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# Competition Matters

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## About the Author

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# Introduction

Canada's productivity performance is now at the forefront of the policy agenda: policy-makers and the public have taken on the message that productivity – the value produced by each hour of work – impacts living standards, and they are concerned. While Canada experienced robust productivity growth during the 1990s, the pace of productivity growth and our performance relative to peer economies have both fallen significantly over the past decade.

Various studies have concluded that, despite a stable and predictable fiscal and monetary environment, Canadian businesses in aggregate invest less in high-tech capital goods and undertake less research and development than comparable companies in other countries. Underperformance in innovation – represented for the aggregate economy as "multi-factor productivity" – is seen as the main drag on productivity.[1][2] Importantly, our lackluster performance in this area cannot be attributed to the sectoral composition of the Canadian economy: the evidence is that Canada's productivity gap reflects underperformance relative to our peers *within* particular industrial sectors.[3]

This failure to invest and innovate has perplexed policy-makers. With stable government finances, predictable inflation and a sound banking system, why aren't Canadian businesses more productive? Wouldn't any rational firm seek productivity gains to increase profitability?

Lackluster productivity in the early 2000s was additionally puzzling: despite record retained earnings and an appreciating Canadian dollar, there were only modest real increases in investment in machinery and equipment by Canadian businesses. As economist Don Drummond inquired: "Why did corporations just sit on their profits over this period? Did they not realize that this was a golden opportunity to ramp up their productivity to better withstand global competition? Why instead, did they leave so much of their earnings in corporate bank deposits?"[4]

One possible culprit might be the relative lack of competition in the Canadian economy.[5] Barriers to entry that inhibit competition – either from new domestic entrants or foreign competitors – diminish the incentive for innovation, as described below.

The intensity of competition is influenced by a variety of factors, including regulatory barriers and inadequate restraint of anti-competitive practices. The impact of anti-competitive restrictions varies. Barriers-to-entry in regulated network sectors (such as transportation, telecommunications, electricity and banking) might have far-reaching effects since other transactions depend on those sectors. If such barriers lead to "rent-seeking" by key players in network sectors, firms that depend upon these sectors will also suffer.

This report is intended to provide background for the policy discussion around the impact of competition. The first part discusses the current context, examining the statutory and regulatory environment in Canada, as well as particular barriers to domestic competition and foreign entry. The second part briefly summarizes theories and evidence of linkages between competition and productivity.

## Part 1: Canada's Competitive Environment

Canadian businesses are subject to both general legislation governing competitive conduct and sector-specific regulatory regimes.

The federal government has legislative jurisdiction over industrial sectors of national importance, such as railways, air transport, telecommunications and banking. Under its constitutional "trade and commerce" power, it regulates: trade as a whole (as opposed to particular industries); inter-provincial trade; and trade within national product markets (as opposed to purely intra-provincial trade). Federal statutes also restrict private entry into certain sectors, such as postal services and health services.

Canadian provinces have regulatory jurisdiction over intra-provincial trade (i.e. within provinces), natural resources, electricity generation and subjects of local concern. Following from their constitutional jurisdiction, provinces regulate the professions. Many provincial governments also impose public monopolies on liquor sales, and municipalities (acting on provincial grant of authority) typically restrict private entry to local transit provision.

Using Statistics Canada data and sector definitions, Table 1 shows the main regulated sectors in Canada and their approximate share of GDP (a total of 23%, or nearly one quarter of the economy). Many are "network" industries (e.g. telecommunications, airlines, electricity and banking) that intermediate various economic interactions and have broader effects on the overall economy. OECD data shows that Canada performs well on measures of product-market competition in our main manufacturing industries (these exhibit relatively low concentration of firms and high import penetration) but, in the past, has been substantially less competitive than peer economies in network sectors (e.g. electricity, gas and water supply and telecommunications, in which mark-ups were notably high compared to other OECD countries).[6]

These network sectors were historically viewed as natural monopolies since the costs of establishing the original network were high. The regulatory bargain was that firms would construct the necessary infrastructure on the promise of a protected, though capped, return on the investment. Thus, in the case of telecommunications, airline services and electricity generation, firms were subject to rate-of-return regulation that guaranteed a given return on invested capital while preventing gouging. During the 1980s and 1990s some aspects of these sectors were deregulated but particular markets, key infrastructure and essential inputs remain regulated or government-administered to this day.[7]

If the aim of restricting competition has been to produce national champions, Roger Martin and James Milway of the Institute for Competitiveness and Prosperity argue that Canada has produced meager results.[8] In particular, Milway and Martin contend that "the evidence indicates that such ownership restrictions have not helped Canada's competitiveness – nor have they created national champions who are true global leaders."[9]

| North American Industry Classification System (NAICS) | Output in 2011 (Chained (2002) million dollars) | Share of 2011 GDP |
|---|---|---|
| All industries [T001] | 1,266,590 | |
| **Supply Managed Agricultural Products** | | |
| Dairy product manufacturing [ 3115 ] | 2,646 | 0.2% |
| Poultry processing [ 311615 ] | 1,356 | 0.1% |
| **Regulated Industries** | | |
| Air transportation [ 481 ] | 6,162 | 0.5% |
| Rail transportation [ 482 ] | 5,615 | 0.4% |
| Electric power generation, transmission and distribution [ 2211 ] | 28,322 | 2.2% |
| Natural gas distribution, water, sewage and other systems [221A] | 5,690 | 0.4% |
| Motion picture and sound recording industries [ 512 ] | 2,911 | 0.2% |
| Broadcasting (except Internet) [ 515 ] | 3,212 | 0.3% |
| Telecommunications [ 517 ] | 26,852 | 2.1% |
| Financial intermediation [52X] | 50,792 | 4.0% |
| Insurance carriers and related activities [ 524 ] | 22,183 | 1.8% |
| Legal, accounting, tax preparation and bookkeeping services [541A] | 13,679 | 1.1% |
| Architectural, engineering and related services [ 5413 ] | 14,356 | 1.1% |
| **Restricted Private Entry** | | |
| Hospitals [ 622 ] | 31,416 | 2.5% |
| Health care services [62X] | 73,553 | 5.8% |
| Postal service [ 491 ] | 2,592 | 0.2% |
| **Total** | | 23.0% |

**Table 1: Share of GDP for regulated sectors (Source: Statistics Canada, CANSIM table 379-0027)**

The nature of regulation differs by sector. Below, the main protected sectors and their regulatory restrictions are described.

## Canada's protected sectors

### Telecommunications and broadcasting

The Canadian Radio-television and Telecommunications Commission ("CRTC") regulates both prices and conditions of service. It is, however, guided to rely on market forces and to eschew economic regulation where competition will achieve the objectives of the *Telecommunications Act*.[10] As an example, the CRTC will not regulate the pricing of local telephone services where there are three carriers (including an incumbent) with the capacity to serve at least 75% of the market.[11]

Other aspects of telecommunications require regulation to allocate resources and prevent abuse of market power. Electromagnetic spectrum for wireless telephones is auctioned by Industry Canada, with certain "set-asides" to allow for future entrants. Additionally, the CRTC requires incumbents to share infrastructure (such as cellular towers or local telephone loops) at prescribed rates to lower barriers to entry.

While domestic competition is welcomed, foreign entry into the telecommunications sector has historically been restricted: non-Canadians have not been allowed to hold more than 20% of the voting shares of a Canadian carrier. Until 2012, foreign investors were only able to take stakes in Canadian carriers through contorted (and contested) capital structures, as in the case of WIND Mobile.[12] In the spring of 2012, however, following recommendations from the 2008 Competition Policy Review Panel,[13] restrictions were relaxed. Foreigners are now allowed to acquire carriers so long as these have less than 10% of market share by revenue.

Some commentators have called for further liberalization of telecommunications carriers to foreign ownership. In particular, the C.D. Howe Competition Council has cautioned that the 10% ownership restriction is an "asymmetrical rule" that "likely would result in smaller, less efficient networks receiving a disproportionate share of capital, when new investment would be better warranted in developing new and more efficient networks."[14]

The CRTC also regulates broadcast licensees under the *Broadcasting Act*.[15] This act requires Canadian control of broadcasting; foreigners cannot hold more than 20% of the voting equity of a broadcast licensee. The C.D. Howe Competition Policy Council has similarly advocated liberalization of broadcasting to foreign ownership, stating that "distinctions between the telecom and broadcasting sectors are difficult to sustain, given the digital economy and evolving consumer usage patterns. Any change in foreign ownership requirements for telecoms therefore should be matched by a similar change for broadcast distribution undertakings."[16]

### Airlines

The airline industry was largely deregulated in the late 1980s when restrictions on domestic entry and price regulation were eliminated. Following the changes, real prices did fall.[17] However, competition has not flourished in the sector. In the late 1990s, airline consolidation led to a variety of airline-specific provisions under the *Competition Act*, but these too have now been eliminated.

Notably, Canada restricts foreign ownership of Canadian airlines to 25% of voting equity and foreign carriers are prevented from flying domestic routes. Foreign ownership restrictions are specified in the bilateral air services agreements that Canada signs with other countries (and thus cannot easily be lifted). Domestic competition could, though be increased, notably by allowing foreign carriers to service domestic routes. Noting the Australian experience with opening domestic routes to foreign carriers, the 2008 Competition Policy Review Panel recommended that this be allowed.[18] Its view was that foreign carriers – who would be bound by the same safety and security measures as domestic carriers - would not simply "skim" the most lucrative routes. It found " no evidence that foreign-controlled airlines would be any more or less inclined than Canadian firms in servicing Canadian routes; airline capacity typically matches the economic opportunities available in a community whether they are large or small."[19] Nonetheless, the recommendation for allowing foreign carriers to fly domestic routes has yet to be enacted.

Prior to 2003 all airports were owned and operated by the federal government. Today, major airports are operated by non-profit corporations that lease facilities from the federal government and negotiate landing slots with particular airlines. Some commentators contend that the federal scheme for airport fees has actually resulted in a perverse incentive to increase costs for carriers, given the locational advantages an airport enjoys.[20] The *Competition Act* prevents incumbents from buying up scarce resources (such as landing spots) to prevent entry by potential competitors into its market. Nonetheless, the grandfathering of landing slots could potentially pose a barrier to entry if incumbents were to pre-emptively acquire landing rights ahead of any liberalization. In 2003 and again in 2006 a bill was tabled in Parliament that would have enabled the Minister of Industry to intervene to compel reallocation of slots at airports, but this never became law.[21]

## Electricity

Provincial governments regulate most matters concerning electricity, including generation and distribution within provinces. The federal government has constitutional jurisdiction over inter-provincial trade in electricity (albeit functionally unexercised) and over trade in electricity with the U.S., as well as regulating the safety of the nuclear industry.

Regulations and market structures for electricity differ by province:

- In **Alberta**, wholesale and retail electricity markets are highly-competitive with the province's electric system operator administering a "power pool" as real-time spot market for electricity.
- **Ontario** has allowed for open access in transmission - both wholesale and retail - but many other aspects remain highly regulated. The government-owned producer remains the major source of generation capacity. There is a real-time wholesale market administered by Ontario's independent system operator but most electricity is provided at fixed prices under long-term generation contracts or contracts resulting from requests for proposal.

- **B.C**. features some private access but the government-owned provider dominates generation. The province has issued several competitive "power calls" to award long-term purchase agreements with the government's power authority, with varying degrees of success.
- Other provinces generally retain vertically-integrated government-owned monopolies.[22]

Various reforms have been recommended to improve system efficiency, such as moving away from fixed price contracts for generators, further enabling private-sector providers and allowing prices to reflect the true cost of supply.[23] However, the Canadian Centre for Policy Alternatives has argued that privatization in electricity generation results in higher prices for consumers, citing price increases in particular years in Ontario and Alberta.[24]

The federal government can assume jurisdiction over inter-provincial power lines if the federal Cabinet designates such infrastructure to be of national importance. This power has not, however, been exercised and the provinces therefore retain effective regulatory authority over inter-provincial connection.[25] Certain commentators have advocated that the federal government should take a more active role, through the National Energy Board, in enacting policies to govern inter-provincial electricity transmission so as to ensure non-discriminatory access.[26][27]

Noting that Canada has more electrical connections with the U.S. than between provinces, the Canadian Academy of Engineering has argued that interconnecting our fragmented electricity grid would improve pricing and sustainability of our power supply.[28] Specifically, it contends that there are limited present opportunities to distribute electricity from regions with excess ("stranded") supply to high-demand regions and to meet time-dependent "peak loads".

Additionally, Jan Carr, former CEO of the Ontario Power Authority, argues that a precondition for interconnecting provinces is a scheme for the interface of different provinces' market structures.[29] He argues that alternating pattern of monopoly and competitive commercial structures between provinces effectively erects trade barriers at virtually every provincial border. In his view, enabling interconnection between provinces will require policies to discourage particular provinces from monopolizing transmission access so that generators from outside a particular province can compete regardless of differing market structures.

## Financial services

Canada's financial sector is regulated by a variety of government agencies. Federal agencies regulate the solvency and risk-taking of financial institutions, as well as their interactions with borrowers and deposit-holders. Provincial securities commissions regulate brokerage activities. In addition, Canadian banks with equity in excess of a certain threshold (currently, $12 billion) are subject to a "widely held" requirement such that no person (i.e. no natural person or business corporation) may hold over 20% of the entity.[30] As well, with certain exceptions for bank holding companies and eligible financial institutions, a person may not acquire over 10% of any bank. This guards against "self-dealing" by financial institutions (i.e. conducting preferential transactions with controlling shareholders). However, the rules do restrain foreign banks from acquiring large Canadian banks as subsidiaries and thereby are a bar to foreign acquisition of large Canadian banks.

The *Bank Act*[31] also requires approval from the Minister of Finance for mergers between Canadian banks. In 1998 the then Minister of Finance turned down two proposed bank mergers, and since that time there has been a *de facto* prohibition on mergers between large financial institutions.[32]

There are no specific foreign ownership restrictions on financial services. The entry of foreign financial institutions is subject only to prudential approvals by the Office of the Superintendent of Financial Institutions and the Minister of Finance, and compliance with regulations. Foreign bank branches require approval but are permitted without establishing a Canadian subsidiary. However, while foreign-owned new entrants are permitted to grow large, the widely held rule does limit foreign owners from acquiring a large Canadian bank.

Despite a concentrated banking sector, there is evidence of fairly rigorous competition between Canadian banks on pricing of credit. Bargaining power may often depend on the asymmetry of information regarding a potential borrower (a feature somewhat inherent in the nature of the banking relationship) and the cost of searching for better rates.[33] While productivity in banking is particularly difficult to assess, recent analyses comparing the efficiency of Canadian to U.S. banks do not find evidence of a significant gap (although noting that there may be efficiency benefits for Canadian banks becoming larger).[34] Given the similar structures and common funding costs for Canadian banks, some similar pricing between banks is arguably to be expected. Notably, there is growing theory and international evidence that greater bank concentration has stability benefits for the system as a whole.[35] A hypothesis may be that, with a more concentrated system, banks better recognize the costs of systemic instability and better limit risk-taking.

## Supply management for agricultural produce

Producers of dairy, poultry and eggs are governed by a system of quotas, administered by federal- and provincial-level marketing boards. Quotas limit supply and raise prices. Imports in excess of import quotas are assessed at substantial over-quota tariffs in order to maintain these inflated prices.

The historical motivation for supply management was to preserve stable agricultural prices for producers but commentators argue that the system distorts economic activity, disproportionately affects low-income families[36], and has been a hindrance for Canada in concluding international trade agreements.[37] One possibility for dismantling the system would be a gradual phase out by auctioning quotas and gradually increasing the quotas available.[38]

## Non-sector specific protection

### Interprovincial barriers to trade

Canada's federal system yields a range of interprovincial barriers to trade, especially around product standards and the recognition/portability of professional qualifications. The OECD has cited regulation by provincial professional bodies in the legal, accountancy and architectural sectors as a key limiting factor on competition in those professions.[39] Some authors have suggested that the federal government employ its constitutional power over trade and commerce to dismantle such barriers.[40] However, the degree to which the provincial regulations remains a matter of empirical debate.[41]

In 1995 an *Agreement on Internal Trade* (*AIT*) was reached between the provinces. Its stated objective was to reduce barriers to trade and investment within Canada and to promote an open, efficient and stable domestic market. However, the original *AIT* had limited success in meeting its goals, largely due to a rather onerous dispute resolution process and a lack of provincial commitment to implementation. Recent (2009), amendments to the *AIT* require mutual recognition of certified workers across provinces and territories and implementation is ongoing. Certain commentators contend that the *AIT* still lacks a route of appeal to a national tribunal and also argue that remaining exclusions on professional mobility in the *AIT* should be eliminated.[42]

Other bilateral trade agreements have been concluded between provinces.

- **The 2006 *Trade, Investment and Labour Mobility Agreement between B.C. and Alberta*** (*TILMA*, since extended to Saskatchewan in the 2010 *New West Partnership Trade Agreement*) covers a wider range of products and services than the original AIT and includes a dispute resolution mechanism with enforceable penalties.
- **The 2009 *Ontario-Quebec Trade and Economic Agreement*** aspired to build on the *AIT* and harmonize regulatory practices between these provinces.

The *TILMA* approach has been strongly endorsed by some. In placing the onus on regulators to justify any exceptions to the common standard, it has arguably managed to break the gridlock that plagued the *AIT*.[43] The Canadian Centre for Policy Alternatives, on the other hand, views remaining internal trade barriers as minor and argues that the ability to challenge differences in provincial standards via a tribunal process will place downward pressure on public-interest regulation.[44]

## Competition policy

Canada's *Competition Act*[45] governs a range of conduct, with the general aim of promoting economic efficiency and the adaptability of the Canadian economy. The *Competition Act* lays out civil remedies against market practices that inhibit competition, deceptive marketing practices, and mergers that may lessen competition. It also imposes criminal sanctions for collusion between competitors (i.e. cartels) and intentionally misleading advertising.

2009 amendments to the *Competition Act* provided for more effective enforcement against "hardcore" cartels, introduced new civil "reviewable conduct" provisions, implemented monetary penalties for certain anti-competitive conduct, and introduced a more efficient two-stage merger review process.

The federal government's agency for administering the *Competition Act* is the Competition Bureau. The Bureau reviews certain proposed mergers and will investigate alleged anti-competitive conduct. If it cannot reach a negotiated solution with parties, the Bureau can bring a challenge against allegedly civil anti-competitive conduct before the Competition Tribunal,[46] which is a specialized quasi-judicial body.

The Tribunal sits in panels of three, consisting of at least one judicial member and one lay member with business experience. Where the Tribunal finds that anti-competitive conduct has occurred, on a balance of probabilities, it can impose orders remedying the anti-competitive conduct. These may include orders to cease particular conduct or divest assets as well as the imposition of monetary penalties in certain circumstances. Provincial courts adjudicate criminal matters under the *Competition Act* and can impose penalties for criminal conduct under the *Competition Act* that is proven beyond a reasonable doubt.

Importantly, courts have developed a "regulated conduct doctrine" that provides a defence for anti-competitive conduct that is regulated under a specific federal or provincial statute. This doctrine arguably insulates regulated sectors from full application of competition law. For instance, it is possible for a company to be relieved of liability if it operates under a statutory monopoly or if the given anti-competitive behaviour was specifically authorized by a competent regulatory body (for example, brewers' control of beer marketing under certain provincial statutes may be interpreted as falling under the doctrine). The C.D. Howe Institute Competition Policy Council recently recommended that the regulated conduct doctrine be very narrowly interpreted, calling the doctrine "a back door route to cartels."[47]

The Competition Bureau has recently intensified its enforcement efforts – particularly with respect to abuse of dominance cases.[48] The number of inquiries into cartel conspiracies increased by 150% in the two years following the coming-into-force of the 2009 amendments to the *Competition Act*.[49] Since 2009, four abuse of dominance cases have been brought down: two against real estate brokers' associations (one settled; one was contested and awaits a decision),[50] one against commercial waste disposal firms (settled by consent)[51] and one against companies who rent water heaters (in progress).[52] These matters concern the unilateral abuse of market power to exclude competitors or otherwise lessen competition. Before this flurry of activity, the Commissioner had not filed an abuse of dominance case since 2002 and there had been only 13 abuse of dominance applications in total between 1990 and 2002 (with five contested proceedings and nine settlements).

In addition, under the new civil price maintenance provision, in 2010 the Commissioner brought an application against credit card networks for allegedly anti-competitive restraints on merchants.[53] This matter is presently awaiting a decision from the Competition Tribunal. In 2011, the Commissioner also filed an application under the new competitor collaboration provision against a proposed joint venture agreement for trans-border routes between airlines.[54] This concluded in a settlement.

## Foreign investment restrictions

The *Investment Canada Act* (*ICA*)[55] governs foreign investment in Canadian businesses. It provides for review of foreign acquisition of a Canadian business where the value of the business exceeds a certain threshold, where an investment might be injurious to national security or where the business is "related to Canada's cultural heritage or national identity". Where investments are subject to review, the Minister of Industry must be "satisfied" that the acquisition will be of "net benefit" to Canada and not raise national security concerns. From previous jurisprudence of the Federal Court of Canada, the Minister's "satisfaction" is not subject to judicial review (i.e. a court cannot evaluate whether the Minister's decision was reasonable, provided the procedure was fair).[56]

In determining "net benefit", the *ICA* requires the Minister to take account of a range of factors, including: the effect on economic activity (including employment) in Canada; the degree and significance of Canadian participation in the business and industry generally; the effect on productivity and technological innovation; the compatibility with Canadian industrial and cultural policy; and the effect of Canada's ability to compete in world markets.[57] The Minister may seek undertakings from a foreign acquirer to ensure a positive "net benefit" (e.g. covenants to maintain employment or conduct particular activities in Canada).

The 2008 Competition Policy Review Panel recommended reversing the onus in the "net benefit" test such that only transactions that are found to be "contrary to Canada's national interest" would be disallowed.[58] The Panel contended that such a change would align the review standard with a presumption that foreign investment is generally positive for Canada. Practically, the Panel believed that such a change would lessen the scope for intervention by the Minister. This advice has not yet ben followed. Both the C.D. Howe Institute and the Conference Board of Canada have renewed calls for a shifting the burden of proof to the Minister and for adoption of an Australian-style "national interest" standard.[59]

Notably, the government has recently announced additional limitations on investment by state-owned enterprises.[60] The government has indicated that SOE investment in the Canadian oil sands will be approved only on an "exceptional basis".

On the positive side – for the promotion of foreign investment - Canada has concluded 24 bilateral *Foreign Investment Promotion and Protection Agreements* ("FIPAs"), that establish reciprocal rights and typically stipulate that foreign investors will not experience worse treatment than similarly-situated domestic investors. It has also assumed limited obligations under the WTO agreement on *Trade-related Investment Measures* ("TRIMS").

## Part 2: Competition Matters for Productivity: the evidence

It is generally accepted that firms facing competitive pressure will innovate and invest in order to enhance profitability. As Tom Jenkins, Chair of the recent Government of Canada Research and Development Review Panel, has argued, "A foundational principle governing productivity is that competition drives innovation, which in turn drives productivity. It follows that when we have suboptimal competition we can expect suboptimal innovation and suboptimal productivity."[61]

Moreover, more productive firms should gain market share at the expense of laggard competitors meaning that overall productivity should improve. Aghion and Schankerman classify productivity gains from competition into three positive effects: a "market selection effect" (reducing the market share of less productive firms); a "restructuring effect" (increasing the incentive to reduce costs); and an "entry effect" (stimulating incentives for low-cost firms to enter markets).[62]

It remains somewhat perplexing why all firms – including monopolists – do not seek to increase productivity (in order to increase profits). However, empirical studies do show that intensified competition has significant “restructuring” as well as “market selection” effects.[63] Evidence from Canada certainly points in this direction.

- **Baldwin and Gu** (2006) show that the shift in market share towards more productive firms has a substantial impact on overall productivity growth.[64] Specifically, they demonstrate that, for Canadian manufacturing industries, about 70% of overall labour productivity growth from 1979 to 1999 was due to changes in market share between firms.

- **Gu and Lafrance** (2008) show that between 1977-2003 those Canadian industries that were deregulated – such as rail transportation, telecommunications and financial services – experienced more rapid growth in labour productivity (and underlying multifactor productivity) than did the aggregate Canadian business sector.[65] Indeed, these industries had similar or higher productivity growth than their U.S. counterparts. An exception to this rule is the airline industry, which saw substantial deregulation in the late 1980s, but declining labour productivity (while the productivity growth of U.S. airlines kept pace with the aggregate U.S. business sector).[66]
- Trade liberalization has had similarly positive effects. In his analysis of the effects of NAFTA, **Trefler** (2004) shows that import-competing industries that saw the greatest Canadian tariff cuts experienced a 12% drop in employment and a 15% increase in labour productivity as low-productivity plants contracted in the face of intensified competition. Export-competing industries in areas with the largest cuts in U.S. tariffs, saw plant-level labour productivity increase by 14%.[67]
- **Melitz and Trefler** (2012) argue that shifting resources away from low productivity firms towards high-productivity firms (the "market selection effect") is particularly important for industry-level productivity gains. [68] They also show that reduced trade costs serve to expand markets and induce innovation because, with greater potential sales, the fixed costs of technological adoption can be spread across greater potential output.
- **Baldwin and Yan** (2012) find that Canadian manufacturing firms that export achieve higher productivity growth than their non-exporting counterparts.[69] Examining two periods (1990-1996 and 2000-2006) they found better productivity performance amongst those firms that entered new markets (whether domestic or international). They also found that firms that are successful in entering new markets place a high emphasis on market innovation. Specifically, firms that perceive high levels of market competition tend to become more successful by experimenting with new markets (that is, if firms are attuned to competition in their "home" markets, they do better in "foreign" markets).
- **Deloitte Canada** draws on various Statistics Canada studies to argue that "Free trade agreements open the door for Canadian firms to enter new international markets, where they must respond to high levels of competitive intensity with productivity-enhancing improvements."[70]

At an international, or multi-country level, there is also strong evidence to support the contention that increased competition boost productivity.

- **Nicoletti and Scapetta** (2003) show a significant negative impact from product market regulation on "multifactor productivity" growth across OECD countries and find that reforms that enhance competition tend to boost productivity.[71] They hypothesize that regulatory barriers-to-entry curtail adoption of best-practice technologies by hindering the entry of more productive firms. In particular, they find that the productivity gains from enhanced competition are greater if a country is further from the "technological leader" (i.e. the greater the difference in a country's relative productivity).

- **Conway and Nicoletti** (2007) show that differences in product market regulation significantly influence investment in information and communication technologies (ICT) and impact the pace at which sectoral productivity catches up with the leading country.[72] The authors point out Canada's low levels of investment in ICT and note that the contribution of ICT-using sectors to aggregate labour productivity growth was small in Canada compared to other OECD countries. Their empirical simulations suggest that, were Canada to have liberalized regulations in network industries in 1995, aggregate labour productivity growth for the period to 2003 would have been boosted by roughly one percentage point annually (around a 50% increase in productivity growth).
- Taking a sample of manufacturing industries across OECD countries from 1973 to 2001, **Bitzer and Görg** (2009) demonstrate the general productivity benefits of inward foreign direct investment.[73] They argue that foreign direct investment results in a shift of output towards more productive firms and knowledge "spillovers" both "horizontally" (between firms in the same industry) and "vertically" (with downstream customers and upstream suppliers). However, their finding was not universal. Some countries - Germany, Spain, Norway and Italy - experienced negative productivity effects from increased foreign investment, possibly due to inflexible labour markets.
- Using indicators for the effectiveness of competition policy and a sample of 22 industries in 12 OECD countries over the period 1995-2005, **Buccirossi et al**. (2012) show a significant positive impact on total factor productivity from key institutional and enforcement features of competition policy.[74] In particular they found that the degree of deterrence inherent in the way competition law is enforced matters to aggregate productivity performance.

There is not, however, universal agreement on this issue. Canada 2020 panelist, **Jim Stanford**, argues that free trade with the U.S. and a "more hands-off, laissez faire approach" to economic policy has undermined Canadian productivity growth.[75] He alleges that free trade has led to Canada being "pigeon-holed" as a resource economy and has resulted in "deindustrialization" of Canada's manufacturing sector. Stanford contends that government industrial policy is required "to maximize the opportunities for domestic exporters through reciprocal trade and export-oriented development plans, rather than blithely assuming that 'free trade' will lift all boats."[76]

# Conclusion

This report has provided an overview of the competitive landscape in Canada, as well as an introduction to the scholarly literature around the relationship between competition and productivity.

The productivity agenda in Canada is shifting from macroeconomic and fiscal reforms to the micro-foundations of innovation and particularly to competitive intensity as a driver of firm performance. Progress has been made through the lowering of barriers to trade, but key sectors remain insulated from competition, potentially dragging on the economy as a whole.

The evidence suggests that such restrictions on competition – particularly within key network sectors – and barriers to the inflow of foreign capital and ideas may be crucial roadblocks for our national economy. It is important to note, however, that during previous periods when Canada's productivity growth was more robust, our economy was more highly regulated than today. Regulation and lack of competition is not therefore likely to be the sole culprit. There are certainly additional influences on the incentives for businesses to innovate and invest. For example, the closer a country is to the "technological frontier", the more productivity growth will tend to rely on new and risky research and development. For such "frontier" economies, the pace of innovation may especially depend on "externalities" from basic scientific research, workers' technical capabilities and the efficiency of the regime governing intellectual property.

Importantly, although certain restrictions are more onerous than in other OECD countries, Canada now generally has better-tailored regulation than peer countries and, following the 2009 amendments to the *Competition Act*, boasts a world-leading framework for combatting anti-competitive conduct. It is hoped that such changes will enhance competition and boost productivity.

As analysis of micro-level influences on productivity moves ahead, the role of competition must be a key item on the agenda. This will entail both conducting sophisticated empirical studies and asking basic, practical questions. As Don Drummond has noted, "obtaining those answers will require a combination of theory and street smarts."[77] Both rigorous economic evidence and understanding of front-line business reality must inform policy formulation by federal and provincial governments. In Canada's never-ending race to be more productive, we must not lose sight of the objective: too much is at stake.

# Appendix

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## End Notes

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[1] Expert Panel on Business Innovation. Report. *Innovation and Business Strategy: Why Canada Falls Short.* Ottawa: Council of Canadian Academies, 2009. (However, the measured degree of multi-factor productivity has been a matter of recent academic debate. See: W. Erwin Diewert and Emily Yu, "New Estimates of Real Income and Multifactor Productivity Growth for the Canadian Business Sector, 1961-2011" (2012) 24 International Productivity Monitor 27; and Wulong Gu, "Estimating Capital Input for Measuring Business Sector Multifactor Productivity Growth in Canada: Response to Diewert and Yu" (2012) 24 International Productivity Monitor 49.)

[2] Drummond, Don and Alistair Bentley. "The Productivity Puzzle: Why Is The Canadian Record So Poor And What Can Be Done About It?" TD Economics, 3 June 2010. Web. (< http://www.td.com/document/PDF/economics/special/td-economics-special-ab0610-productivity.pdf>.)

[3] Currie, Bill Lawrence Scott and Andrew Dunn. *The future of productivity: clear choices for a competitive Canada.* Toronto: Deloitte Canada, 2009. Print.

[4] Drummond, Don. "Confessions of a Serial Productivity Researcher." (2011) *International Productivity Monitor* vol. 22, p. 7.

[5] Sharpe, Andrew and Ian Currie. "Competitive Intensity as driver of innovation and productivity growth." *Centre for the Study of Living Standards Research Report 2008-3* Ottawa: CSLS, 2008. Print.

[6] Maher, Maria and Jay Shaffer, "Product Market Regulation and Economic Performance in Canada" (2005) OECD Economic Working Paper 421. Notably, Canada has seen broad improvement since the earlier report in this measure for restrictiveness of product market regulation. See: Anita Wölfl, Isabelle Wanner, Tomasz Kozluk and Giuseppe Nicoletti, "Ten years of product market reform in OECD countries – insights from a revised PMR indicator" (2009) OECD Economics Department Working Paper No.695.

[7] Iacobucci, Edward, Michael Trebilcock and Ralph Winter. "The Canadian Experience with Deregulation." (2006) *University of Toronto Law Journal* vol. 56.1, p. 1.

[8] Martin, Roger and James Milway. "Flourishing in the global competitiveness game." *Institute for Competitiveness and Prosperity Working Paper 11*. Toronto: Institute for Competitiveness and Prosperity, 2008.

[9] *Ibid* 54.

[10] Governor in Council. *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives.* SOR/2006-355. P.C. 2006-1534, 2006-12-14. 14 (December 2006) Justice Canada, SC 1993, c. 38. Online: (http://laws-lois.justice.gc.ca/eng/regulations/SOR-2006-355/page-1.html>.)

[11] Governor in Council. (4 April 2007), *Order Varying Telecom Decision CRTC 2006-15.* SOR/2007-71. P.C. 2007-532, 2007-04-04. 4 April 2007. Web. (online: Justice Canada < http://laws-lois.justice.gc.ca/eng/regulations/SOR-2007-71/page-1.html>.)

[12] Whether WIND Mobile's capital structure accorded with the restrictions was challenged before the CRTC, which decided that the capital structure did in fact imply foreign control, a decision subsequently reversed by Cabinet. The Cabinet decision was judicially reviewed with the Federal Court of Appeal upholding Cabinet's decision that WIND was Canadian-owned. See: *Globalive Wireless Management Corp v Public Mobile Inc*, 2011 FCA 194.

[13] Competition Policy Review Panel. *Compete to Win: Final Report*. Ottawa: Public Works and Government Services Canada, June 2008, p. 49.

[14] C.D. Howe Competition Policy Council. "Abolish Ownership Restrictions in Telecommunications." Ottawa: C.D. Howe Institute, 23 June 2011. (online: http://cdhowe.org/pdf/Competition%20Policy%20Council%20June17%202011.pdf)

[15] *Broadcasting Act* 1991. SC 1991, c 11.

[16] *Ibid*.

[17] Edward Iacobucci, Michael Trebilcock and Ralph Winter, "The Canadian Experience with Deregulation" (2006) *University of Toronto Law Journal* vol. 56, p. 51. The authors regard airline deregulation as a success although observe that the price decline may owe to other influences as well.

[18] Competition Policy Review Panel. *Compete to Win: Final Report*. Ottawa: Public Works and Government Services Canada, June 2008, p. 42.

[19] *Ibid*. (41.)

[20] Cherniavsky, Ben and Benjamin Dachis. "Excess Baggage: Measuring Air Transportation's Fiscal Burden." *C.D. Howe Commentary No. 242.* C.D. Howe Institute, February 2007. Print.

[21] See: David Johansen, "Bill C-20: Canada Airports Act" (30 October 2006) Legislative Summary LS-537E, online: Parliament of Canada (http://www.parl.gc.ca/About/Parliament/LegislativeSummaries/bills_ls.asp?ls=c20&Parl=39&Ses=1).

[22] For a useful summary, see "Overview of Electricity Regulation in Canada" (March 2008) Blake, Cassels & Graydon LLP, online: Blakes (http://www.blakes.com/english/legal_updates/reference_guides/Overview%20of%20Electricity%20in%20Canada.pdf)

[23] See: Dachis, Benjamin and Donald Dewees, "Plugging into Savings: A New Incentive-Based Market Can Address Ontario's Power-Surplus Problem," (July 2011) C.D. Howe Institute E-Brief No. 120; James P. Feehan, "Newfoundland's Electricity Options: Making the Right Choice Requires an Efficient Pricing Regime," (January 2012) C.D. Howe Institute E-Brief No. 129; and Michael Wyman, "Power Failure: Addressing the Causes of Underinvestment, Inefficiency and Governance Problems in Ontario's Electricity Sector" (May 2008) C.D. Howe Institute Commentary No. 261.

[24] Fernandez, Lynne and John Ryan. *Power Struggle: Manitoba Hydro and the Spectre of Privatization.* Canadian Centre for Policy Alternatives–Manitoba, June 2011.

[25] Blake, Cassels and & Garydon LLP. *Overview of Electricity Regulation in Canada*. Blake, Cassels & Graydon LLP, (March 2008) p. 37, online: (http://www.blakes.com/english/legal_updates/reference_guides/Overview%20of%20Electricity%20in%20Canada.pdf).

[26] Pierce, Richard, Michael Trebilcock and Evan Thomas. "Beyond Gridlock: The Case for Greater Integration of Regional Electricity Markets." (March 2006) *C.D. Howe Institute Commentary No. 206*.

[27] Blue, Ian. "Off the Grid: Federal Jurisdiction and the Canadian Electricity Sector." (2009) *Dalhousie Law Journal,* vol 32.2, p. 349.

[28] Canada Power Grid Task Force. "Electricity: Interconnecting Canada." Canadian Academy of Engineering, 2009. (online: CAE http://www.cae-acg.ca/documents/VolumeI-Eng.pdf)

[29] Carr, Jan. "Power Sharing: Developing Inter-Provincial Electricity Trade." (July 2010) *C.D. Howe Institute Commentary No. 306.*
[30] *The Bank Act*, SC 1991, c 46, s 2.2, 374.
[31] *The Bank* Act. SC 1991, c 46, s 396.
[32] Competition Policy Review Panel. *Compete to Win: Final Report*. (June 2008), Ottawa: Public Works and Government Services Canada, p. 52.
[33] Allen, Jason, Robert Clark and Jean-François Houde, "Price Competition and Concentration in Search and Negotiation Markets: Evidence from Mortgage Lending" (2012) Bank of Canada Working Paper Working Paper 2012-4.
[34] Allen, Jason, Walter Engert, and Ying Liu, "Are Canadian Banks Efficient? A Canada-U.S. Comparison," (2012) Bank of Canada Financial System Review 61.
[35] For a theoretical discussion of concentration and banking stability, see Franklin Allen and Douglas Gale, "Competition and Financial Stability" (2004) *Journal of Money, Credit, and Banking,* vol. 36, p. 453. For empirical evidence of bank concentration improving stability from a cross-country analysis, see: Thorsten Beck, Asli Demirgüç-Kunt and Ross Levine, "Bank concentration, competition, and crises: First results" (2006) Journal of Banking and Finance, vol. 30, p. 1581.
[36] Milway, James, Katherine Chan, John Stapleton and Brian Cook. *The poor still pay more: Challenges low income families face in consuming a nutritious diet.* (December 2010), Toronto: Institute for Competitiveness and Prosperity, online: (<http://www.competeprosper.ca/images/uploads/ICAP_The_poor_still_pay_more.pdf>.)
[37] See: Martha Hall Findlay (assisted by Margarita Gres), "Supply Management: Problems, Politics and Possibilities" (June 2012) University of Calgary School of Public Policy, online: (http://www.policyschool.ucalgary.ca/?q=content/supply-management-problems-politics-and-possibilities).
[38] Robson, William B.P. and Colin Busby. "Freeing up Food: The Ongoing Cost, and Potential Reform, of Supply Management." (April 2010) *C.D. Howe Institute Backgrounder No. 128.* Ottawa: C.D. Howe Institute.
[39] Maher, Maria and Jay Shaffer. "Product Market Regulation and Economic Performance in Canada." (2005) *OECD Economic Working Paper 421.* Paris: OECD.
[40] Trebilcock, Michael J. "The Supreme Court and Strengthening the Conditions for Effective Competition in the Canadian Economy." (2001) 80 *Canadian Bar Review vol. 80, p.* 542-604.
[41] For a survey of knowledge gaps, see: Kathleen Macmillan and Patrick Grady, "Interprovincial Barriers to Internal Trade in Goods, Services and Flows of Capital: Policy, Knowledge Gaps and Research Issues," (2007) Industry Canada Working Paper 2007-11.
[42] Knox, Robert. "Who Can Work Where: Reducing Barriers to Labour Mobility in Canada." *C.D. Howe Institute Backgrounder No. 131.* Ottawa: C.D. Howe Institute, June 2010.
[43] Macmillan, Kathleen and Patrick Grady. "A New Prescription: Can the BC-Alberta TILMA: Resuscitate Internal Trade in Canada?" C.D. Howe Institute Backgrounder No. 106. Ottawa: C.D. Howe Institute, October 2007.
[44] Lee, Marc and Erin Weir. *The Myth of Interprovincial Trade Barriers and TILMA's Alleged Economic Benefits.* Ottawa: Canadian Centre for Policy Alternatives, February 2007.
[45] *The Competition Act.* RSC 1985, c C-34.
[46] Applications by the Bureau against conduct under Part VII.1 of the *Competition Act*, relating to deceptive marketing practices, may also be commenced via the Federal Court or the superior court of a province in addition to the Tribunal route. Matters under Part VII of the *Competition Act*, including abuse of dominance and review of mergers, must be commenced via the Tribunal.
[47] C.D. Howe Institute Competition Policy Council. "Closing the Back Door Route to Cartels: The Need to Clarify the Regulated Conduct Doctrine." C.D. Howe Institute, 20 November 2012. Online: (http://cdhowe.org/pdf/Competition_Policy_Council_Nov_2012_Report.pdf)
[48] Addy, George, John Bodrug and Charles Tingley. "Abuse of Dominance in Canada: Reflections on 25 Years of Section 79 Enforcement." *Canadian Competition Law Review* vol. 25, p. 276 – 297.
[49] Aitken, Melanie, "The 2009 Amendments to the *Competition Act*: Reflecting on their Implementation and Enforcement, and Looking Toward the Future," (2011) *Canadian Competition Law Review* vol. 25, p. 659 – 670.

[50] *The Commissioner of Competition v The Canadian Real Estate Association* (25 October 2010), CT-2010-002 (Consent Agreement); and *The Commissioner of Competition v The Toronto Real Estate Board* (27 May 2011), CT-2011-003 (Notice of Application), online: Competition Tribunal (http://www.ct-tc.gc.ca).
[51] *The Commissioner of Competition v Waste Services (CA) Inc and Waste Management of Canada Corporation* (6 June 2009), CT-2009-003 (Consent Agreement), online: Competition Tribunal (http://www.ct-tc.gc.ca).
[52] *The Commissioner of Competition v Direct Energy Marketing Limited* (20 December 2012),CT-2012-003 (Notice of Application); and *The Commissioner of Competition v Reliance Comfort Limited Partnership* (20 December 2012),CT-2012-002 (Notice of Application), online: Competition Tribunal (http://www.ct-tc.gc.ca).
[53] *The Commissioner of Competition v Visa Canada Corporation and MasterCard International Incorporated et al* (15 December 2010), CT-2010-010 (Notice of Application), online: Competition Tribunal (http://www.ct-tc.gc.ca).
[54] *The Commissioner of Competition v Air Canada, United Continental Holdings, Inc., United Airlines, Inc. and Continental Airlines Inc* (24 October 2012), CT-2012-001 (Consent Agreement), online: Competition Tribunal (http://www.ct-tc.gc.ca).
[55] The Income Tax Act, RSC 1985, c 28 (1st Supp).
[56] See *Baril v.Canada (Minister of Regional Industrial Expansion)*, [1986] 1 FC 328. However, it should be noted that the precise language of the Federal Courts Act on which this decision was based has since been modified.
[57] The Investment Canada Act, s 20.
[58] Competition Policy Review Panel, *Compete to Win: Final Report* (Ottawa: Public Works and Government Services Canada, June 2008), p. 3.
[59] Bergevin, Philippe and Daniel Schwanen, "Reforming the Investment Canada Act: Walk More Softly, Carry a Bigger Stick," (December 2011) C.D. Howe Institute Commentary No. 337; and Michael Grant, "Fear the Dragon? Chinese Foreign Direct Investment in Canada," (June 2012) Conference Board of Canada Report.
[60] Industry Canada, "Government of Canada Releases Policy Statement and Revised Guidelines for Investments by State-Owned Enterprises" (7 December 2012), online: Industry Canada (http://news.gc.ca/web/article-eng.do?nid=711489).
[61] Jenkins, Tom, "A simple solution to Canada's innovation problem," (September 2011) Policy Options 12.
[62] Aghion, Philippe and Mark Schankerman, "On the welfare effects and political economy of competition-enhancing policies" (2004) 114 The Economic Journal 800.
[63] Thomas J. Holmes and James A. Schmitz, " Competition and Productivity: A Review of Evidence" (2010) 2 Annual Review of Economics vol. 2, p. 619.
[64] Baldwin, John R. and Wulong Gu, "Competition, Firm Turnover and Productivity Growth" (2006) Statistics Canada Economic Analysis (EA) Research Paper Series 11F0027MIE No. 042.
[65] Gu, Wulong and Amélie Lafrance, "Productivity Growth in Canadian and U.S. Regulated Industries" (2008) Statistics Canada Canadian Productivity Review, No. 15-206-X, no. 20.
[66] The Conference Board of Canada finds that U.S. airlines have a substantial (around 30%) cost advantage compared to Canadian airlines. Fees and taxes explain part of the differential but Canadian airlines also have higher operating costs and lower utilization rates than their U.S. This may be because there remains inadequate competition from foreign carriers. Vijay Gill, "Driven Away: Why More Canadians are Choosing Cross Border Airports" (October 2012) Conference Board of Canada.
[67] Trefler, Daniel, "The Long and Short of the Canada-U. S. Free Trade Agreement" (2004) 94 American Economic Review p. 870.
[68] Melitz, Marc and Daniel Trefler, "Gains from Trade when Firms Matter" (2012) Journal of Economic Perspectives vol. 26, p. 91.
[69] Baldwin, John R. and Beiling Yan, "Market Expansion and Productivity Growth: Do New Domestic Markets Matter As Much As New International Markets?" (2012) Statistics Canada Economic Analysis (EA) Research Paper Series 11F0027M, no. 78.
[70] Currie, Bill, Lawrence Scott and Andrew Dunn, "The future of productivity: clear choices for a competitive Canada" (2009) Deloitte Canada p. 54.

[71] Nicoletti, Giuseppe and Stefano Scarpetta, "Regulation, productivity and growth: OECD evidence" (2003) Economic Policy vol 18, p. 9.
[72] Conway, Paul and Giuseppe Nicoletti, "Product Market Regulation and Productivity Convergence: OECD Evidence and Implications for Canada" (2007) International Productivity Monitor vol 15 p. 3.
[73] Bitzer, Jürgen and Holger Görg, "Foreign Direct Investment, Competition and Industry Performance" (2009) The World Economy vol 32, p 221.
[74] Buccirossi, Paolo, Lorenzo Ciari, Tomaso Duso, Giancarlo Spagnolo and Cristiana Vitale, "Competition Policy and Productivity Growth: An Empirical Assessment" (2012) The Review of Economics and Statistics, forthcoming.
[75] Stanford, Jim, "Canada's Productivity and Innovation Failures: Questioning the Conventional Wisdom," (2011) in Canada 2020, *The Canada We Want in 2020* p. 22.
[76] *Ibid* at 31.
[77] Drummond, Don, "Confessions of a Serial Productivity Researcher," (2011) 22 International Productivity Monitor vol. 3, p. 9.