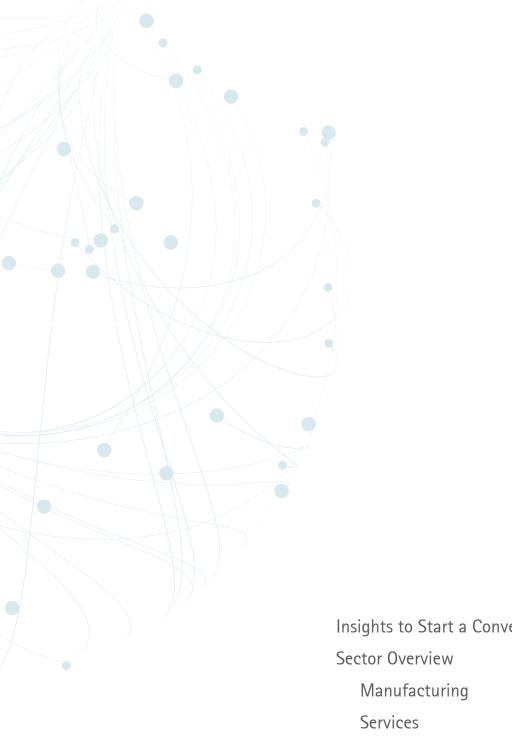




CONTENTS



Insights to Start a Conversation	2
Sector Overview	
Manufacturing	6
Services	8
Natural Resources	10
Retail	12
Sector Focus: Automotive	14
About the Supply Chain Management Association	16

INSIGHTS TO START A CONVERSATION

The supply chain is a web of relationships linking all parts of the economy. All organizations are linked by supply chains, and this network is becoming increasingly complex in nature, and global in reach. Even the smallest company finds itself dealing with suppliers in different industries and in different parts of the world.

The dispersed nature of supply chain professionals and our role in sourcing. purchasing and transporting goods all over the world mean our profession is ideally placed to notice small changes in the operating landscape. Taken together, these collective insights can indicate broader economic and business trends very early and very accurately. It is for this reason that the opinions of supply chain professionals are gathered on a monthly basis to provide the best real-time economic indicator available, the Purchasing Managers' Index™ (PMI™).

The PMI is used by governments, banks and financial institutions around the world to provide the earliest indicator of the direction of the economy. As the PMI and other economic indicators tell a story of what is happening, this report attempts to gather insights on why it is happening.

In Canada, the Supply Chain Management Association partners with Royal Bank of Canada (RBC) and Markit to produce the PMI for the manufacturing sector. To provide a broader range of input for the purposes of this report we have also gathered insights from supply chain professionals in the services, retail and natural resources sector, in addition to manufacturing. By talking to people who form the connections through these four sectors, we hope to identify any impediments within the Canadian economy.

An environment that breeds wellfunctioning supply chains is an attractive and productive place to do business. With this report we hope to make a diagnosis, and start a conversation that will contribute to finding solutions to some of the challenges faced by businesses across the country. As we see this as the start of a conversation, we look forward to hearing any comments or questions you may have to help us shape future reports.

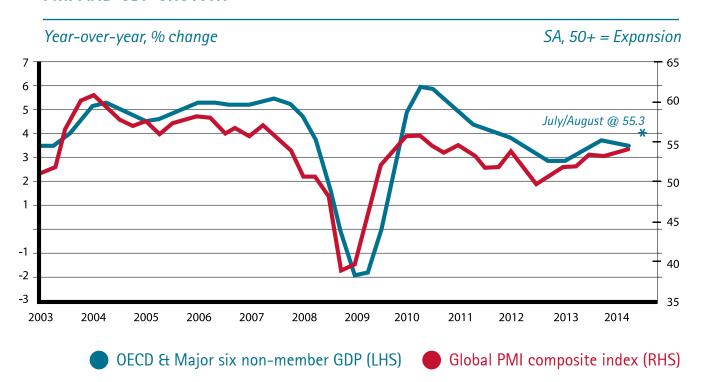
THE PURCHASING MANAGERS' INDEX™

Purchasing Managers' Index[™] (PMI[™]) surveys have been developed in many countries to provide purchasing

PMI data are based on monthly surveys of carefully selected companies. These provide an advance indication of what is really happening in the private sector economy by tracking variables such as output, new orders, stock levels, employment and prices across various sectors. PMI surveys have been designed to provide business decision-makers with up-to-date, accurate and reliable data on which to benchmark performance and base business strategy.

In June 2011, the Supply Chain Management Association, RBC, and Markit (a leading, global financial information services company) launched the monthly RBC Canadian Manufacturing Purchasing Managers' Index™ (RBC PMI™), a comprehensive and early indicator of trends in the Canadian manufacturing sector. To develop this monthly snapshot the survey gathers the insights of over 400 supply chain professionals from the manufacturing sector first business day of each month.

PMI AND GDP GROWTH



Source: Organization for Economic Cooperation & Devt, JP Morgan, Markit, RBC Economics Research

"We are seeing more trends towards more reporting and transparency in both the public and private sectors. Accountability has always been important, but it seems to be growing in importance."

~ Natural Resources Company

"Supplier deliveries have been inconsistent, many have underestimated their requirements for raw materials.

Prices have increased, in many cases because of currency."

~ Services Company

"We have long lead times due to global sourcing. As a consequence we have had issues with US and China customs, and logistics delays."

~ Manufacturing Company

"Canada is a small market, Canada-specific regulations add costs to production, design and impact the volume we can produce to get economies of scale."

~ Manufacturing Company

SECTOR OVERVIEW

MANUFACTURING



The Business Recovery: Rewards and Risks

Diana Gavrila, procurement director at The Allan Candy Company, has noticed an improvement in business conditions in recent months. But Ms Gavrila notes that the Mississauga. Ontariobased confectionery maker has also had to contend with raw material shortages, late deliveries by suppliers and warehouse bottlenecks.

Allan Candy mirrors many other manufacturers, as Canada's supply chain reaps the benefits and confronts the challenges typical of the early stages of an economic upswing.

The strengthening US recovery is spilling over into rising consumer and business confidence in Canada, buoving demand for a host of unglamorous but essential items from fabricated metal shapes to plastics and electrical components.

"A number of factors were weighing on growth in the early part of the year," says Craig Wright, RBC's chief economist. "Now what we're seeing is that the PMI is accelerating out of that weak spot."

Industrial capacity utilization climbed to 82.7% in the second quarter of 2014, the fourth quarterly rise in a

row and the highest in seven years, according to Statistics Canada. The manufacturing sector was the driving force behind the advance. Makers of transport equipment were running at a record 93.7% of capacity between April and June.

Yet despite the influx of new orders, many suppliers have held back on installing new plants and equipment until they are confident that the recovery is on a solid footing.

Their hesitancy is reflected in the supplier delivery times component of the RBC PMI which has remained below 50 for the past four years. The seasonally-adjusted delivery times sub-index stood at 45.5 in August 2014. A figure below 50 indicates that delivery times are lengthening. Respondents cited strong demand for raw materials as a contributing factor to delayed delivery of inputs.

The good news, however, is that businesses are starting to respond to the uptick in demand by investing in new capacity. Lafarge, the big cement maker, is spending \$60 million to double the capacity of its Edmonton plant and modernize its Calgary

factory. The Canada Pension Plan Investment Board put up \$200 million this spring for construction of a 250-acre industrial park in north-west Edmonton.

RBC sees exports and investment accelerating over the next few months. "Exports have picked up quite sharply in the second quarter, the investment will follow," Mr. Wright says. "Corporate balance sheets are flush with cash, which bodes well for investment prospects as the economic uncertainty eases."

KPMG's latest Canadian manufacturing outlook pinpoints three main challenges now facing the supply chain:

- Supplier performance in terms of risk, reliability and quality
- Aligning operations to real-time fluctuations in customer demand
- A lack of skilled talent to manage supply chain execution and planning

Ms Gavrila at Allan Candy says that more flexible unions, more skilled workers and faster government approvals would help ease strains in the supply chain.



Her concerns are echoed by other replies to a recent survey of a crosssection of Supply Chain Management Association (SCMA) members.

"The federal burden in documentation and compliance with regulations has increased over the past five years," notes Dave Anderson, supply chain manager at Ottawa-based Davis Engineering.

Another respondent adds, "I would like to see our government become a partner rather than fighting against us." Several others urge more protection for local firms against low-cost suppliers abroad, especially in China.

On the other hand, governments can play a useful role by sweeping away inter-provincial trade barriers. Referring to the Trade, Investment and Labour Mobility Agreement between British Columbia and Alberta, one respondent takes the view that the TILMA agreement has helped to ensure a more competitive market in Alberta, and it should be adopted throughout Canada.

RBC INSIGHTS:

The Purchasing Managers' IndexTM (PMITM) Index for September 2014 of 53.5 points to further improvement in business conditions although at a slower rate relative to August's reading of 54.8. The drop in the index largely reflects three main components — new orders, output and employment — rising in September but at a more moderate pace than in August. More broadly Canada's beleaguered manufacturing sector cites fluctuating demand and intensified competition as major obstacles. Among manufacturers, 63% of firms report demand uncertainties. Concerns about input prices, government regulations and maintaining cash flows are significant nationwide.

SERVICES

Boosting Supply Chain Efficiency

Whatever the social benefits of raising the minimum wage, a round of recent hikes is causing headaches for the service sector supply chain.

Labour generally makes up a far higher proportion of costs for service companies than for manufacturers. Legislated pay increases can thus throw a spanner in their planning assumptions — not to mention their competitive edge.

In some provinces, upticks in the minimum wage stem from automatic indexation; in others, they reflect a drive to help the lowest-paid workers. Alberta, Manitoba, Nova Scotia, Prince Edward Island, Quebec, Saskatchewan and, most important, due to its size. Ontario, have all pushed up minimum wage levels over the past 18 months.

Ontario lifted its floor from \$10.25 to \$11 an hour — a 7.3% rise — on June 1, 2014.

"The cost of consumables is less of a concern right now than wages and labour costs," says Marlene Houstan, a senior strategic procurement executive and an SCMA Ontario board director.

"We pay close attention to supply chain efficiencies, because that's what our clients expect from us, especially in a competitive economic environment. A big part of that is keeping a watchful eye on all costs."

Wage increases are generally running well above the overall inflation rate. According to Statistics Canada, the average hourly wage for employees aged 25-54 was \$26.77 in August 2014, up 3.1% from a year earlier. The overall consumer price index rose a more modest 2.1% in the same period.

The concern over labour costs comes at a time when pressure is growing on service providers to pay more attention to the benefits of a competitive, integrated supply chain.

Javier Perez, a director of Oracle's consultancy arm, wrote in *Profile*, a magazine published by the Californiabased software giant. "Services industries are often at a loss in describing the strategic and financial impact of superior supply chain management for their large strategic spend categories, such as IT services,

legal services, and consulting."

"These companies also do not apply the same best practice principles as manufacturers," he writes. "For example, it is not unusual for important parts of the supply chain at services organizations to be managed in a decentralized fashion by line-ofbusiness managers. These managers often make vendor decisions without the benefit of cross-company historic performance, such as on-time delivery and quality of services rendered."

Rogers Communications is among the Canadian service companies that are putting new emphasis on supply chain management. According to Phil Rauen, Roger's senior vice president for procurement and supplier management, the company's new chief executive, Guy Laurence," ...has higher expectations of supply chain management than his predecessor did."

Supply chain management is becoming more closely integrated in Rogers' budgeting process. Among other measures. Rogers and UK-based Vodafone, Mr. Laurence's previous

employer, unveiled a partnership in June that includes joint procurement initiatives. The agreement links Rogers to Vodafone's "partner market" group of more than 30 telecoms providers in almost 50 countries.

"People are trying to combine their volume and punch above their weight." Mr. Rauen says. "I'm more focused on creating proactive ideas to go after costs, versus just sitting back and waiting for the business to tell me the next thing they want to buy."

As Oracle's Mr. Perez puts it, "With the ability to better analyze categories of spend, services and project costs, and execution results, services companies are starting to find that supply chain management can be the same powerful strategic enabler that manufacturing companies have always seen it to be."

RBC INSIGHTS:

Gross domestic product (GDP) of service-producing industries continued to rise in July, with the 0.2% advance matching the increase in June. This occurred despite an expected 0.6% decline in wholesale trade. The main offset was a 1.5% bounce in education services. The latter represented a reversal from a downwardly revised 1.9% decline in June (-0.04% previously). This reflected a more complete accounting of the effect of the British Columbia teachers' strike.



NATURAL RESOURCES

Moves to Defuse Tensions

Supply chain management rarely becomes a hot political issue. But the inaugural meeting of Canada's Commodity Supply Chain Table in Ottawa this summer shows just how tense relationships have become between producers, shippers and transport companies in some parts of the natural resources sector.

The new group is drawn from the farming, forestry, mining, oil and chemical industries, as well as railways, ports, grain elevators and ship owners. It will meet twice a year, providing a national forum to ease friction in the resources supply chain.

The focal point of attention for now is Canada's railways. Ian Murray, managing director, Intermodal Marketing at Canadian Pacific, says, "Canada's rail system is a core part of the country's supply chain network, and we are continuing to reinvest to keep up with ever growing capacity demands. For every dollar of revenue, CP has invested approximately 20 cents and put it right back into infrastructure."

"As we see the continued increase in international trade," Mr. Murray adds,

"The railways play an increasing role in getting those goods to and from the port. The chain is only as strong as its weakest link and everybody involved in the supply chain needs to work to address bottlenecks. The railway is doing its part to strengthen and speed up the links that it manages."

Even so, prairie farmers have been up in arms over a massive backlog in moving last year's bumper grain harvest from elevators to ports.

"There's been a lot of talk about transportation and the poor performance of our supply chain... but not a lot of action," Wade Sobkowich, the Western Grain Elevator Association's executive director said earlier this year. "The numbers speak for themselves and what we've seen isn't good enough."

Elsewhere, the rail companies have come under pressure to handle a vast expansion in oil shipments as a result of fast-rising North American production, especially from the Bakken field that straddles the border between North Dakota and Saskatchewan. Existing pipelines have been unable to cope with the surge.

The National Energy Board reports that Canada's crude oil exports by rail soared to 14.8 million barrels a day between April and June, from 12.1 million b/d a year earlier and just 2.9 million b/d in the second quarter of 2012.

The grain and oil crunches have underlined the supply chain's importance to the resources sector. Canola, wheat, pulse and soybean growers, supported by the federal government, announced earlier this year that they would spend \$3.2 million to devise a five-year plan to improve the efficiency — and thus the international competitiveness — of the farm-based supply chain.

"We've got a lot of room for improvement in how we move things from the prairies to the port," the Alberta Wheat Commission's general manager Doug Cornell said. The plan is to use specific performance measurements to identify weak spots in the supply chain.

Ottawa has thrown its weight behind the farmers by forcing the railways to carry more grain. Under the Fair Rail for Grain Farmers Act, passed this spring, Canadian National Railway



and CP Rail must each move 536,250 tonnes of grain each week until the end of November, or face fines of up to \$100,000 a day.

The Act also gives prairie shippers greater access to competing railway companies. For example, 150 grain elevators can now do business with more than one railway, compared to just 14 previously.

Agriculture minister Gerry Ritz told the Toronto Star in August "A freemarket government is loath to regulate private-sector companies. But there comes a time when they are a major impediment to the economy overall that you have to step in."

The rail companies have accused the government of heavy-handedness, blaming the bottlenecks mainly on this year's unusually cold winter. CP Rail disclosed in September that it has mounted a legal challenge against some of the changes.

RBC INSIGHTS:

Market expectations for a continuation of solid growth in gross domestic product (GDP) in July were largely based on indications of strong manufacturing activity in the month. However, this strength was offset by sizeable declines in a number of other sectors including: agriculture (2.4%), and mining, oil, and gas extraction (1.5%). The weakness in agriculture largely reflects forecasts of a drop in grain production this year following 2013's bumper crop. Extreme cold earlier this year hampered transportation — rail systems in particular — and contributed to first-quarter declines in both exports and imports. The weakness in mining was relatively broad-based in both energy and non-energy components. In addition, the RBC commodity price index fell 3.4% in August, marking the largest monthly decline in two years and bringing the headline index to a nine-month low.



RETAIL

Social Responsibility to the Fore

Joe Fresh, a division of Loblaw Companies, was among the first clothing retailers in the world to take action after the collapse of the dilapidated Rana Plaza factory building in Dhaka, Bangladesh in April 2013.

The Canadian company quickly sent a supply chain team to investigate the disaster, which killed 1,100 people, and pledged to compensate victims' families. Loblaw and other Canadian retailers met within a week of the tragedy to discuss ways of improving working conditions in faraway manufacturing plants.

A year and a half later, social responsibility has emerged as a critical element in supply chain management not only among retailers, but many other businesses too.

"There is an expectation among our shareholders, customers and employees that we hold our vendors to the same standard as we have," says Marcia Seymour, senior manager for procurement corporate responsibility at TD Bank Group. Ms Seymour adds "In the past 3-5 years, there have been lots of changes in what we buy and what consumers want."

Several respondents to a recent survey of a cross-section of SCMA members used phrases such as "sustainability", "fair trade", "greater environmental responsibility" and "corporate social responsibility" to describe the main trends and issues in Canadian supply chain management.

Asked what changes would make the operating environment in Canada more competitive, one replied, "Development of a unique Canadian business environment as a centre of excellence in sustainability and corporate responsibility, resulting in becoming a competitive, global differentiator."

Another called for "proper representation and inclusion" of aboriginal communities and fair representation of women in procurement. A different respondent added, "I would also like to see fairer wages for women."

Phil Rauen, senior vice-president for procurement and supplier management at Rogers Communications, says that many more of Rogers' own corporate customers have begun asking about its social responsibility practices.

In one sign that such pressure is unlikely to abate soon, Hassan Yussuff, president of the Canadian Labour Congress, wrote in the Ottawa Citizen in September that, apart from Joe Fresh, "... Canada's retailers are still sitting on their hands. They haven't woken up to their responsibilities to the workers who make their clothes for pitifully low wages in unsafe conditions."

Mr. Yussuff urged Canada to join some other Organisation for Economic Co-operation and Development (OECD) governments, such as France, Germany, Spain and the UK, that have called on domestic retailers to contribute to the Rana Plaza victims' fund "irrespective of whether they have any sourcing links to the Rana Plaza."

Half the brands that sourced goods from Rana Plaza have yet to disclose any contribution towards the compensation fund, according to the Clean Clothes Campaign, a non-profit group that seeks to improve working conditions in the garment supply chain. The fund aims to raise US\$40 million.

Even so, many retailers are responding to the social responsibility challenge. Loblaw says that last year, it became the first retailer in North America to introduce farmed seafood products certified by the Aquaculture Stewardship Council to its supermarkets.

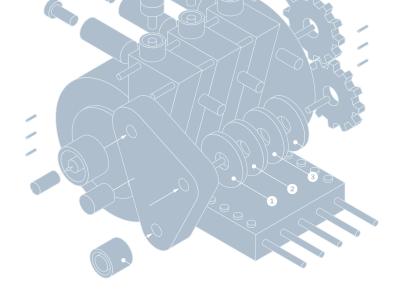
Its annual Oceans for Tomorrow event, held in conjunction with the Marine Stewardship Council, the World Wildlife Fund and three of its top seafood suppliers, includes food demonstrations and cooking classes all aimed, in Loblaw's words, at "...increasing both sustainable seafood sales and consumer awareness of this important environmental issue."

RBC INSIGHTS:

Canadian consumers shook off the winter blues in the second quarter with spending rising at a 3.8% annualized pace, more than compensating for the weather-related setback in the first three months of the year. Nominal retail sales in July 2014 unexpectedly dropped by 0.1%, although this followed a 1.2% surge in June. On a volume basis, overall retail sales in July were unchanged in the month following a 0.6% increase in June. Despite the marginal decline in July retail sales growth, the data remain consistent with inflation-adjusted consumer spending continuing to rise in the third guarter of 2014 at a 2.2% annualized rate although this would be a slower advance than the 3.8% surge recorded in the second quarter.



SECTOR FOCUS: AUTOMOTIVE



Steady Recovery Exposes **Capacity Constraints**

Canada's auto parts suppliers have enjoyed a vigorous recovery from the 2008-09 recession and the near death experience of General Motors (GM) and Chrysler, two of the big three Detroit carmakers. Even so, the upheavals of those dark days continue to reverberate through the automotive supply chain.

The good news is that motor vehicle sales in North America are back to pre-recession levels. US light-vehicle sales were running at a seasonally adjusted annual rate of 17.5 million units in August 2014, the highest in eight years and almost two-thirds up on the 10.6 million units sold in calendar 2009.

Vehicle sales in Canada have hit all-time records, reaching 171,560 units in August. The PMI for the Canadian auto sector has hovered above 60 each month since May. signalling continued expansion. New orders, exports and employment are all on a gradual upswing.

Parts suppliers' profits are also on a tear. Magna International, Canada's biggest auto parts maker, with plants around the world, posted net income of US\$510 million in the second quarter of 2014, up 24% from a year earlier.

Furthermore, relationships between carmakers and their suppliers have improved. "Things are working well

on both sides of the table," says Jim Gazo, vice-president of operations at Automodular Corp, which assembles rear suspensions, power packs and other modules.

On a more sobering note, the rebound has exposed a mismatch between demand and capacity. The supply base has struggled to come to terms with the surge in orders over the past five years.

The cutbacks at GM, Chrysler and other carmakers in the depths of the recession cascaded throughout the supply chain. Many weak players were forced out of business.

The survivors pulled in their horns, closing or shedding unprofitable operations. Some diversified into other businesses, such as parts for wind turbines and other renewable energy equipment. Most have been reluctant to invest in new capacity until the recovery was on a firmer footing.

The result is that auto parts makers are now struggling to keep up with demand. "We want more parts and they don't have the capacity," says one procurement executive.

The PMI confirms this concern. Order backlogs have grown and delivery times have lengthened, pointing to high capacity utilization. Some suppliers have added shifts, including over weekends, to meet their customers' requirements.

The auto sector is the biggest contributor to Canada's manufacturing output and the country's biggest industrial employer. The industry comprises 11 light-duty and three heavy-duty assembly plants as well as over 540 parts manufacturers, according to the Canadian Vehicle Manufacturers Association. The association estimates that the auto sector provides jobs, directly and indirectly, for one in seven Canadians.

Few other supply chains match its complexity. A typical sedan contains about 4,000 components, not counting thousands of small items such as screws and caps.

Ford Motor Co. alone has 1.700 tier 1 suppliers, many of which build entire modules such as seats and instrument panels. Each of these companies buys parts and raw materials from companies further down the chain. Components for Ford's assembly plants come from 4-6.000 different sites around the world.

Compounding the complexity is the need for every component — from fuel tank valves to cylinder liners, electronic controls and antennas — to be delivered exactly when and where it is needed on the assembly line. This often entails shipping across the US-Canada border, given the close integration between assembly plants and parts suppliers in the two countries.

FACTS **ABOUT THE AUTOMOTIVE** SECTOR IN CANADA:

1,300 automotive companies

\$71 billion annual revenues

53 billion annual exports

2.3 million units produced in produced in 2013

biggest exporter

Employs 111,000 skilled workers

Source: Invest in Canada

Meanwhile, pressure for innovation and collaboration has intensified as carmakers increasingly focus on consumers' varied and ever-changing preferences.

Stunning advances in automotive technology — including electric cars, driverless cars and "connected" cars have triggered demand for a vast new array of products and services.

One result has been growing specialization. Together with financial pressures, the drive to dominate specific markets has become a powerful impetus for consolidation. The Wall Street Journal reported in mid-August "Many suppliers, have drastically slimmed their focus on a few niche areas, and tried to use that expertise to broaden their customer base."

Most recently, Germany's ZF Friedrichshafen agreed to buy Michigan-based TRW Automotive for US\$11.7 billion, creating the world's second-largest automotive supplier by sales. Delphi Automotive, Borg Warner and Sweden's Autoliv are among other tier 1 suppliers reportedly on the hunt for mergers and acquisitions.

The current capacity constraints have brought other challenges too.

A recent KPMG presentation to the Michigan-based Original Equipment Suppliers Association pointed out that a wave of older, experienced workers retired during the recession. Furthermore, many senior auto executives moved to other industries and took their databases with them. What talent remains, KPMG noted. often does not filter down to tier 2 and 3 suppliers due to uncompetitive wages, benefits and job security.

Quality has also become a concern as suppliers scramble to keep pace with fast-rising vehicle sales. "When suppliers run at the levels they have been, quality will suffer," KPMG noted. A spate of vehicle recalls in recent vears has underlined the importance of quality and reliability along the entire supply chain.

Canada's automotive supply chain faces some issues of its own. Dan Georgescu, (Ford Global Procurement, and an instructor at Wilfrid Laurier University), believes that the link between industry needs and academic research in Canada is weaker than in Europe, where universities collaborate far more closely with car manufacturers and suppliers.

"The research performed by colleges and universities is rarely used by the industry," Mr. Georgescu says.

Ontario held the crown as North America's number-one car-assembly jurisdiction in the mid-2000s. But it has lost ground in recent years.

According to KPMG's latest survey of automotive executives in the BRIC countries (Brazil, Russia, India and China). 45% of respondents now consider Mexico as a possible launch pad for exports to the rest of North America, 44% favour Brazil and 8% the US. By contrast, only 3% would opt for Canada.

Investors have been drawn south by factors ranging from union concessions in the US, tighter border controls and the rise of Mexico and Brazil as automotive powerhouses. Some auto executives predict that the recent free trade agreement between Canada and South Korea could further dent Canada's competitiveness.

The long-term growth and prosperity of Canada's auto supply chain clearly cannot be taken for granted.

ABOUT THE SUPPLY CHAIN MANAGEMENT ASSOCIATION

As the leading and largest association in Canada for supply chain management professionals, the Supply Chain Management Association (SCMA) is the national voice for advancing and promoting the profession. SCMA sets the standard of excellence for professional skills, knowledge and integrity and was the first supply chain association in the world to require that all members adhere to a Code of Ethics.

With nearly 8,000 members working across the private and public sectors, SCMA is the principal source of supply chain training, education and professional development for supply chain professionals in Canada. Through its 10 Provincial and Territorial Institutes, SCMA grants the Supply Chain Management Professional (SCMP) designation, the highest achievement in the field and the mark of strategic supply chain leadership.

SCMA was formed in 2013 through the amalgamation of the Purchasing Management Association of Canada and Supply Chain and Logistics Association of Canada. With a combined history of more than 140 years, today the association embraces all aspects of strategic supply chain management, including:

- Purchasing/Procurement
- Strategic Sourcing
- Contract Management
- Materials/Inventory Management
- Logistics and Transportation

Impact of the Supply Chain Profession

The supply chain management profession makes a significant contribution to Canada's economy and is critical to the competitive advantage of all enterprises. There are over 767,000 supply chain professionals in Canada spread across multiple sectors. Latest research shows that SCMA members control more than \$130 billion in annual spend. The standard of living we all enjoy through timely, cost-effective access to a range of innovative, highquality goods and services is directly linked to the professional practice of supply chain management. The profession favourably influences the social and economic success of not only Canadians but citizens worldwide.



