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Supranational governance and corporate strategy: the emerging role of the World Trade Organization

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Abstract

The subsidization of firms by their governments is one of the most controversial issues in international trade. As such, international disciplines on subsidy have been developed under the auspices of the World Trade Organization (WTO). However, many states continue to regard state aid as a vital and entirely legitimate form of government intervention in the economy. Indeed, they cite economic studies on spillovers, externalities and appropriability problems to make their case. Writers such as Porter, Doz and Rugman have illustrated the importance of the domestic economy to international operations. But how are WTO disciplines affecting firms? We develop a case study of the commercial rivalry between two aircraft manufacturers, Bombardier and Embraer, to demonstrate the growing importance of supranational regulation to corporate strategy. © 2001 Elsevier Science Ltd. All rights reserved.

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1. Introduction

The events in Seattle during December 1999, when the WTO's ministerial conference ended in failure, reminded business that international commerce does not occur in a vacuum: rather it is conducted between a myriad of state actors, international

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organizations and societal groups such as environmental, labour and human rights groups. The interaction of business and its environment has long been a subject of scholarly enquiry. Much of the early interest was in foreign direct investment: an interest that remains salient today (Graham, 1997). Recently, the interaction of business and civil society has been examined (Maxwell, Rothenberg, Briscoe, & Marcus, 1997). Firms have recognized that non-state actors, such as non-governmental organizations like Greenpeace, can have a profound effect on their operations. However, relatively little of this work concerns the growth and development of international organizations like the WTO. Instead, where firm — government relations are concerned, much of the focus remains on national governments in their capacity as home or hosts for foreign direct investment. Sanyal and Guvenli (2000) note that “more and more governments” have accepted liberal economic policies, yet they fail to recognize that this liberalism has an institutional manifestation in the WTO. Rugman and Verbeke (1998) note that the WTO may become increasingly important, but regard the international regulation of investment policies as a more pressing matter on the regulatory agenda. In her review of the government — business relations literature, Getz (1997) argues that as international business expands, it is reasonable to expect that international level regulation will become more salient for scholars and practitioners. However, she does not attempt to develop either theoretical frameworks or case studies to pursue this point. Dunning (1997a), similarly, raises the potential importance of supranational or international regulation in his edited work on business government relations. He notes that the expansion of international commercial activity challenges states to reconsider their governance of economic affairs. Dunning also stops well short of examining the actual interaction of business and international institutions like the WTO. The management literature, in brief, seems to suggest that there is “something” important about international organizations like the WTO, but no agreement on how to proceed.

This may be due to the relative novelty of the WTO: it has only existed formally since 1995. However, another reason may lie in the misplaced belief that, as an international organization, the WTO has no effect on firm strategy or operations. Rather, the primary research focus ought to be on national regulatory regimes and their influence on firms seeking to locate there. This article does not argue that the WTO is the only important environmental variable for international business, nor is it the most powerful (however one determines relative power in the international system). We do argue, however, that the organization’s potential impact on the conduct of international commerce is understudied. The business and management literature has generally not grappled with the details of WTO decisions — in contrast to the legal literature — but has concentrated on the WTO’s place within the international regulatory system (Rugman, 2000). A proper assessment of the WTO’s influence — or lack of — on international business can be gained only by a careful examination of actual cases. The case developed in this paper is intended merely to add some empirical leverage to the argument that the WTO matters in international business strategy; it is not, nor cannot, be conclusive in its findings. Significant further work needs to be done in this area. Our aim is to illustrate how WTO decisions may affect firms through shaping national-level industrial and technology

policies. In this sense, our approach is not so different from work that examines the impact of NAFTA on North American business; the NAFTA treaty is an important intervening variable in the conduct of international business in North America — particularly where locational decisions are concerned (Globerman & Shapiro, 1999).

2. Research methodology

We echo Dunning (1997b) in arguing that increasing economic interdependence presents a fundamental challenge to states, and to international business scholars. Internationalised markets increase the incentives for states to react to each other's economic policies and the WTO is one forum where this is done. Decisions made by WTO panels do affect firms, though it is true that firms do not have "standing" at the organization; that is, they cannot be actors in the disputes process. This does not diminish the importance of the organization to international business. The WTO is an international regime, a bundle of regulations and norms of behaviour. Regimes are important in that they constrain and shape, in various ways, the policy preferences of actors, including firms and governments. This paper seeks to contribute to an emerging debate about firms, the WTO and international regulatory processes. Our objective is to show how the WTO can become an important variable in international business and strategic management.

The paper begins by outlining the development of the WTO as a supranational authority. From there, it examines a recent dispute between Canada and Brazil in the regional aircraft industry. We draw on the extensive documentation produced by the WTO — particularly the panel and appellate reports — as well as aerospace industry trade publications. The case is interesting because it focuses attention on one of the more contested areas of international trade: government subsidy to firms. The dispute helps illuminate how government intervention on behalf of home firms is an intrinsic part of aircraft production, and how WTO rules might affect this in the future. The implications of the WTO's reasoning in the case go beyond the aircraft industry. WTO decisions are cumulative: later case law builds on earlier ones. Thus, understanding the aircraft case is important for many industries, especially those where government subsidies feature prominently.

3. Supranationalism and the WTO

Supranationalism refers to a level of political authority above the nation state. It implies a shift in sovereignty away from states and toward an international institution. The European Union (EU) is the best example of a supranational authority: the European Commission is, for instance, able to make and, ultimately enforce laws on EU member states. The WTO is nowhere near as strong as the European Commission,

but it is a mistake to argue that it does not constrain states.¹ The WTO is a much more robust institution than the General Agreement on Tariffs and Trade, which it replaced. The key institutional innovation of the WTO is the binding disputes process. When a trade dispute is taken to the WTO, the parties will face a panel process not unlike a court proceeding. The panel, having heard arguments from the parties, issues a report and recommended action. Parties to the dispute can appeal the result to a standing appellate body. The decision of the appellate body is final: no further appeals are allowed. Crucially, final reports will be adopted by the WTO council — and so will be binding on the losing states — unless there is a consensus against adoption. Mustering a consensus against is effectively impossible: reports of the appellate process are, in essence, binding and final. States must comply with the WTO recommendations or face trade sanctions. Since compliance with WTO decisions may require changes in domestic law, firms can be affected.

Some WTO decisions have caused considerable public anger, and this reflects the fact that the disputes process places states in the position of complying with decisions — by changing domestic law if necessary — or run the risk of trade sanctions. While some of the more controversial decisions concerned environmental protection, other cases centred on firms. The Kodak–Fuji dispute, for example, centred on the question of fair access for Kodak to Japan’s retail film market. There was considerable anger in Congress when the American government — and hence Kodak — lost the case. The case examined here, the regional aircraft dispute between Brazil and Canada, is similar to the Kodak case in that the world of trade policy became blurred with corporate strategy. As Baron (1995) has noted, corporate strategy involves not only market activities like product development, finance and marketing, but also non-market issues like government aid, regulatory policy and trade policy. Early cases in the WTO should serve as a warning to managers that the Geneva-based institution can have an important role in shaping corporate strategy by affecting the economic regulatory environment where firms operate.

4. Strategy, regulation and rivalry: the case of regional aircraft

A regional aircraft is an airplane that can seat between 30 and 100 people, travel up to 1500 miles and is powered by either turboprops or jets. The market for these aircraft expanded dramatically during the 1990s. This expansion was particularly marked for jet powered regional aircraft. For much of the 1990s, two firms dominated

¹ Consider the text of the WTO panel report on US foreign sales corporations, where the US argued that taxation policy was outside the WTO’s remit: “[The] United States is free to maintain a worldwide tax system, a territorial tax system or any other type of system it sees fit. This is not the business of the WTO. *What it is not free to do* is to establish a regime of direct taxation, provide an exemption from direct taxes specifically related to exports, and then claim that it is entitled to provide such an export subsidy because it is necessary to eliminate a disadvantage to exporters created by the US tax system itself.” WTO (1999e) United States — Tax Treatment of “Foreign Sales Corporations”: Report of the Panel, Geneva: WTO, 8 October 1999, p. 282, italics added.

Table 1
A comparison of models^a

Model	No. of passengers	Wing span (ft.)/wing area (sq.ft.)	Cruise speed (mach)	Range (miles)
Bombardier CJ200/ER/LR	50	69.7/560	0.77	1134/1893/2307
Embraer ERJ-145ER/LR	50	65.8/551	0.78	1186/1771

^a Source: data from *Aviation Week and Space Technology*, Aerospace Source Book, 17 January 2000, pp. 70–71.

the market for these jets: Embraer of Brazil and Canada's Bombardier. These two companies, whilst bitter rivals, show remarkable similarities in both corporate and product development (see Table 1 for the latter).

Both companies are to some degree "chosen instruments" of national governments wishing to develop a domestic aerospace industry, though the firms used very different strategies to expand their operations. Bombardier did not begin life as an aerospace firm but rather moved into the sector via a string of acquisitions (Table 2).

Embraer's development stands in stark contrast to its Canadian rival. Bombardier has always been a private company; Embraer, in contrast, was state-owned from its creation in 1969 until privatisation in 1994 (Embraer, 2000). Under state ownership, the inability to control costs meant that the Brazilian government often bailed out the firm. These losses, coupled with a general shift in Brazilian economic policy in favour of privatisation, saw Embraer sold to private investors. The firm's existing product lines of light, propeller driven and jet aircraft provided the key competencies needed for entry into the regional airliner market. The company entered this civil market with the 50 seater EMB-145 in 1992.

Although the firms came at the market from different directions, internationalising their operations produced a convergence in strategy. The regional aircraft market places pressure on firms to implement very similar strategies. A series of environmental conditions makes product differentiation difficult and forces firms to compete on price and service quality. This sensitivity to price has a major role in explaining the key role of government subsidy in the sector. Pressures for convergence exist

Table 2
Bombardier acquisitions

Target	Canadair (1986)	Short Brothers Learjet (1989)	Brothers Learjet (1990)	De Havilland (1992)
Products/value-added	Executive jets	Wing fabrication; access to the European market	Executive jets; highly recognized brand name	Turboprop aircraft

on both the demand and supply side of the market and the rapid development of the regional jet market in particular represents a positive interaction of technology and market demand conditions.

The civil aircraft industry generally is a sector characterized by incremental technological change (McGuire, 1999). Unlike the computer industry, for example, the basic technologies underlying civil aircraft, particularly in airframe design and construction and propulsion, have remained relatively stable since the development of the jet engine in the 1940s. This arises for two reasons: cost of new product development and certification procedures. The civil aircraft industry is a highly R&D intensive industry with typical research and development spending equal to 10–15 per cent of revenues (DTI, 1997). Launching an entirely new product is incredibly risky. Boeing was nearly bankrupted by the development costs for the 747 airliner, designed in the 1960s (Rodgers, 1996). In short, the uncertainty associated with new product development makes firms reluctant to introduce revolutionary technologies; incremental changes to a design are a preferred option.

This caution is reinforced by the arduous certification procedures for new aircraft. Certifying a new airliner requires a minimum amount of flying to demonstrate the reliability of the aircraft and its systems in a variety of conditions. This process can take years and firms will not introduce new technologies unless they are already robust enough to withstand the certification regime. Thus, competing aircraft makers tend to introduce products that are remarkably alike in basic technologies and performance. Commercial rivalries tend to manifest themselves as competitions among relatively undifferentiated aircraft. Both Bombardier and Embraer developed products that differed little in basic performance and design. As one airline executive put it, “In airplanes, you have a choice between chocolate and vanilla. One year it could be vanilla or it could be chocolate” (Ott, 2000, p. 44).

The development of the regional aircraft niche into which Bombardier and Embraer belong also demonstrated the demand side pressures that force strategic convergence. A key pressure was the growth of hub-and-spoke routing systems among major airlines, particularly American ones, in the wake of US airline deregulation in 1978. Hub and spoke systems work by funnelling large numbers of passengers through large, hub airports like Chicago, Dallas, or London Heathrow. Smaller planes perform the vital role of linking these hub airports with smaller regional centres. Traditionally, propeller driven aircraft performed this function. However, customer surveys showed that customers prefer jet-powered aircraft, perhaps viewing them (correctly or not) as safer airplanes (Shifrin, 1998). Airlines had to wait until technological progress in the small jet sector provided engines that were both quiet enough to fly in and out of local airports without causing noise pollution and efficient enough to make the routes economical (Sparaco, 1998, p. 1). Once this was achieved in the late 1980s, regional jet orders began to soar. By 1998, the 80 member airlines of the European Regions Airlines Association (ERA) had ordered almost 1000 regional jets (Sparaco, 1999, p. 2).

The argument we make here is that in an environment where environmental pressures make differentiation strategies difficult, government intervention on behalf of domestic firms can be the key to competitive success. Both Canada and Brazil sought

to use state aids as a way of reducing the cost of their firms' products. For their part, neither firm was shy about the absolute need of extensive government support for their product development and sales. However, national provision of state aids is subject to multilateral disciplines. Thus, the success of corporate strategy depended, partly at least, on how the WTO chose to interpret its subsidy provisions.

Bombardier was the first to market, introducing the 50 seat "Canada Regional Jet" (CRJ) — 100 in 1992. Embraer's offering, the EMB-135 followed two years later. Although Bombardier was the first to market, it did not enjoy a first mover advantage. Embraer stunned its Canadian competitor in 1996 by announcing large orders from two American regional airlines: Continental Express and American Eagle. Both air carriers ordered in excess of 100 Brazilian regional jets each. Bombardier began to complain that Embraer's success was the result of Brazilian government support. The Brazilian government had developed an exchange rate subsidy scheme, Proex, to assist exporters. Under the scheme a bank lending funds for the purchase of an Embraer aircraft received two payments. The first was from the airline purchasing the aircraft; the second was from the Brazilian government. Whatever the interest rate attached to the loan, the programme allowed the Brazilian government to pay 3.8 percentage points. Hypothetically, if an airline negotiated a loan at say, 7 per cent, Brazil's subsidy effectively reduced that interest rate — and hence payments — to 3.2 per cent. Crucially, Embraer would secure the agreement of the Brazilian government to fund the subsidy before concluding the sale. The company could thus enter a bidding contest with Bombardier knowing that Brazilian state would agree the funding (WTO, 1999a, p. 2). Trade press reports suggested that Embraer aircraft were enjoying a US\$ 2 million price advantage in bidding contests. For its part, Bombardier claimed that the programme provided an effective subsidy of US\$ 4.5 billion to Embraer (Bombardier Corporation, 1999).

However, Bombardier itself had secured government support for its product development programmes. In 1992, the Canadian government offered the company a C\$ 38 million loan to support development costs of the first CRJ model. Then, in 1996, Ottawa pledged C\$ 87 million of funding for a new, seventy seat CRJ model. This second subsidy, which would be paid back on a royalty basis, was delivered under the auspices of the Canadian government's Technology Partnerships Canada (TPC) programme (TPC, 1996). Canadian government assistance to the aerospace sector in general, however, came to C\$ 631 million. While not all of this money went to support regional aircraft production, some did go to support the development of subsystems with possible applications on Bombardier aircraft (TPC, 2000, p. 2).

The rivalry became increasingly bitter through 1997. Bombardier pressed the Canadian government to take a case to the WTO, but withdrew the request when the possibility of a negotiated settlement appeared. Neither firm was able to develop a product strategy that would break the impasse: the firms were offering technologically similar solutions and price competitiveness was the key element in the rivalry. Both countries essentially counter-sued each other in the WTO after failing to agree on a bilateral negotiated compromise.

5. Research findings: the WTO decision and its impact

On 14 April 1999, a WTO disputes panel found that some Canadian subsidy programmes supporting Bombardier violated the agreement on subsidies and countervailing measures (ASCM) (WTO, 1999b). These were the debt-financing scheme, the “Canada Account” and the Technology Partnerships Canada programme designed to support regional aircraft production. For its part, Brazil was found to have afforded Embraer an illegal subsidy with its Proex scheme of interest rate subsidies to purchasers of Brazilian aircraft. Brazil and Canada appealed sections of the panel reports. On 2 August 1999 the Appellate Body issued its report (WTO, 1999c) which essentially upheld the initial findings. The regional aircraft case clarified the WTO’s position on the nature and scope of permitted support for the aircraft industry. More importantly, it provides an insight into emerging international disciplines on subsidization that may affect other firms and industries in future.

A subsidy is legal unless it confers a market advantage — a benefit in WTO parlance — on the firm or industry receiving it. Both the panel report and the Appellate Body had to consider a means of determining whether a benefit had been conferred. In its deliberations, the panel developed what may be called the “market reference” test for determining benefit. The panel based its view on a very strict interpretation of the WTO rules on subsidies. The wording of the ASCM implies that the benchmark for illegal subsidy is whether the terms offered by a state are more generous than those that could be obtained by a firm in commercial markets. In this case, the panel noted that the TPC, “neither seeks nor earns a commercial rate of return on these contributions.” (WTO, 1999b, p. 217). Canada also suffered defeat on the question of whether its subsidy programmes were contingent on export sales. The aim of the ASCM is to allow subsidies that have beneficial effects, such as reviving economically depressed areas, but discipline those whose primary purpose is to distort trade. Thus, government support aid given with the *expressed purpose* of increasing exports is not allowed under WTO rules. The WTO ruled that Canada’s TPC programme was designed specifically to increase Canadian exports. The panel made its point by quoting directly from TPC documentation provided by the Canadians; TPC funds, “are provided for “near market projects with high export potential”” (WTO, 1999b, p. 225).

Brazil’s defence of its Proex scheme rested on two arguments: that as a developing country it enjoyed looser disciplines on subsidy than Canada; and that it was entitled to subsidize Embraer so as to cancel out the beneficial effect of Canada’s support to Bombardier (WTO, 1999d). In the appeals process, the developing country argument was dropped. In any event, the latter defence is the more analytically interesting, as firms often cite the “level playing field” defence as a reason for receiving state support. However, the WTO rejected this argument; to admit that countries may subsidize firms so as to retaliate for foreign subsidization, was to invite a spiral of counter subsidy and a “race to the bottom” in international subsidy disciplines (WTO, 1999d, p. 51). Moreover, as the Proex interest subsidy was fixed at 3.8 per cent, it could not be the case that Brazil simply sought to match Canada’s subsidization: matching in one case might have demanded a larger subsidy, and in another

case a smaller amount. The Proex programme was thus not designed to merely cancel out state aid to Bombardier, but to provide Embraer with a price advantage.

As a result of the appeals process, both Canada and Brazil had to alter their state aids. In the Canadian case, the entire TPC programme, which from 1996 to 1999 had awarded almost C\$ 1 billion to firms, was to be restructured to make it WTO-compliant. Bombardier was not asked to pay back the money it received from the government under the TPC programme but Industry minister John Manley announced that some C\$ 16.4 million in TPC funding awarded for regional aircraft support, but not yet disbursed, had been cancelled (TPC, 1999).

The Brazilian case was slightly more complicated. The WTO ruled that the Proex scheme was an unfair, trade distorting subsidy. However, asking the Brazilians to withdraw the funding within 90 days of the issue of the report raised a complication: did that mean that contracts between Brazil, Embraer and an airline, which had been signed but not executed, were to be terminated? This raised a difficult legal issue; Embraer argued that it could not be asked to break legally binding contracts with customers. Bombardier insisted that it do so, arguing that some US\$ 3.7 billion in illegal supports would otherwise go through. In May 2000, the WTO ruled in favour of Canada, judging that the Proex-based sales could not proceed. The number of aircraft involved was staggering: some 900 units. The enormity of the penalty had serious implications for both Embraer and Brazil. As one observer noted, Embraer is by far Brazil's most successful high-technology exporter and this decision, "is about whether or not Brazil has a high-technology industry", (Alden & Collitt, 2000). In August 2000, a WTO arbitration panel ruled that Canada was entitled to impose tariffs on Brazilian goods worth US\$ 230 million per year until a bilateral accord on the Proex-based sales was agreed (Williams et al., 2000, p. 10). Negotiations to conclude this agreement are continuing as of this writing.

Aerospace analysts expected the price of regional aircraft to increase slightly as the competing firms were forced to recoup the full development costs of the aircraft (Smith, 1999). More generally, however, the outcome highlights the role played by the WTO in governing international business. Since WTO treaties have the status of international law, and since WTO panel decisions are meant to form a corpus of law to guide future decisions, the Bombardier–Embraer case could have repercussions in a variety of industries. We argue that there are two key issues for firms. First, the case established that governments may not subsidize their own firms, simply because other states are doing so. Second, the market reference test developed in the case may prove troublesome. Government subsidies are often justified by structural conditions in a sector, such as long payback periods or appropriability problems, that make private capital markets unwilling to invest. Yet, the market reference test seems to argue that, unless a government loan is substantially "commercial" in its structure, it is vulnerable to trade action.

This decision may affect types of strategic rent seeking behaviour where governments seek to position their firms competitively relative to foreign firms via state aid. Crucially, it calls into question the viability of corporate strategies where government support is a key component of either product-specific R&D or FDI decisions. It is worth recalling that the TPC was a research and development programme. That,

however, did not insulate it from the WTO. It is also worth noting that both American and EU government participated in the regional aircraft hearings and that the British government, to cite one example, was concerned that its own regional economic development programmes might be affected by the WTO's developing jurisprudence on subsidies.² In short, as the WTO reaches into domestic economies, corporate strategies will be affected as, in the Rugman and Verbeke formulation (1998), the degree of national responsiveness that can be offered to firms is constrained.

6. Making sense of contextual complexity: factoring the WTO into TNC strategy

Few firms are factoring supranational regulation into their corporate strategy processes. Moreover, the international business literature dealing with firm-government relations and the "non-market" corporate strategy context tends to consider only firm-state interaction (Baron 1995, 1997; Dunning, 1997a; Mercer, 1992; Porter, 1990; Shaffer & Hillman, 2000; Story, 1999; Rugman & Verbeke, 1998; Sanyal & Guvenli, 2000). Many authors allude to the supranational level of governance but fail to extend their analyses into this realm (Baron, 1997; Getz, 1997; Dunning, 1997b; Rugman & Verbeke, 1990; Story, 1999). Our discussion of the Bombardier–Embraer case indicates that, in sectors such as aerospace, the competitive affect of supranational institutions — particularly the WTO — cannot be ignored or underestimated.

The basic building blocks of corporate strategy are common to all industry types and firm structures. They are also found in both domestically oriented and international strategies. It is when a firm enters into competition and operations beyond the spatial confines of its country of origin that the layers of complexity increase and the strategic context becomes more challenging. Our conceptualisation of this multi-faceted transnational strategic context is illustrated in Fig. 1.

In the outer field are four separate but interrelated contextual (non-corporate) strategy variable sets. The box labelled "Co-operation" incorporates all forms of collaboration that a company can enter into in order to increase its global market presence and transnational competitiveness. These range from loose alliance agreements such as shared marketing, through joint venture activities, to full-blown mergers or acquisitions. The section titled "Globalisation" encompasses both strategies that a firm may choose to adopt (such as an internationally disaggregated value chain) and issues that a firm is obliged to factor into its transnational strategy (cross-cultural management training for instance). The third box, "PEST", accounts for a wide range of disparate societal variables that help shape transnational corporate strategy. These include political ideology, party politics, exchange rates, inflation, demographic trends, new inventions and technological innovation. The final contextual subdivision, "Regulation", is central to this paper. Regulation is normally incorporated into

² McGuire acknowledges the insights of an official from the Department of Trade and Industry, personal communication, Bristol, 17 November 1998.

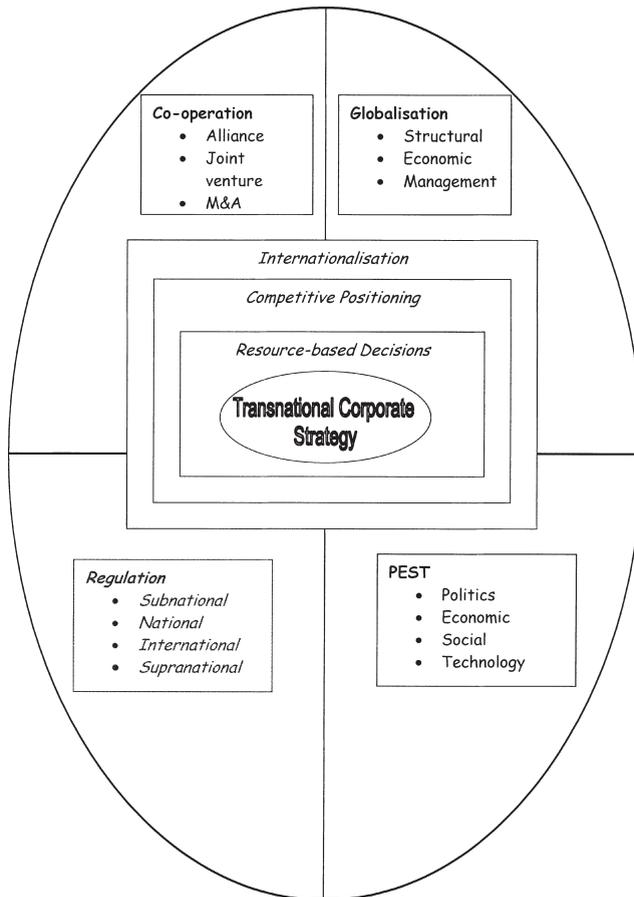


Fig. 1. A model of transnational corporate strategy making in context.

PEST analysis. However, we argue that regulation — be it trade rules, subsidy laws or environmental legislation — warrants separate consideration when formulating transnational corporate strategy. This is not only due to the range of regulations that can have an impact on firm performance and behaviour but also because of the assorted governance levels from which regulations may emanate. We have identified the most important levels of governance as subnational (county or federal state), national, international (the Chicago Convention for air transport for instance) and supranational (the EU or the WTO).

In forging transnational corporate strategy, firms face a broad array of external challenges and decisions. As with domestic-oriented corporate strategy, a firm should build a transnational strategy on the basis of internal strengths (Barney, 1991; Grant, 1991; Prahalad & Hamel, 1990; Stalk, Evans, & Schulman, 1992; Teece, Pisano, & Shuen, 1990; Kay, 1993) and external opportunities (Day, 1990; Mintzberg, 1990; Porter 1979, 1980; Webster, 1994). As illustrated in Fig. 1, an effective corporate

strategy needs to incorporate both an inside-out, resource-based approach and an outside-in, competitive market-positioning perspective, though this does not imply that a “balance” must be struck. It is possible that, for a given firm at a given time, one perspective or the other may dominate. The key is not to dismiss one perspective in favour of the other. Together, these stances are situated at the very heart of strategy making. As a general rule, an integrationist rather than isolationist approach³ should always be adopted when formulating corporate strategy (Foss, 1999). Progress in understanding and adapting to market phenomena and competitive scenarios is more likely when insights and procedures are combined than when a single formula or model is employed. However, the development of multilateral regulation under the WTO suggests that, for outside-in perspectives, an additional environmental factor must be considered. In the aerospace case, the peculiarities of the industry sit uneasily with the multilateral subsidy disciplines of the WTO. The high development costs, long payout periods and difficulty in pursuing a product differentiation strategy, have implications for the relative importance of external factors like government subsidy. Unable to develop the aerospace equivalent of a “killer application”, firms rely on government support to provide a financial edge. This is why the WTO regime is important here; to the extent that it constrains government subsidy provision, it constrains the scope of strategic action open to firms.

As mentioned at the outset of this section, a key problem in conceptualising the role of regulation lies in the fact that the international business literature only highlights the importance of “nationally responsive” multinational enterprise (MNE) strategies (Bartlett & Ghoshal, 1989; Doz, 1986). These are strategies that owe much to the specific incentives offered by a particular location. This work however does not accommodate international level responsiveness. Baron provides a useful and powerful case for developing what he calls, “non-market strategies” (NMS) (Baron, 1995). He argues that effective strategy requires firms to understand that the non-market environment plays an important role in shaping and influencing firm competitiveness (Baron, 1997). NMS’s need not refer only to national governments, but rather can be employed to structure the interaction of a firm with any public institution, including international institutions. Sell (1999) for example, shows how American MNEs used non-market strategies to force enhanced intellectual property protection onto the US trade policy agenda. This, in turn, influenced very directly the content of the WTO trade-related intellectual property agreement (TRIPs) signed as part of the Uruguay Round negotiations in 1994. However, despite the appeal — both practical and intellectual — of Baron’s “integrated” (nonmarket and market) strategy approach and his references to the international business environment, he does not develop the model in a supranational context. We are concerned here with the supranational and have sought in this paper to provide evidence that there is

³ Nicolai Foss discusses “integrationist” versus “isolationist” approaches to the strategic theory of the firm in relation to the debate surrounding the relative conceptual superiority of knowledge-based and modern economics of organization views of the firm. He agrees with the “integrationist” approach, arguing that “on the methodological level, one may argue that a problem with isolationist strategies is that they suffer from an implicit and narrow essentialism...”, (Foss, 1999, p. 743).

another level of business–governance interaction above and beyond the nation state and that firms should take this into account in the formulation of their corporate strategies (Dunning, 1997a).⁴ Our linkage is clear and simple: *supranational regulation has an impact on firm strategy because it constrains the ability of states to offer nationally responsive policies in support of firms*. The legal rulings of transnational institutions do have a very real affect on the actions of firms.

7. An emerging research agenda

This paper does not argue that the WTO is the only important environmental factor facing international business, but it does suggest that the organization can have an influence and so its operations deserve closer study by management scholars. We argue that the Bombardier–Embraer case is merely an early example of what may confront more and more internationalised firms: the importance of supranational regulation for strategy formulation and implementation. This process is indirect; WTO decisions apply to governments and their domestic legislation. However, given the importance of the domestic economy to the competitiveness of firms, indirect effects matter none the less. In the aircraft case, lack of product differentiation made government intervention a key element in the competitive struggle. WTO subsidy regulations have forced Canada, Brazil, and their firms to reassess their funding plans and strategies. However, the effects may reach far beyond the aircraft sector. Canada has had to redraft its entire programme for supporting R&D. The TPC programme was designed, not merely to assist Canadian firms, but to influence the locational decisions of foreign firms seeking to access the North American market. The WTO decision will make this harder to do. Similarly, since the Proex scheme was supposed to assist various Brazilian exporters, the WTO decision may make the task of numerous Brazilian firms more difficult. International business scholars, unlike international lawyers (such as Bronckers, 1999; Mattoo & Subramanian, 1998; Trebilcock & Howse, 1999), have been slow to comprehend the changed environment and hesitant to acknowledge the increased market relevance of supranational institutions. In a review of the current literature, Getz (1997) calls on scholars to apprehend that international institutions are natural targets for corporate political activity as their importance in regulating international business grows.

The regional aircraft case is but one instance, but it should not be discounted. Other WTO decisions that might have a profound impact on international firms have since arisen. In February 2000, the WTO announced that US tax legislation concerning the treatment of export-earned income constituted an illegal subsidy and ordered

⁴ John Dunning concurs with this recognition of what he terms “greater plurality of government forms”, arguing that the emergence of supranational governance is an element of modern “alliance or flexible capitalism” (1997: 34).

its withdrawal (WTO, 1999e).⁵ This ruling may force firms such as Boeing, Microsoft and Caterpillar to restructure their exporting procedures. It may well also result in their paying more tax. Other WTO decisions have struck down protectionist barriers to the sale of liquor in states such as Korea. Famously, a WTO decision that Japan was not excluding Kodak from the Japanese photographic market to protect Fuji caused uproar in the US and forced Kodak to reconsider its strategy (Baron, 1997). In 2000, an Australian company, Howe and Co. was forced to pay back some of the export subsidies it received from the Australian government. Aside from the punitive aspect of the case — requiring repayment of subsidies was unprecedented — one Australian official observed that Australia would have to rethink its entire industry support programmes (Taylor & Pearson, 2000).

In sum, it is time to emphasise the significance of supranational regulation to the strategic direction of modern business. Supranationalism is still in its infancy and there is widespread disagreement about the appropriate scope of international-level regulation (Trebilcock & Howse, 1999). Some firms have developed a sense of the growing importance of supranationalism and have begun to factor it into their strategy making processes. This is an important development, as the responsibility confronting the majority of firms and strategically minded managers is to ensure that they are aware of WTO structures and procedures and familiar with how the WTOs operation might affect their business. The task facing international business scholarship is to catch up with these firms and trace the tangible impact of WTO decisions on specific companies. There is a rich literature on the “input” side of trade policymaking and strategy: that is, the role of companies in lobbying for specific policies to be adopted by their governments, or inserted into WTO treaties. What we currently lack at the international level are “output” side studies that examine what the WTO decided and how it decided it (Hocking & McGuire, 2000). Further down that line, we also lack studies of the actual adjustments made by firms and states to WTO rulings (Capling, 2000). This paper represents a small attempt to redress this imbalance.

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⁵ This was the appellate review, which largely upheld the panel’s decision. See, WTO (1999e), United States — Tax Treatment for “Foreign Sales Corporations”: Report of the Panel, Geneva: WTO, 8 October 1999.

References

- Alden, E., & Collitt, R. (2000). Canada and Brazil Seek Subsidies Deal, *The Financial Times*, 12 May (p. 12).
- Baron, D. (1995). Integrated strategy: market and nonmarket components. *California Management Review*, 37 (2), 47–65.
- Baron, D. (1997). Integrated strategy, trade policy and global competition. *California Management Review*, 39 (2), 145–169.
- Bartlett, C., & Ghoshal, S. (1989). *Managing across borders: the transnational solution*. Boston: Harvard Business School Press.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17 (1), 99–120.
- Bombardier Corporation (1999). Bombardier Welcomes WTO Final Decision on Proex Subsidy Bombardier Corporation press release. www.bombardier.com. 2 August 1999.
- Bronckers, M. (1999). Better rules for a new millennium: a warning against undemocratic developments in the WTO. *Journal of International Economic Law*, 2 (4), 547–566.
- Capling, A. (2000). The American Way? Aggressive Bilateralism in Australian Trade Policy. In: A. Capling, *Havana to Seattle: Australia and the Global Trade System*. Cambridge: Cambridge University Press, chap. 7.
- Day, G. S. (1990). *Market driven strategy, processes for creating value*. New York: The Free Press.
- Department of Trade and Industry (1997). R&D Intensity in Manufactured Products for Years Between 1986 and 1995. www.dti.gov.uk/ost/SETstats97/sect.4/4tabs/4_8tabs.htm
- Doz, Y. (1986). *Strategic management In multinational companies*. Oxford: Pergamon Press.
- Dunning, J. (1997a). Introduction. In J. Dunning, *Governments, Globalization and International Business* (pp. 1–28). Oxford: Oxford University Press.
- Dunning, J. (1997b). Governments and the macro-organization of economic activity: a historical and spatial perspective. In J. H. Dunning, *Governments, Globalization, and International Business* (pp. 29–72). Oxford: Oxford University Press.
- Embraer, S.A. (2000). *Embraer update*. Corporate Press Release. www.embraer.com. 2 March 2000.
- Foss, N. (1999). Research in the strategic theory of the firm: isolationism and integrationism. *Journal of Management Studies*, 36 (6), 725–755.
- Getz, K. (1997). Research in corporate political action: integration and assessment. *Business and Society*, 36 (1), 32–72.
- Globerman, S., & Shapiro, D. (1999). The impact of government policies on foreign direct investment: the Canadian experience. *Journal of International Business Studies*, 30 (3), 513–532.
- Graham, E. (1997). Should there be Multilateral Rules on Foreign Direct Investment?. In: J.H. Dunning *Governments, Globalization and International Business*. Oxford: Oxford University Press.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation, *California Management Review*, Spring: pp. 114–135.
- Hocking, B., & McGuire, S. (2000). Business-Government Interaction and the WTO: What Does the FSC Case Tell Us about Economic Diplomacy? Unpublished seminar Paper, School of Management, University of Bath.
- Kay, J. (1993). *The foundations of corporate success*. Oxford: Oxford University Press.
- Mattoo, A., & Subramanian, A. (1998). Regulatory autonomy and multilateral disciplines: the dilemma and a possible resolution. *Journal of International Economic Law*, 1 (2), 303–322.
- Maxwell, J., Rothenberg, S., Briscoe, F., & Marcus, A. (1997). Green schemes: corporate environmental strategies and their implementation. *California Management Review*, 39 (3), 118–134.
- McGuire, S. (1999). Sectoral innovation patterns and the rise of new competitors: the case of civil aerospace in Asia. *Industry and Innovation*, 6 (2), 153–170.
- Mercer, D. (1992). *Managing the external environment: a strategic perspective*. London: Sage.
- Mintzberg, H. (1990). Strategy Formation: schools of thought. In: J. Frederickson, *Perspectives on Strategic Management*. New York: Harper and Row.
- Ott, J. (2000). Airbus eclipses Boeing, sets order book record. *Aviation Week and Space Technology*, 10 January 2000, pp. 44–46.

- Prahalad, C. K., & Hamel, G. (1990). The core competences of the corporation. *Harvard Business Review*, May/June, pp. 79–91.
- Porter, M. E. (1979). How competitive forces shape strategy. *Harvard Business Review*, March/April.
- Porter, M. E. (1980). *Competitive strategy: techniques for analysing industries and competitors*. New York: Free Press.
- Porter, M. E. (1985). *Competitive advantage: creating and sustaining superior performance*. New York: Free Press.
- Porter, M. E. (1990). *The competitive advantage of nations*. London: Macmillan.
- Rodgers, E. (1996). *Flying high: the story of Boeing and the rise of the Jetliner industry*. New York: Atlantic Monthly Press.
- Rugman, A. (2000). *The end of globalization*. London: Random House.
- Rugman, A., & Verbeke, A. (1990). *Global corporate strategy and trade policy*. London/New York: Routledge.
- Rugman, A., & Verbeke, A. (1998). Multinational enterprises and public policy. *Journal of International Business Studies*, 29 (1), 115–136.
- Sanyal, R., & Guvenli, G. (2000). Relations between multinational firms and host governments: the experience of American-owned firms in China. *International Business Review*, 9, 119–134.
- Sell, S. (1999). Multinational corporations as agents of change: the globalization of intellectual property rights. In A. C. Cutler, V. Haufler, & H. Porter, *Private Authority and International Affairs* (pp. 169–197). Albany: SUNY Press.
- Shaffer, B., & Hillman, A. J. (2000). The development of business-government strategies by diversified firms. *Strategic Management Journal*, 21 (2), 175–190.
- Shifrin, C. (1998). Upswing in jet sales boon to regional aircraft. *Aviation Week and Space Technology*, 18 May 1998, www.awst.com.
- Sparaco, P. (1998). Fairchild Dornier seeks big role for small 328JET. *Aviation Week and Space Technology*, 2 March 1998, www.awst.com.
- Sparaco, P. (1999). Competition escalates in the twinjet market. *Aviation Week and Space Technology*, 11 October 1999, www.awst.com.
- Smith, B. (1999). WTO rules on RJs: final impact unclear. *Aviation Week and Space Technology*. 9 August 1999, www.awst.com.
- Stalk, G., Evans, P., & Schulman, L. E. (1992). Competing on capabilities: the new rules of corporate strategy. *Harvard Business Review*, March/April, pp. 57–69.
- Story, J. (1999). *The frontiers of fortune*. London: FT Pitman.
- Taylor, L., & Pearson, B. (2000). WTO rulings force review. *Australian Financial Review*, 2 March 2000, p. 3.
- Teece, D., Pisano, G., & Shuen, A. (1990). *Firm capabilities, resources and the concept of strategy: four paradigms of strategic management*. CCC Working Paper, December.
- Technology Partnerships Canada (1996). Federal government lays the foundation for jobs in Montreal. Industry Canada press release. 21 October 1996.
- Technology Partnerships Canada (1999). Canada announces measures to comply with WTO ruling on regional aircraft subsidies. Industry Canada press release. 18 November 1999.
- Technology Partnerships Canada (2000). Current statistics. Ottawa: Industry Canada. <http://strategis.ic.gc.ca/SSG/tp00175e.html>. 31 January 2000.
- Trebilcock, M., & Howse, R. (1999). *The regulation of international trade*. (2nd ed). London: Routledge.
- Webster, F. (1994). *Market driven management: using the new marketing concept to create a customer-oriented company*. New York: Wiley.
- Williams, F. et al. (2000). Canada given go-ahead for sanctions against Brazil. *Financial Times*, 23 August, p. 10.
- WTO (1999a). *Agreement on subsidies and countervailing measures*. Geneva: WTO.
- WTO (1999b). *Canada — measures affecting the export of civilian aircraft: report of the panel*, Geneva: WTO. 14 April 1999.
- WTO (1999c). *Canada — measures affecting the export of civilian aircraft: report of the appellate body*. Geneva: WTO. 2 August 1999.

WTO (1999d). *Brazil — export financing programme for aircraft: report of the appellate body*. Geneva: WTO. 2 August 1999.

WTO (1999e). *United States — tax treatment of foreign sales corporations: report of the panel*. 8 October 1999.

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