and imperfect competition have all arrived at estimates holding out the prospect of marginal welfare modifications. The removal of tariff barriers (non-tariff barriers were never addressed) would change Canadian prosperity by at most a few tenths of one percent of GDP, essentially owing to the low level of average bilateral tariffs.

However, Ronald Wonnacott (1975), aside from the usual static consumption and production efficiency benefits, also addressed the effect on the terms of trade and the advantage coupled to the larger room for economies of scale. As to the first two sources of gains, i.e. specialization corresponding to comparative advantages and the improvement of the terms of trade, Wonnacott borrowed estimates from a study by Williams (but only published in 1978) which suggest that through these two channels Canadian GDP would go up by 2.3%. Because the Williams' findings were predicated on a constant returns to scale production function, Wonnacott argued that the beneficial economies of scale effect ought to be added. By attributing the difference in US-Canada productivity levels in the manufacturing sector (which stood at 27% in 1973) exclusively to the difference in scope for scale economies on account of the existing trade barriers, Wonnacott stated that Canada would raise its welfare by an additional 5.9% (as manufacturing generated some 22% of Canadian GDP). The reciprocal removal in 1975 of trade obstacles with the US was thus predicted to bring a total long term bonus to Canada of some 8% of GDP.

This paper is not suited to enter an in-depth discussion of the common characteristics of general equilibrium models (GEMs) set up to address international trade questions (see, e.g. Shoven & Whalley, 1984). For a good understanding of the various results reported below, it is useful to recall that in a GEM the various product and factor markets represented are in continuous equilibrium by way of changes in relative prices. As all markets clear, GEMs assume away unemployment and adjustment costs. They therefore can be said to take a long term view, the more so as they do not incorporate the financial sector of the economy (money is so to speak 'hyperneutral' in the macroeconomic sense).

Table 5, drawing on the survey conducted by Lester (1987), gives an overview of the empirical evidence produced by GEMs on the effects of a bilateral removal of barriers. A glance of this table teaches that the estimated effects vary strongly, from a marginal loss to a gain of almost 9% of GDP (plus a real wage increase in manufacturing industries of 28%). What explains these strikingly divergent outcomes? On a general level they can be said to result from differences in:

- i) the structure of the model as concerns, for example, the degree of sectoral disaggregation, the inclusion of economies of scale and

TABLE 5: ECONOMIC IMPACT OF A BILATERAL LIBERALIZATION OF TRADE ESTIMATES
OF GENERAL EQUILIBRIUM MODELS

	Percentage change in		Weighted average of trade barriers on goods		Base Year	number of sectors	Econ. of Scale	Trade Diversion	Comments	
	Welfare (GDP)	TOT	Canada/US	US/Canada						
Williams (1978)	2.6	exogenous	14.0	9.1	1961	63	No	No	Linear programming model. Production and consumption function are of Leontief type	
Harris Cox (1984)	8.9	n.a.	9.7	17.8	1976	29	Yes	Yes	This model comprises three regions (Canada, US, ROW) (inclusion of NTBs)	
Hamilton & Whalley (1985) a)	0.6	1.8	4.9	6.7	1977	6	No	Yes	Eight endogenous regions; explicit tariff barriers only.	
	b)	0.7	0.7	23.3	20.2	1977	6	No	Yes	Both tariffs and NTBs
Wigle (1986) a)	-0.1	-2.6	8.1	2.6	1977	6	Yes	Yes	Hamilton & Whalley model but with economies of scale	
	b)	0.7	n.a.	21.7	13.1	1977	6	Yes	Yes	

imperfect competition, and the associated pricing behaviour of enterprises, the extent of the mobility of production factors, and so forth;

- ii) the structure of key parameters in behavioural functions in the model, like for instance export and import demand elasticities or the elasticities of substitution between producer inputs and between consumer goods;
- iii) the assessment of the size and kind of the barriers, which, among other things is dependent on the selection of the model's base year.

As Williams (1978) has a remote base year which is not comparable with that of the other three studies and its linear programming nature make it lie outside the mainstream of general equilibrium analysis, it will not be discussed.

The most interesting contributions for our purpose are Harris and Cox, Hamilton and Whalley (b) and Wigle (b) as they are calibrated on virtually the same base year and all three have made an attempt to comprise both tariff and non-tariff barriers to trade.

The fact that Wigle, who has modified the Hamilton and Whalley model by inserting economies of scale, arrives at a GDP effect of only 0,7%, demonstrates that the introduction of scale economies in a GEM is not sufficient to obtain large welfare effects from bilateral trade liberalization. It turns out that it is the combination of two assumptions, namely increasing returns to scale and collusive pricing behaviour on the part of Canadian industry protected against American imports, that lies at the heart of Harris and Cox's relative large welfare gain estimate.

Even so, a review of the Harris and Cox model by positing constant returns to scale across all industries yield a GDP growth result of 2,4%, still more than three times the Hamilton and Whalley prediction. This discrepancy can be ascribed to essentially three factors: first, Harris and Cox (wrongly) assume that US bilateral impediments to trade are more important than their Canadian counterpart; second, their import and export price elasticities are about three times the size of those used in

the Hamilton and Whalley exercise. These two hypotheses make for an improvement of the terms of trade following the removal of trade barriers. Third, their model is much more disaggregated: the economy is composed of 29 sectors, as against 6 in the other studies. The finer the degree of sectoral detail, the more capable is the model of tracking the reallocation of resources towards greater specialization along comparative advantage lines.

Evidently, these three factors must also be drawn upon to explain the difference between the Harris and Cox and Wigle results. But the prime explanation here is linked to the assumption regarding the pricing behaviour of firms active in industries characterized by imperfect competition. Harris and Cox postulate that in some of the twenty manufacturing sectors exhibiting increasing returns to scale, firms set their prices monopolistically with each of them perceiving a constant elasticity of demand and charging the profit maximizing price (the so-called Negishi assumption). In other sectors firms are supposed to collude tacitly, setting the Canadian price at the world price plus the tariff (the so-called Eastman-Stykolt hypothesis). The absence of price competition in sectors shielded by the tariff gives rise to X-inefficiency showing up in too many plants and firms and too wide a product variety. Upon the liberalization of trade the domestic industries characterized by pricing collusion will be forced to restructure allowing Canada to reap rationalization gains through a better exploitation of the economies of scale potential. The higher the ex ante tariffs and the larger the import price elasticity, the greater the economies of scale potential that will actually be realized.

In contrast, under monopolistic competition and a given technology, productive inefficiency is absent. The lowering of domestic tariffs will depress demand for domestic goods. With falling production, the scale of output and hence average productivity diminish as well, which would tend to reduce economic welfare.

The inclusion of the Eastman-Stykolt hypothesis is of key importance to the Harris and Cox result. This is readily appreciated when varying the relative weights apportioned to the two pricing strategies. If instead of

50% - as assumed in their reported exercise - 80% of firms in imperfectly competitive sectors are supposed to collude in terms of prices prior to the liberalization of trade, the positive GDP effect from a NAFTA soars from 8,9% to more than 16%. Conversely, a reduction of the importance of the collusive pricing conduct to 20% of firms dwarfs the welfare gain to 4,3% of GDP. In contrast to Harris & Cox (1984) only one out of the six sectors modelled in Wigle's study displays collusive pricing. The choice of Wigle's parameters is such that he limits the post tariff rationalization effects ceteris paribus to 40% of what would be obtained in the Harris model (Lester, 1987, p. 21).

In sum, Harris and Cox's rosy prediction on Canada's gains from the establishment of a NAFTA hinges on Canada's import competing industry's ability to eliminate productive inefficiency as tariffs vanish. This ability is supposed to be positively contingent on the presence of pre-NAFTA price collusive practices.

The third approach consists in sectoral macroeconometric models (SMMs), usually based upon neo-Keynesian traditions. SMMs, as distinct from general equilibrium models, can be utilized to study both the short run and long run effects of trade liberalization. Short terms consequences include labour dislocation and unemployment costs. SMMs model explicitly the linkages between the financial and real sector of the economy.

Whilst in GEMs the welfare effect from a NAFTA derives primarily if not exclusively from a reallocation of production factors following a change in relative prices, SMMs are typically driven to a large extent by developments along the aggregate demand side. For instance, one of the typical channels through which the beneficial upshot from trade liberalization makes itself felt in a SMM is by lowering the general price level compared to what it would be otherwise. This cut in prices triggers a real income and wealth effect and depressed interest rates. Hence, freeing trade provides an indirect impetus to domestic demand.

This emphasis on demand factors renders SMMs proper instruments to shed light on the shorter term consequences of a NAFTA. Compared to GEMs, they are less well-suited for long term purposes as, they are silent about how

at remote time horizons demand can be accommodated by a supply function that is subject to constraints.

Given their emphasis on aggregate demand developments, SMM's lack carefully specified production functions. All of the models employed to probe consequences of a NAFTA display constant returns to scale and are, therefore, incapable of accounting for the productivity increases springing from scale economies and industry rationalization processes. This inability to generate such increases endogenously is often sought to be remedied by inserting productivity improvements into the model in an exogenous fashion.

Table 6 surveys employment and output forecasts produced recently by two SMMs', the TIM-model of INFORMETRICA and the CANDIDE 3.0 model of the Economic Council of Canada.

The TIM-model consists of 19 sectors and it generates the evolution of the terms of trade with the US by itself. (Non tariff barriers in the US are measured to exceed those still in place in Canada). Fiscal policy following the removal of tariffs is supposed to be neutral, i.e. the revenue loss is compensated by tax increases in other domains. Under constant returns to scale, the bilateral elimination of trade obstacles boosts GNP by 1,3% after five years, with no further expansion effects later on. Employment rises by 0,6% after 5 years to edge up to 1% after a decade. When productivity in the manufacturing sector is posited to grow by 5% over a ten-year period, the predicted welfare effect becomes larger (nearing 2% after ten years) but the expansion of employment is - not surprisingly - less pronounced.

Economists at the Economic Council of Canada, have run a macroeconometric simulation on the CANDIDE model in 1986, which was refined in the course of 1987. The analysis will center on their most recent research.

CANDIDE 3,0 is a large disaggregated annual macroeconomic model of the Canadian economy, with parameters based on 1954-81 data. It is composed of 44 detailed sectoral models, interfaced with a neo-Keynesian macroeconomic model. The latter rests on the standard IS-LM framework,

TABLE 6 ECONOMIC IMPACT OF A BILATERAL LIBERALISATION OF TRADE
SECTORAL MACROECONOMETRIC MODELS

Models	1st year		5th year		10th year		Weighted average of		Period of	No of	Terms of
	Emplt.	GNP	Emplt.	GNP	Emplt.	GNP	barriers on goods trade	US	analysis	sectors	trade
<u>INFORMATICA (TIM) (1985)</u>											
(tariff barriers) A)	-0,0	-0,0	0,1	0,3	0,3	0,5	3,6	3,6	1988-2005	19	endogenous
(tariff barriers+NTBs) B)	0,0	0,1	0,6	1,3	1,0	1,2	6,5	8,1	1988-2005	19	endogenous
(B + exogenous productivity increase) C)	0,0	0,1	0,5	1,6	0,8	1,9	6,5	8,1	1988-2005	19	endogenous
<u>Economic Council of Canada (Candide 3.0) (1986)</u>											
tariffs + NTBs. Exogenous increase of manufacturing industry productivity across the board by 5%	-0,1	0,0	0,1	1,9	2,4	3,3	6,5	8,1	1987-1995	44	exogenous
<u>Economic Council of Canada (Candide 3.0) (1987) (employment figures in 1000)</u>											
recalculated tariffs and NTBs A)	38	1,0	144	1,6	89	1,6	4,8	4,1	1987-1995	44	exogenous
A) + sector specific productivity increase amounting to 6.1% for the whole of industry B)	12	1,1	187	2,8	350	3,3	4,8	4,1	1987-1995	44	exogenous

with refinements to feature newer generally received insights like public sector finance constraints, private sector expectations and public sector reaction functions, and labour market constraints.

Two different methods (based on price and on volume comparisons) were used to calculate the tariff equivalent of trade restrictions associated with countervailing and anti-dumping duties, safeguard actions, voluntary export restraints, standards and import licensing. The effects of removing federal discriminatory public procurement regulations on net exports of each of the 44 industrial sectors were computed on the hypothesis that following the liberalization of trade, the import propensity with respect to public purchases will be as large as that for private domestic demand. Given this assumption, bilateral trade would intensify strongly in sectors like transport equipment, non-household electrical appliances, and scientific instruments. Industrial and agricultural subsidies handed out by both federal governments were not incorporated in the free trade simulations. Non-tariff barriers impinging on tradeable services were not addressed either.

A survey of econometric estimates of industry economies of scale in Canada reveals that for most sectors the scope for trimming total average costs by stepping up output is rather small. The scale parameter estimates varying from sector to sector in a narrow range of 1,0 (constant returns) to 1,10, it is found that on (weighted) average a doubling of industrial output will raise total factor productivity by a mere 6%.

However, the observation that 70% of Canadian plants claim only 20% of industrial production lends support to the view that there is ample room for efficiency gains from restructuring. Estimates put forward by Lester and Robidoux (1986) suggest that if all plants of suboptimal size were to operate at minimum efficient scale (MES) level, total average costs, inclusive of intermediate inputs, could fall by almost 4% in the manufacturing sector. When converting these potential cost savings (expressed on a gross output basis), into value added by multiplying them by the industry-specific ratio of value added to gross output, ensuring all plants to work at MES level would push up total factor productivity

in industry by 12% on average! The Economic Council of Canada economists thus assume that half of these potential productivity improvements would be taken advantage of following the conclusion of a NAFTA. This explains the selection of the exogenously imposed productivity figures, amounting to 6,1% for industry in its entirety, employed in the simulation reported at the bottom of Table 6.

The chief economic mechanisms at work in the CANDIDE 3,0 model in the wake of the bilateral elimination of obstacles to North American trade are as follows. First, as Canadian goods become cheaper for American consumers, export demand will mount, resulting in more output and jobs. The obverse happens on the import side where Canadian production is displaced by a rise in imports from the US. However, to the extent that firms used to operate inefficiently, tougher import competition may provoke the emergence of rationalization process. Even in the absence of this industrial restructuring effect, lower import prices exert three beneficial influences. Less costly imported inputs buttress Canada's competitive position relative to third countries. On the one hand, the lowering of the general price level will cause a beneficial real income and wealth effect, propping up aggregate demand. In as much as the fall in priced reduces wage claims, a virtuous circle originates whereby the removal of trade barriers may subdue the inflation rate for an extended period. Finally, the demand induced expansion of output, will spur investment, the more so as the price of investment goods, which are to a large degree obtained from the US, will decline by more than the average price level. Therefore, it is primarily modifications in the components of macroeconomic demand rather than the reallocation of production factors towards greater efficiency that are at the root of the reported global welfare and employment effects.

Assuming industrial productivity to go up by on average 6.1% (over five years), the Candide 3.0 model predicts Canadian GNP to have expanded by 2,8% five years after the creation of a NAFTA. After ten years GNP is forecast to have risen by 3.3%. Strikingly, and except for the very short run, employment is to benefit more from an elimination of bilateral trade obstacles if in the aftermath productivity increases.

8.3 Adjustment costs estimates

As factors of production become unemployed due to trade liberalization, social - as well as private - costs are incurred. These social costs amount to the volume of output lost during the reallocation process of the redundant labour and capital. This loss has to be set against the productive efficiency and consumer welfare benefits brought about by free trade in order to obtain an accurate picture of the net gains from a NAFTA.

In the case of general equilibrium models, the problem of possible redundancies is ignored because all markets are held to clear continuously following changes in sectoral supply and demand signalled by relative price movements. Estimates on the size of factor relocation due to a NAFTA can, however, be inferred from such models. According to the Harris and Cox findings, nearly 7% of the manufacturing labour force will need to shift sectors under bilateral free trade with the US. Concomitant with the industrial rationalization process, where the brunt of welfare gains turns out to spring from, a lot of intra-industry factor reallocation will have to take place, although no figure or range was put forward to this effect.

Macro models lend themselves much better to an analysis of production factor dislocations and net demand effects, at least as far as labour is concerned (2). By linking the aggregate results from CANDIDE 3.0 to the Statistics Canada Input-Output Model, the 1987 study of the Economic Council of Canada has estimated the effects of Canada-US free trade on employment after ten years.

Three-quarters of all sectors, manufacturing and services alike, will enjoy an expansion of employment, with large increases in primary industries and construction. Big gains would be registered for the services sector - retail and wholesale trade and commercial and personal services - which alone would claim two-thirds of all new jobs. It underscores once more the importance for the Canadian economy this sectoral macroeconomic model attaches to expansionary indirect demand effects ensuing from free trade. Only five industrial sectors - rubber

and plastics, leather, textiles, knitwear, electrical appliances, all being highly protected at present - would be forced to shed labour. But this loss in employment would not total more than between 7.000 and 15.000 jobs, with attendant retraining and relocation costs in principle light to bear as none of these problem sectors is concentrated in a traditionally disinherited area. Unless they conceal a great deal of mutually offsetting gross intersectoral labour shifts, these small figures contrast sharply with the 7% estimate from the Harris and Cox exercise.

The Economic Council of Canada simulation predicts, furthermore, that the growth of output and the 200.000 to 350.000 new jobs ensuing from trade with the US are spread fairly evenly over the provinces. There would be no salient winners or losers, with the two dominant provinces, Ontario and Quebec, where more than two-thirds of Canadian manufacturing is based, registering smallest gains ranging from 1,3% to 2,5% more employment. British Columbia and Alberta would outperform the country as a whole but so would the poorer Atlantic provinces like Newfoundland or New Brunswick. Cast in EC jargon, the implementation of a bilateral free trade agreement with the US would serve to heighten economic 'cohesion' in Canada along an upward growth path for the federation in its entirety.

NOTES:

- (1) Markusen (1985). Markusen states that trade liberalization in circumstances of increasing returns to scale and imperfect competition will engender a rise in domestic welfare if it sets the stage for either an expansion or the outright elimination of domestic production. For this production rationalization process to emerge it is sufficient that the following four conditions apply:
 - a) the country is too small to exhaust economies of scale by selling only in the domestic market;
 - b) the difference in technology employed by the two trading partners is not such that domestic firms have higher marginal costs than their foreign counterparts. If it were, domestic enterprises may be prompted to reduce output in response to trade;
 - c) product differentiation is primarily horizontal, i.e., the various products on offer, belonging to one and the same product group, exhibit basically the same quality. If products are differentiated in this fashion, the producers in each country will face, subsequent to the liberalization of trade, a potential demand that is larger than would be the case with perfectly homogeneous products;
 - d) the domestic market, in spite of being imperfect (e.g. due to the fact that the market supports but a few suppliers, or the fact that goods are not perfectly homogeneous) is characterized by free entry and exit. This condition rules out lasting profits (i.e. price will tend to equal average costs) and ensures that a firm will not react to trade by producing in a less efficient way: such a firm would after a while be driven out of the market. If potential new entrants do not find themselves in a structurally unfavourable position, the freeing of trade will imply that existing firms will obtain access to larger markets but also face stiffer competition.

- (2) To our knowledge there are very few studies that have produced estimates of output foregone due to excess physical capacity struck in industries following a change in the foreign trade regime. Baldwin, Mutti and Richardson (1980), studying the effects on the 1971 US economy of a multilateral halving of tariffs, suggest that welfare gains exceed aggregate factor adjustment costs by a ratio of 25 to 1.

ANNEX 1Tariffs by Industrial Sector, post-Tokyo Round: 1987

(ad valorem)

<u>Industry</u>	<u>Canada</u>	<u>United States</u>
Textiles	16,9	7,2
Clothing	23,7	18,4
Leather Products	4,0	2,5
Footwear	21,5	9,0
Wood Products	2,5	0,2
Furniture and Fixtures	14,3	4,6
Paper Products	6,6	0,0
Rubber Products	7,3	3,2
Non-metal Mineral Products	4,4	0,3
Glass Products	6,9	5,7
Iron and Steel	5,1	2,7
Non-ferrous Metals	3,3	0,5
Metal Products	8,6	4,0
Non-electrical Machinery	4,6	2,2
Electrical Machinery	7,5	4,5
Transportation Equipment	0,0	0,0
Miscellaneous Manufactures	5,0	0,9

Note: Canadian tariff averages are weighted by imports from the United States and vice versa.

Source: The United States Trade Representative.

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