

Hiring tips

• Inorganic growth

• Foreign direct investment



FOR STRATEGIC BUSINESS IDEAS

www.managementmag.com

Management

JUNE/JULY 2010 \$5.50

**Inventory
postponement
strategy to balance
supply and demand**

**Measuring
environmental costs**

Rob Harding, CMA, MBA, vice-
president of finance and CFO,
Athabasca Oil Sands Corp.

A world of opportunity

After exploring new territories, Rob Harding
sees the value of having international
experience

Rachel Cuthbert, CMA
Business Intelligence Analyst, Aritzia LP

I HELP TURN DATA INTO LITTLE BLACK DRESSES.

What attracted Rachel Cuthbert to the Certified Management Accountant program was the opportunity it gave her to work in any industry. Fashion being one of her passions, it's no surprise Rachel landed at Aritzia, a North American fashion boutique. She credits her CMA with giving her the tools to understand the business side of fashion. It's a career choice that fits her perfectly. See Rachel's film at becomeacma.com.

Create Possibilities.™

becomeacma.com



**Certified
Management
Accountants™**

Opportunities for change

CMA's are accustomed to wearing multiple hats. Often, they take on responsibilities outside of their primary focus. For example, many find they serve as marketing managers or human resources specialists. In this issue, Connie Stamper, CMA, delivers *Hiring tips for small business leaders*. Her column provides helpful information for CMA's who work in companies that don't have an in-house HR department. Finding and retaining top talent is key to sustaining business advantage for the long-term. Locating and developing great talent is possible even without an in-house HR department.

Today, more companies are recognizing the importance of the environment and how it factors into their day-to-day management decisions. According to a 2006 Statistics Canada study, Canadian firms are estimated to have spent a total of \$8.6 billion on environmental protection. Authors Clémence Rannou and Jean-Francois Henri, CMA, explain in *The better way to measure environmental costs* that one of the first challenges for companies is how to define environmental costs. Companies can't manage what they can't measure; therefore, defining environmental costs will help CMA's make better management decisions.

We live in a communication age. At work, a significant amount of time is spent exchanging information with others using computers and laptops. The incredible growth of the Internet has excited businesses and consumers alike with its promise of changing the way we live and work; making the issue of security a business imperative. Information security is provided on computers and over the Internet by a variety of methods. Although a straightforward security method is to keep sensitive information on removable storage media like flash memory drives or external hard drives, the most popular forms of security rely on encryption. The process of encryption involves encoding information in a way that only the user with the "key" can decode it. Jacob Stoller joins *CMA Management* this month for a detailed look at the cost benefits of encryption.

Lastly, Rob Harding, CMA talks about his tumultuous, yet rewarding experience working abroad. Harding's story reiterates the endless possibilities CMA's have in the workplace—whether it's working in Canada or taking your skills and talent to venture into new territories.



Andrea Civichino
Editor-in-Chief



Publisher Suzanne K. Godbehere
Vice-President, Marketing & Communications
(905) 949-3106
sgodbehere@cma-canada.org

Editor-in-Chief Andrea Civichino
(905) 949-3109
acivichino@cma-canada.org

Art Director Sean O'Rourke
(905) 949-3132
sorourke@cma-canada.org

Translation and Co-ordination Joanne Beauchamp
Hélène Arseneault
(514) 878-1105

Advertising

National Advertising Sales Dovetail Communications Inc.
30 East Beaver Creek Road
Ste. 202
Richmond Hill, ON
L4B 1J2
Phone: (905) 886-6640
Fax: (905) 886-6615
www.dvetail.com

President Susan A. Browne
sbrowne@dvetail.com

Sales Manager Beth Kukkonen
bkukkonen@dvetail.com

Account Manager Sarah Vassos
svassos@dvetail.com

Insertion orders and advertising materials are to be sent to: Crystal Himes
chimes@dvetail.com Dovetail Communications Inc., 30 East Beaver Creek
Road Ste. 202, Richmond Hill, ON L4B 1J2, Fax: (905) 886-6640

Circulation and Administration

For general inquiries, change of address notices, etc. please call:

Liliane Kenyon (877) 262-6622

lkenyon@cma-canada.org

Subscriptions Member: \$15.00 (plus GST)
Non-members: \$15.00 (plus GST)
U.S. and overseas: \$40.00 (U.S. funds only)

Undeliverable Mail

Canada Post: send undeliverable copies to:

CMA Management
1 Robert Speck Parkway, Suite 1400, Mississauga, ON L4Z 3M3
email: info@cma-canada.org
Telephone: (905) 949-4200
PM 40064728
PAP Registration No. 9858

CMA Management is a member of the Canadian Circulations Audit Board/Business Publications Audits International (CCAB/BPA)
Indexed in Canadian Periodical Index ISSN 1490-4225.
Issue Date: June/July 2010

CMA Management is published monthly, except December-January and June-July, August-September (combined issues), by CMA Canada. If you no longer wish to receive this publication, please contact CMA Canada.

Articles prepared by individuals associated with organizations advertising in CMA Management provide generic information on business topics, and do not promote specific products or services.

Products and services identified in CMA Management are neither sponsored nor endorsed by CMA Canada or its affiliates. For more information on these products and services, readers are encouraged to contact the advertisers directly.

Opinions expressed are not necessarily endorsed by CMA Canada. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, without the prior written consent of the publisher or a licence from The Canadian Copyright Licensing Agency (Access Copyright). For an Access Copyright Licence, visit www.accesscopyright.ca or call toll free to 1-800-893-5777.

We acknowledge the assistance of the Government of Canada through the Publications Assistance Program toward our mailing costs.

Printed in Canada by Web Offset Publications Ltd., Pickering, ON.

Canada



CMA Management

Features



18 Sometimes it pays to procrastinate
Using an inventory postponement strategy to balance supply and demand.

By David M. Bukovinsky and Gregory A. Graman



22 Demystifying concessionary loans

A prevalent feature of international business, concessionary or subsidized loans are critical to stimulate the exportation of capital goods.

By Jacques A. Schnabel



28 The better way to measure environmental costs

Environmental costs represent a large portion of costs incurred by companies. The first challenge is how to define them.

Clémence Rannou and Jean-François Henri, CMA



34 A world of opportunity

After exploring new territories, Rob Harding, CMA, sees the value of having international experience.

By Arda Ocal

Cover Photo: James May

Columns

11 Human resources



Hiring tips for small business leaders. Companies don't need an in-house HR department to locate and develop great talent.

By Connie Stamper, CMA

14 Business strategies



Inorganic growth. Strategic rationale for a merger or acquisition.

By Matt Davies

37 Information technology



Encryption—The last line of defense. No security system is perfect—and all measures—no matter how elaborate, are subject to failure.

By Jacob Stoller

40 Global view



Canadians may fear it, but a recent study calls foreign direct investment a plus. The benefits of foreign direct investment outweigh the drawbacks.

By John Cooper

Departments

6 Media bites Make a difference

- Yes You Can
- The Sustainable MBA



7 News and views

New and noteworthy information you can use

- Study shows women underrepresented in corporate Canada's boardrooms
- 2010 handbook of pronouncements
- Case study: Moving her career forward
By Peter Jeewan
- Survey: It takes more than a month to fill accounting positions
- Excellence for comptrollership in the public sector



Make a difference

Yes You Can



Stacey Hanke, a Chicago-based management consultant and author of the book *Yes You Can* says when people communicate they need to be aware of what others see and hear and how they respond, whether it's face-to-face, over the phone, during a sales call or presentation, conference call, meeting or via technology.

"It's not just what you say but how you say it that matters," she advises. "If you aren't making a conscious effort to manage your tone of voice, the way you stand, and the words you use, you risk delivering your message ineffectively and leaving your recipient with the wrong impression. The resulting misunderstanding will not help your cause."

Hanke says that you can learn how to communicate effectively no matter where you are. Even your technology-driven communication will improve if you first focus on improving the most important method first — face-to-face communication.

"We're not talking tailoring a perfect e-mail or internalizing the shorthand texting alphabet. Eliminate the static that plagues your one-on-one, person-to-person communication and everything else you do will dramatically improve as well."

Her new book is a hands on, A to Z guide for learning how to do just that. Some of her best recommendations include: increase awareness, pause more often, use technology power wisely, gesture to create a positive visual impression, use fear as a motivator, speak less and listen more.

"Even tiny little changes and improvements in how you communicate can be crucial and extremely beneficial," she adds. "That's because in most cases, the incremental changes people make can result in instantaneous and dramatic improvements in behavior, communications, performance, customer services, relationships, branding, and profits. They can see it right away and the outcomes of the changes they make are tangibly documented based on what happens."

Stacey Hanke and Mary Steinberg. AuthorHouse. ISBN-10: 1438904436

The Sustainable MBA



Sustainable companies seek balance between profits, social equity, and environmental protection. Many of these leading companies find that their green environmental policies lead to decreased costs and increased opportunities. Giselle Weybrecht interviewed over 100 CEOs and green experts in

organizations like these before writing *The Sustainable MBA*.

The Sustainable MBA begins with chapters that define sustainability and green issues for the uninitiated. Next are chapters on "core topics." The chapter on accounting is mundane. The chapters on economics, marketing, operations, and organizational behavior are far more interesting.

For example, the chapter on economics has a section on evaluating the impact of the environmental degradation of an ecosystem. This section, like most others in *The Sustainable MBA*, is filled with references to other relevant information. Weybrecht recommends books about the economic impact of environmental damage and provides links to web pages.

The chapter on organizational behavior addresses the importance of human resources (HR). The aim of HR in an ecologically sensitive organization is to create a culture of sustainability, and manage the impact of green changes, by communicating consistent ecological messages, recruiting the right people, and promoting a green community where employees are involved and rewarded for their sustainable actions.

The marketing chapter discusses greenwashing — the practice of misleading consumers about an organization's environmental practices, or the environmental benefits of a firm's products or services. A common method of greenwashing is using packaging that is coloured green or drawing attention to one sustainable aspect of a product that has many other environmentally degrading attributes. Another way of greenwashing is advertising a product as "recyclable" when there are no facilities set up for recycling these kinds of materials.

A section of *The Sustainable MBA* is devoted to measuring the impact of "green" programs. What is the life-cycle impact of a product? What is the risk assessment of the product causing an ecological catastrophe? What technology is needed to minimize the environmental impact of a product? Along with these queries are audit questions for ongoing assessments of environmental compliance and improvement. The latter are similar to those in the business process section of a balanced scorecard.

The Sustainable MBA covers a vast scope of material and contains very few concrete examples. Some readers may wish to have more depth. *The Sustainable MBA* does promote the need for more companies to become green and does provide information for guiding these firms onto the path of ecological sustainability.

Giselle Weybrecht. John Wiley & Sons. ISBN: 978-0-470-74114-6
Reviewed by Patrick Buckley, PhD, CMA

News and views

New and noteworthy information you can use

Study shows women underrepresented in corporate Canada's boardrooms

Findings from the *2009 Catalyst Census: Financial Post 500 Women Board Directors*, reveal that women hold 14 per cent of director positions in the FP500, an increase of only one percentage point in two years. Moreover, the study showed that nearly 45 per cent of public companies have no women board directors at all.

"Corporate Canada must recognize that, competitively, they are playing with 'half a deck' when they ignore the marketplace and workforce and overlook appointing women to board service," Deborah Gillis, vice-president, Catalyst, North America, says. "In 2010, the argument that companies can't find women to sit on boards simply doesn't work."

Among the study's findings were the following:

- Women held just 10.3 per cent of board seats in Canadian public companies compared to 15.2 per cent of Fortune 500 companies, most of which are public.
- In 2009, crown companies had the highest representation



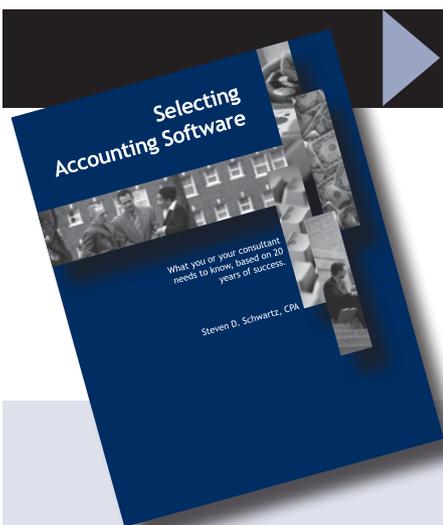
of women on their boards while public companies had the lowest.

- Private companies saw the biggest boost, where the percentage of women board directors increased four percentage points (12 per cent in 2007 to 16 per cent in 2009).

- The arts, entertainment and recreation industry led in representation of women board directors, while the mining, quarrying, and oil and gas extraction industry had the lowest.

Gillis pointed to the need for Canadian companies to "nab the best women now" — or risk losing them to proactive, multinational companies already seeking to add qualified women to their boards. "Canadian companies and their recruiters need to act quickly and broaden the criteria for board roles," Gillis says.

Since the research shows a strong correlation between women's representation on boards and better financial performance, shareholders — women and men — have an interest in calling for equity in the boardroom, according to Catalyst.



Free Accounting Software Reference Library

► For qualified CMAs who select or recommend accounting software, this free reference library includes:

- **Selecting Accounting Software:** a generic, non product-specific presentation of terms and concepts to consider in choosing a new accounting software system.
- **Evaluating Adagio companion booklet:** describes Adagio's approach to those terms and concepts to help you determine if Adagio is the best solution for your client.
- **Adagio Accounting catalog:** describes the "best fit" markets for Adagio Accounting and catalogs Adagio modules as well as 3rd Party modules which work with Adagio.

► Phone 1-800-663-9799 or visit www.softrak.com/CMA2010 to receive your free copy.

Adagio
by Softtrak

2010 handbook of pronouncements

The International Public Sector Accounting Standards Board (IPSASB) recently published its *2010 Handbook of International Public Sector Accounting Pronouncements*. In two volumes, the handbook contains all current IPSASB pronouncements, including 31 accrual-based standards and the IPSASB's cash basis standard. Five of these standards were approved by the IPSASB in 2009, including requirements and guidance for all aspects of accounting for financial instruments, as well as intangible assets and agriculture.

"It provides the only global and comprehensive set of accounting requirements and guidance developed specifically for preparers of public sector financial statements," Andreas Bergmann, chair, IPSASB, says. "It is also a strong foundation for the next phase of the IPSASB's work, including developing the IPSASB's conceptual framework — a set of principles that, following completion, will underpin the IPSASB's standard-setting activities for the long-term — and maintaining alignment with the International Accounting Standards Board's International Financial Reporting Standards (IFRS)."

Under the convergence program, the IPSASB achieved substantial convergence with the IFRS requirements as of Dec. 31, 2008, that are relevant for the public sector.

The handbook can be downloaded free of charge in PDF format or ordered in print from IFAC's publications and resources site: web.ifac.org/publications.

Case Study Moving her career forward

By Peter Jeewan

Meet Beverley Rebello, a recently designated CMA who is passionate about her profession. Rebello's career is on an upward trajectory and she has enlisted the help of recruitment firms to get on — and stay on — the right career path.



Rebello chose the CMA designation because, although she's a numbers person, she also understands the importance of seeing the bigger picture. She found the CMA curriculum to have the perfect mix of finance and strategy focused courses. "In second year university, I became a CMA associate student member and spoke at CMA events at the University of Toronto campus," she says. "I worked with two different companies as part of their summer employment program and that experience really helped me choose the path towards the CMA designation."

As a financial analyst at Bausch & Lomb, Rebello provides business support to the vision care and pharma businesses and offers analytical support to the commercial directors of each unit manages the Canadian P&L and looks after advertising and promotion spend. In addition, she is assisting in the implementation of Hyperion planning, and developing scorecards within the organization. She was hired to provide the commercial businesses with a higher level of business support and to support the team in streamlining the finance team's month end processes.

Prior to joining Bausch & Lomb, Rebello worked for Johnson & Johnson as a financial analyst, where she supported the customer logistics team. "I was responsible for new product launch costing, in-transit inventory and royalties. I had a leading role in supporting our team through a month end process blitz that significantly reduced month end inefficiencies."

Before Johnson & Johnson, she was with Accenture Consulting in the finance and performance management work stream. Her consulting experience involved developing balanced

Management

Editorial Think Tank

Anthony Atkinson, PhD, FCMA
Professor, University of
Waterloo, Waterloo, ON

**Pierre-Jean Dion, FCMA, CHRP,
M.Sc.**
Vice-president, Optima
Management Inc., Trustee, CMA
Canada Research Foundation
Montreal, QC

Clare Isman, FCMA
Deputy minister, Ministry
of Advanced Education,
Employment & Labour, Regina,
SK

John Mould, FCMA
Ombudsman, HSBC Bank Canada,
Vancouver, BC

Todd Scaletta, FCMA
Director, Knowledge
Management, CMA Canada,
Mississauga, ON

Ramesh Swamy, CMA
Senior manager, Deloitte
Financial Advisory Services
Los Angeles, Calif.

Darcy Verhun, MBA, CMC, FCMA
Partner, Conroy Ross Partners
Calgary, Alta.

scorecards and leading large scale process improvements and change management initiatives within client organizations. “I had the opportunity to travel to a client site based in Florida which enabled me to develop strong time management skills as I was also completing my first year of the CMA Strategic Leadership Program™,” she says.

Rebello used a recruiter for the first time in February 2009, when she secured a contract position with Johnson & Johnson in the area of supply chain finance. Her second experience, this time working with a different recruitment firm, helped her secure her current role at Bausch & Lomb.

“Overall my experience has been very positive,” she says. “In the past I have tried to do my own career search, but I realized that it is easier to leave the search to a recruiter because they have well established relationships with employers. They know the specific working environment of the companies and they are very familiar with the roles. It’s like having a reference check of a potential employer, which you couldn’t get by yourself.”

Rebello recommends that recent CMAs use a recruiter

because going through the career search alone can be an intimidating process. “You may not know enough about a company or its work environment in order to make an informed decision,” she says. “When you do use a recruiter, don’t try to look on your own at the same time. You need to trust in the process 100 per cent.” Rebello offers the following advice: 1) Conduct your own screening process. 2) Meet with different recruiters and find the one who really understands your experience and what you are looking for in your career.

In the medium term, Rebello looks forward to expanding her financial skill set, and gaining experience in the implementation of financial systems. “I would also like to leverage my existing experience in process improvements by earning my six sigma green belt,” she says. “In the long-term, I’d like to move up to a management role where I can provide a higher level of business expertise as well as having the opportunity to mentor other team members.”

Peter Jeewan, CA, is president & CEO of Lannick Group of Companies, specialists in recruiting and placing designated finance and accounting professionals in contract and permanent roles for 25 years.

Get caught up. Get ahead. Get a life.



Flexible accounting & finance
staffing solutions that add up.

CONTRACT | SEARCH

416-340-1500 • lannick.com

register or inquire at: CMA@lannick.com



LANNICK
GROUP of COMPANIES

TORONTO • MISSISSAUGA • NORTH YORK • OTTAWA

Excellence for comptrollership in the public sector

On Monday, May 10, 2010, public sector finance professionals, government officials, executives of CMA Canada, its provincial partners and U.K.-based Chartered Institute of Public Finance and Accountancy (CIPFA) staff gathered for the second annual *Award of Excellence for Comptrollership in the Public Sector* dinner and award ceremony.



The event took place at the historic Fairmont Château Laurier in Ottawa, where attendees honoured the winners and finalists for their outstanding contributions to financial management and/or comptrollership within the Government of Canada.

Michel Bernard, Mary-Lee Clarke and Joan Reade (Section 5970 Project Team) from the Canada Revenue Agency were chosen as this year's recipients. The team received a plaque and a \$1,000 donation to a charity or scholarship fund of their choice.

Also honoured at the dinner was Paul J. Gauvin, FCMA, who received the *CMA-CIPFA Lifetime Achievement Award*. He has been the chief financial officer in three of the largest federal organizations including Employment and Immigration Canada, Transport Canada, and the Royal Canadian Mounted Police (RCMP). His most recent assignment was special advisor to the commissioner of the RCMP.

This year's featured speakers included Sheila Fraser, Auditor General of Canada and James Ralston, Comptroller General of Canada. Both addressed the importance of innovation, the sharing of best practices and the role of financial management, and comptrollership in the Government of Canada.

Stay tuned for information about the third annual *Award of Excellence for Comptrollership in the Public Sector* to be held in spring 2011.

Survey: It takes more than a month to fill accounting positions

For already-stretched accounting departments, waiting over a month for help may seem like an eternity. Yet, a recent survey by Robert Half Finance & Accounting found it typically takes even longer than that for employers to hire for open positions. Chief financial officers (CFOs) interviewed said it takes an average of five weeks to fill a staff-level role and six weeks to bring a new manager on board and six weeks to hire for an open management-level accounting or finance position.

"As the economy rebounds, employers need to ensure they have adequate staffing levels to take advantage of emerging business opportunities," Kathryn Bolt, president, Robert Half International's Canadian operations, says. "Over time, companies running with teams that are too lean risk overextending and burning out their employees."

According to Bolt, having a nimble hiring process in place is critical to securing top talent. "The most sought-after professionals always have options and companies need to move quickly to attract and retain the market's top candidates." The following are tips to make the hiring process more efficient:

- 1. Stay front and centre.** Don't delegate the hiring process. You know best what you want in an employee. Avoid delays or, worse, potential hiring mistakes by remaining closely involved in the process from beginning to end.
- 2. Stick to the game plan.** Before resumé start coming in, develop a method for evaluating them consistently. Using the job description as a base, make note of key criteria you're looking for from applicants, and search for those same attributes in each resumé you receive.
- 3. Get help.** Specialized recruiters can help you pinpoint your needs. And their networks provide access to people you might not locate on your own, including professionals who may not be actively looking, but would make a change for the right opportunity.
- 4. Don't delay.** When you identify strong applicants, don't procrastinate. Top performers are in demand in any market. By moving too slowly, you risk losing your first choice—and extending the hiring process.

We welcome your comments and article ideas

Please write to the Editor,

CMA Canada
Mississauga Executive Centre
1 Robert Speck Parkway, Suite 1400
Mississauga, Ontario, Canada L4Z 3M3

Fax: (905) 949-0888
e-mail: acivichino@cma-canada.org



Hiring tips for small business leaders

Companies don't need an in-house HR department to locate and develop great talent

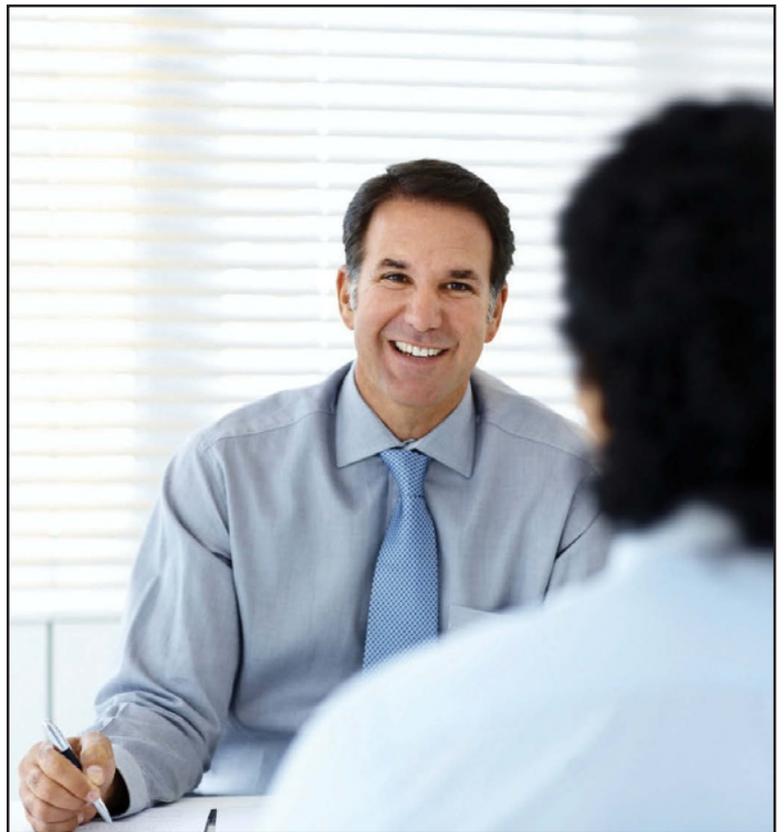
By **Connie Stamper, CMA**

Managers at small firms are well versed at juggling and balancing. They frequently take on responsibilities outside of their primary focus simply because there is no one else available to handle these tasks. When it is time to add personnel, for instance, many find they must serve as a human resources (HR) specialist as well as a hiring manager, since small businesses often lack dedicated HR resources in-house.

Before the recession, it may have been enough for some companies to muddle through the hiring process — but things have changed.

From creating the employment ad and interviewing candidates to defining compensation and providing appropriate training for new personnel, a managing accountant in a small business may need to do it all when it comes to hiring accounting personnel or support staff. The best are solid generalists who possess skills in several areas of HR and proactively keep up with leading employment practices and trends. However, those who have limited or no specialized expertise often choose to “wing it,” hoping they have what it takes to locate talent and ensure new hires make a quick and smooth transition into the organization.

Before the recession, it may have been enough for some companies to muddle through the hiring



process — but things have changed. There is simply no room today for hiring mistakes in organizations of any size. And managers in small businesses need to be especially careful when bringing in new staff. A firm's ability to capitalize on gradually increasing customer demand requires that every employee is prepared to contribute immediately, and in a fashion that has a decisive impact on the bottom line. Just one candidate mismatch can create enough disruption to compromise productivity and morale company wide.

Leading employers in Canada, large and small, remain cautious about adding personnel. At the same time, firms recognize they



need accounting staff who can envision and implement financial strategies in sync with today's market conditions. This means having the ability to help the firm identify cost-savings opportunities as well as support efforts to take advantage of increasing customer demand.

Leading employers in Canada, large and small, remain cautious about adding personnel.

While the stakes are higher in today's hiring environment, it doesn't mean that small or mid-sized businesses cannot compete for talent without dedicated HR resources. If you are an accounting manager who wears the hiring/HR managers "dual hat," the following are some best practices that will help you attract and secure the most qualified accounting and finance professionals and support staff for your firm.

Write focused but informative job descriptions

Creating or updating the job description is a critical part of the hiring process, but one that is often underestimated. Since the job description will be the basis for the employment ad, it must clearly outline the expectations and responsibilities of the position you need to fill.

Present the job duties in a way that allows candidates to visualize the role and adequately assess whether they would be a good fit for it. Be sure to include information about benefits, such as retirement plans and work/life balance programs, and a few details about what makes your company a great place to work.

A well-written job description not only can attract strong applicants — it also deters unqualified individuals from applying. In a hiring environment that produces a large number of resumés for a hiring manager to review for a single job, the more precise the job posting, the less work involved in screening applicants. In addition, the job description — which should be treated as a "living document" and updated as needed — can serve as a valuable, objective evaluation tool for measuring an employee's performance.

Define what makes an "ideal" small business employee

Determining desired technical abilities and relevant experience are important steps in any organization's hiring process. But hiring professionals know it is critical to dig deeper, particularly during the interview process, to identify

other valuable qualities a newcomer will need to succeed in a specific type of work culture.

Many small- and mid-sized businesses require staff members to collaborate with co-workers more often, handle more diverse responsibilities and work under a brighter spotlight than might be the case at a larger firm. But not all professionals perform well in this type of workplace, which is why it is important to hone in on the qualities an "ideal" employee for your firm should possess. Robert Half's publication, *Post-Recession Leadership Strategies, A Small Business Guide to Hiring, Managing and Retaining Staff*, has identified several ideal traits exhibited by professionals who thrive in a small business environment:

- **Entrepreneurial mind-set** — Applies creative and innovative thinking that can help the company realize its strategic business goals.
- **Team spirit** — Can work collaboratively, constructively and cooperatively with others.
- **Complementary personality** — Adjusts easily to the corporate culture and maintains a positive attitude that builds support among co-workers.
- **Engagement** — Shows interest in and commitment to the "big picture" and understands the link between an individual's effort and the firm's success.

Keep these, and any other specific qualities you desire in an employee, top of mind when reviewing job application materials, screening and interviewing candidates, or asking references for their insight on a potential hire's abilities. During the interview, consider including hypothetical questions to better gauge individual work styles. For example, instead of asking candidates how they typically manage urgent assignments, you might ask, "If you were working on a high-priority project for a manager in our firm and another asked you to help with an emergency task, how would you handle the situation?"

Support candidates beyond the initial orientation

Hiring specialists know that what a new employee learns in the first few weeks on the job shapes that person's ability not only to acclimate to his or her job, but also to thrive in it — and at the company. This is why many leading employers, and not just big organizations, now go beyond the traditional orientation period and embrace a lengthier and more thorough process called "onboarding." Onboarding is designed to go the extra mile to ensure new hires evolve into productive and satisfied staff members. It does not replace the standard orientation your firm conducts for new employees; it merely extends it.

The idea is to follow up early — and then regularly



Many small- and mid-sized businesses require staff members to collaborate with co-workers more often, handle more diverse responsibilities and work under a brighter spotlight than might be the case at a larger firm.

— with new employees after orientation to answer any remaining questions to make sure they understand their jobs and any relevant policies and practices, and most of all, to let them know they are supported and valued. The onboarding process can include training, scheduled milestones, mentoring programs, and interactive meetings. You can increase a new hire’s chance of success if you—or

the employee’s direct supervisor—meet with him or her at predetermined points, depending on the job’s complexity and changeability.

When small business leaders must assume the roles of both a hiring manager and human resources specialist, they can feel overwhelmed—and out of their depth. But by creating a thorough job description, defining the traits a candidate needs to excel in your organization, and actively monitoring the progress of new employees, you will be better equipped to secure the talent your business needs to compete. Taking a more thoughtful approach to the hiring process also increases the likelihood that the personnel you select will evolve into satisfied employees who will stay with your firm for the long-term. ■

Connie Stamper, CMA, is a branch manager at Robert Half International.



Recommended by 9 out of 10 customers.

“Robert Half has a passion for finding the right person for the role and not just someone to fill a chair. We value their quick response and excellent follow-up.”

Support Project Manager,
Regional Airport Authority



Robert Half®

1.800.803.8367
roberthalf.ca

© 2010 Robert Half. 0610-9005



Inorganic growth

Strategic rationale for a merger or acquisition



By Matt Davies

Most companies update their strategic plan annually. It is during this time that board members and company executives are forced to assess their current situation and confirm, or reaffirm, the future direction of the company. Company executives, as part of the strategic planning process, are forced to realistically evaluate whether or not they can achieve their growth objectives organically. If the executive team determines that the company may have difficulty achieving its growth objectives, then the company may want to consider inorganic growth options such as a merger or an acquisition. There are many reasons for a company to pursue a merger or acquisition. A company may want to protect itself against a new competitor and/or a new technology, or diversify by entering a new geographic region or market.

According to Chris Zook's *Profit from the Core*, many failed growth strategies were a direct result of the wrong diversification away from the company's core business. For this reason, he examined three strategies for leveraging the core business: (1) strengthen and develop the core to its full potential; (2) expand into logical and reinforcing adjacencies;

and (3) a shift or redefinition of the core. As a result, it is often helpful, when considering inorganic options, to consider Zook's classification of growth strategies when explaining the rationale for any M&A activity.

By contrast, the approach presented in the *Blue Ocean Strategy* by W. Chan Kim and Renée Mauborgne, which does not specifically

Whether you consider Zook's approach or Kim and Mauborgne's blue ocean approach, it remains important for company executives to be able to clearly articulate their vision and the strategic rationale for any M&A activity. Here is a summary of some of the reasons companies consider a merger or acquisition:

- To defend their competitive position within a market segment or at a particular customer.
- To diversify into a new market and/or geographic region.
- To gain access to new customers and/or partners.
- To acquire new and/or complementary products or services.
- To acquire new expertise or capabilities.
- To accelerate time to market (for a product and/or service).
- To improve the company's rate of innovation either by acquiring new technology and/or intellectual property.
- To gain control over a supplier (backwards integration).
- To position the company to benefit from industry consolidation.



focus on M&A activity, recommends that companies create “blue oceans” or uncontested market spaces to create profitable growth. As a result, the blue ocean strategy, when considered in an M&A context, could suggest that a company looks to make a strategic move through acquisition by moving beyond their core business. Their approach suggests looking beyond conventional boundaries to create a blue ocean. For inorganic growth, companies could investigate looking across alternative industries and/or strategic groups within their industry to identify potential candidates which could provide a greater opportunity for profitable growth.

Once the strategic rationale has been defined, the company can then begin to focus on identifying the right candidates (or target companies) to satisfy the

The due diligence process provides an opportunity to assess and confirm whether or not the target company satisfies both the strategic rationale and the growth objectives.

company’s growth objectives. There are factors to consider to help narrow down the list of potential candidates: revenue, market share, geographic location and target markets, key customers and partners, product/service portfolio fit, technology, intellectual property, and, if possible, cultural fit. Although not an exhaustive list, the aforementioned factors provide a preliminary filter to narrow down the list of potential candidates to a “short” list of preferred candidates. Once the preferred candidates have been identified the



Certified Management Accountants™



The Conference Board of Canada
Insights You Can Count On



CMA's Make Great Board Members!

As one of the sponsors of The Directors College, the Certified Management Accountants support this university accredited corporate director development program that leads to the professional designation Chartered Director.

The biggest asset of this program is its intensity and comprehensive nature, with experienced faculty members delivering broad and deep insights in interactive sessions.

What sets this program apart from other corporate director development programs?

- ◆ **Flexibility**—You select the schedule, setting your own timetable.
- ◆ **Off-site location**—A residential learning experience away from the office encourages enhanced learning and gives you more time to work, study, and network.

Special Offer for CMA Professionals
Save 10 per cent on the registration fee for Directors College programs.

The time for good governance is now. The place is The Directors College.

For more information or to enrol, go to www.thedirectorscollege.com or call 1-866-372-1778.



company can review the preferred candidates with the objective being to eventually rank the candidates and ultimately select a target company.

Contacting the target company (either directly or through an intermediary) would be the next step in the process to determine if a merger or acquisition is actionable. Assuming that the target company was interested, the acquiring company would then begin due diligence. The due diligence process provides an opportunity to assess and confirm whether or not the target company satisfies both the strategic rationale and the growth objectives. It is also important for the acquiring company to gather information on recent comparable transactions in advance of negotiating a deal.

Companies will always need to balance organic growth against inorganic growth options.

In some cases, after due diligence, the acquiring company may decide not to proceed with the merger or acquisition. However, if the company does decide to move ahead with the target candidate the focus shifts to negotiating and structuring a deal. During the negotiations, the acquiring company may decide to share its strategic rationale for the deal with the target company in order to facilitate a deal and to align the future direction of the combined company.

Upon completion of a deal, it will remain important for the acquiring company, throughout the integration process, to remind the integration team of the strategic rationale for the deal to ensure that every integration activity is focused on capturing the pre-deal synergies and maximizing the benefit for all stakeholders.

Companies will always need to balance organic growth against inorganic growth options. Moreover, once a company decides to pursue a merger and/or an acquisition it remains important for the company's executives to clearly articulate the strategic rationale for the deal and select the right target, at the right price, to maximize the likelihood of hitting their company's growth objectives. ■

Matt Davies, CMC, FLMI, is the vice-president of corporate development at a global technology company. He is a graduate from the University of Ottawa and has also attended The Wharton School's executive education program for mergers and acquisitions. Matt has held various management positions at Akara Corporation, Deloitte Consulting, and Andersen Consulting.

Selection criteria

Geographic

- Supports entry to new geographies — global expansion
- Proximity to existing offices/locations
- Cross border M&A considerations

Financial

- Revenue/margin (company size)
- Proximity to existing offices/locations
- Revenue synergies/cost-saving opportunities
- Tax benefits

Industry/Market

- Supports entry to new markets
- Targets a growth market
- Positions company for industry consolidation
- Supports ability to maintain/increase market share

Customers/Partners

- Access to new customers and/or channel/technology partners
- Reinforce existing accounts

Product/Service

- Access to new/complementary products and/or services

Technology/Intellectual Property

- Access to new technology and/or intellectual property

Supply (Backwards integration)

- Gain control over a supplier

Human resource

- Cultural fit
- Access to new skills/expertise



**Certified
Management
Accountants™**

Create Possibilities.™

Being creative is not just about being original, innovative and imaginative. It's about employing blue-sky thinking to ensure that organizations remain relevant and competitive in today's economic environment. CMAs create possibilities in diverse and exciting industries using their unique skill set of accounting, management and strategy.

Expand your hiring reach to over 40,000 qualified CMAs and 10,000 CMA students. The Employment Connection aims to bring the brightest CMA candidates together with the best employment opportunities.

CMA Employment Connection
www.cma-canada.org/employmentconnection

Employer Benefits:

- Reduce your costs and time to hire
- Access our resume database of over 12,000 CMA professionals
- Post jobs confidentially, if required
- Manage your postings and applicants from the same location

Job Seeker Benefits:

- Complete confidentiality over your personal information
- Access jobs at top employers
- Store up to 3 unique career profiles
- Customize job agents to alert you of new postings







Sometimes it pays to procrastinate

Using an inventory postponement strategy to balance supply and demand

By David M. Bukovinsky and Gregory A. Graman

Walk into any store that sells house paint and two things become apparent. The number of available colours seems to be growing exponentially, and the colours are not mixed until the customer orders a specific colour. Paint retailers have long known that postponing the completion of the product is an effective way of controlling costs when there is great uncertainty in demand. Completing the product only as it is demanded, and completing it as near to the customer as possible, can reduce inventory holding costs and stockout costs.

Postponement vs. make-to-stock and make-to-order strategies

The make-to-stock model in which a company manufactures a variety of products in sufficient quantities to meet anticipated customer demands seeks to minimize stockout costs. Production usually takes place in one or a few centralized plants, allowing for economies of scale, and the finished inventory is held or sent to distribution centres where it awaits customer orders. The drawbacks are the high carrying costs associated with this strategy and the potential for large amounts of unsold inventory.

The make-to-order, or just-in-time model seeks to minimize carrying costs by manufacturing products only after orders have been received. This model reduces forecast risk by minimizing the dependency on forecasting. The primary benefit is the reduced risk of unsold products, but at the risk of increased stockout costs associated with limited amounts of finished goods that can be quickly shipped to customers. Manufacturing to order also gives up some of the benefits of mass

production since goods are often produced in smaller batch sizes with more customization.

The postponement strategy falls between the make-to-stock and make-to-order models by delaying as many of the processes that differentiate products for as long as possible. This allows the manufacturer to mass produce work in process, but delay completion until customer orders are received. Therefore, some tradeoffs of costs are inevitable. The potential benefits, as well as the potential costs, depend on the form of postponement employed.

Offshore postponement also has its drawbacks. Labor may be cheaper, but finding sufficient workers with required skill levels may be difficult.

In labelling postponement, goods are completed except for labeling. The primary benefit of labelling postponement is the reduction in finished goods inventory that needs to be maintained. The manufacturer only needs a small safety stock of “generic” unlabelled product instead of stocks of each brand that the product is sold under. The advantages to this method include reduced risk of unsold goods resulting from over-forecasting demand, faster response time as goods only need to be labelled as opposed to being produced from scratch, and less rework related to unlabelling and relabelling products when one brand is over-forecast and another is under-forecast. The disadvantages include increased manufacturing cost and complexity as labelling is no longer an integral part of the production process. Instead, goods must be temporarily stored then moved to the labelling process when needed, thereby increasing handling and reducing efficiency. This problem is compounded if labelling is performed at decentralized locations, requiring duplication of the process at each location. Other disadvantages include stockout cost and slower response time. The lack of pre-labelled goods means customer orders cannot be immediately filled from stock. The resulting delay may or may not be significant to the customer.

Packaging postponement, in which goods are completed, but not packaged, has the potential for even greater cost savings. Errors in forecasting demand for different package sizes and brands are avoided and inventory carrying costs are reduced because the product is stored in bulk until the demand for the various package sizes is known. This results in reduced space requirements and reduced shipping charges since the product can be shipped in its bulk form to distribution centres near the customers and packaged at that point. As with labelling postponement, disadvantages include interrupting the

manufacturing process to store or ship bulk product, then resuming the process to package and label the product, lost economies of scale if multiple packaging facilities are used, and increased time to fill orders compared to a make-to-stock system.

Assembly postponement delays intermediate or final assembly processes until orders are received. The advantages and disadvantages are similar to those of labelling and packaging postponement—carrying costs, stockout costs, etc. Long lead times for assembly may result in lost orders, while in other cases, response time may be reduced, particularly if final assembly is performed near the customer as opposed to a distant centralized assembly facility because the time required for assembly is offset by reduced time needed to ship the product to the customer. Decentralized final assembly points provide quick response time, but they also incur additional costs due to duplication of equipment and effort, loss of economies of scale, etc. Transportation costs may also be reduced when decentralized facilities are used since shipping unassembled components to decentralized assembly/distribution points is usually less expensive than shipping completed products to customers.

Manufacturing postponement derives the greatest benefit when ubiquitous materials and decentralized facilities close to customers are involved. The primary savings are in transportation and storage of materials and finished products. Locally available materials reduce the transportation of materials and need to stockpile large amounts, and proximity to customers reduces the shipping distance of finished goods. As with assembly postponement, foregone economies of scale give rise to increased manufacturing costs as smaller lot sizes are manufactured at numerous locations.

Implementation of a postponement strategy requires substantial up-front costs, the extent of which is determined by the extent of postponement. These may include costs related to changes in product design, production facilities, supplier and distribution networks, etc. The cost of these modifications may be significant or even prohibitive in light of the potential benefits.

Offshoring considerations

The world-wide distribution of products increases the opportunities for postponement. The risk of forecasting errors increases as companies respond to country-specific demands for foreign language labelling, local content, etc. Longer distribution channels increase the cost of balancing inventory supplies by shipping products from over-supplied markets to under-supplied ones. An effective postponement strategy can alleviate some of these problems.

Shipment of generic or bulk products to foreign

markets, with labelling or packaging occurring once the local demand is known, reduces the risk of forecasting errors since the manufacturer does not “localize” the product with manuals, power supplies, etc. until the final destination is known.

Postponement to offshore locations can result in numerous cost savings, with labor cost being the most commonly cited. North American companies, in particular, find that labor in foreign markets is significantly cheaper than in the domestic market. Transportation costs can be reduced because bulk products or components can frequently be shipped in smaller physical volumes than finished products. Even greater savings are possible if materials are sourced in or near the destination country. Unfinished products or components may also be subject to lower import duties than finished products, and manufacturing or assembly in the destination country aids in compliance with local content laws.

Offshore postponement also has its drawbacks. Labour may be cheaper, but finding sufficient workers with required skill levels may be difficult. Significant costs may be incurred to establish offshore facilities for product completion, and decentralized operations tend to be more costly to administer, especially in foreign countries. One final, difficult to quantify cost is the impact on company reputation of sending “local” jobs overseas.

Is a postponement strategy right for your company?

A postponement strategy is not right for every company, nor is each type of postponement applicable to companies that do adopt a postponement strategy.

Bibliography/additional resources

Lee, Hau and Corey Billington, “Designing Products and Processes for Postponement,” in S. Dasu and C. Eastman (Eds.) *Management of Design: Engineering and Management Perspectives*, Kluwer Academic Publishers, Norwell, Massachusetts, (1994), 105-122.

Zinn, Walter, “Should You Assemble Products Before an Order is Received?” *Business Horizons*. 33 (1990), 70-73.

Zinn, Walter and Donald J. Bowersox, “Planning Physical Distribution with the Principle of Postponement,” *Journal of Business Logistics*. 9 (1988), 117-136.

Uncertainty of demand is the overriding determinant of the need for a postponement strategy. Uncertainty increases the risk of stockouts, and attempting to compensate by producing large amounts of inventory results in large holding costs. Inventory value should also be considered. High value products may benefit more from a postponement strategy than low value products.

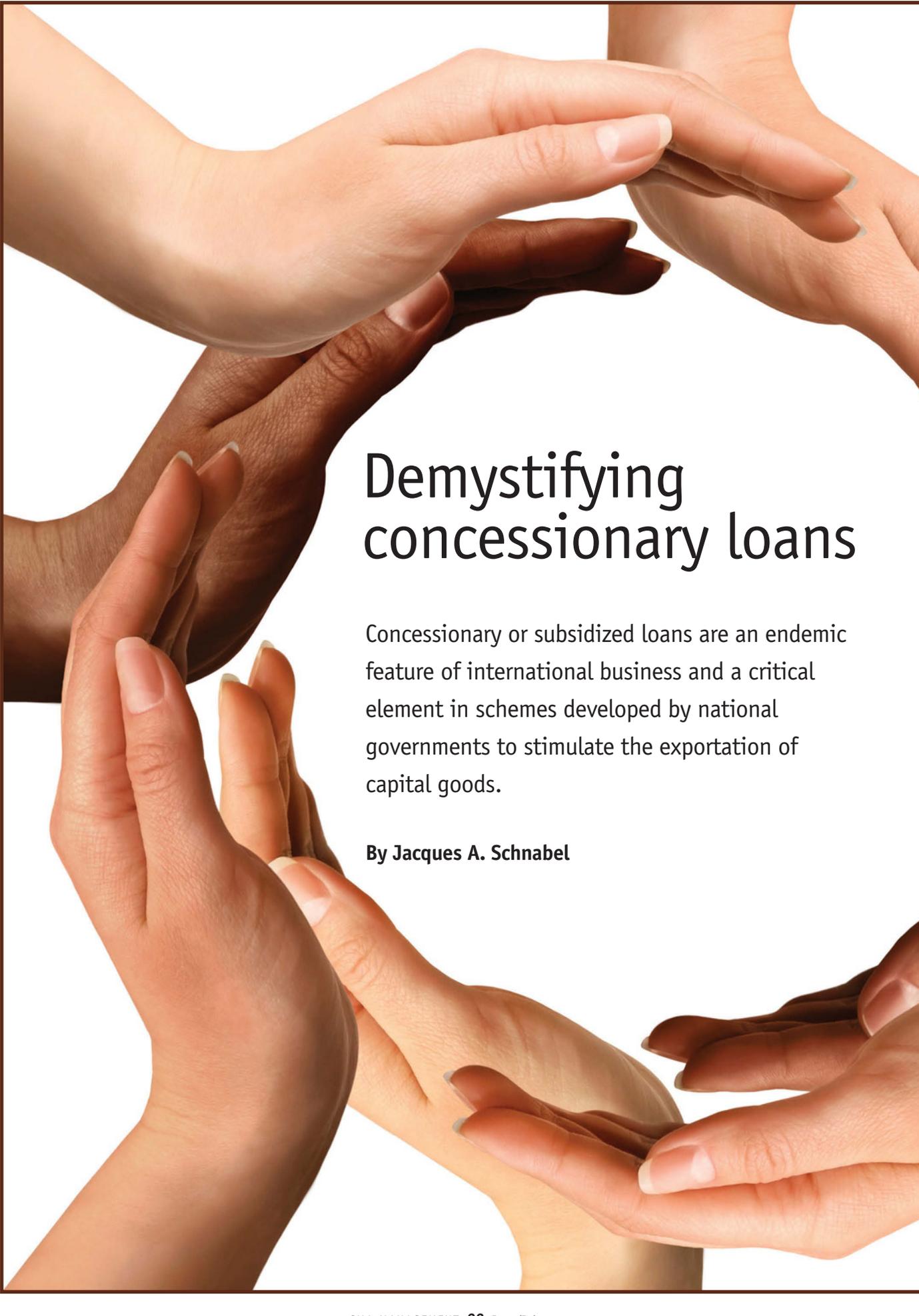
Labelling postponement may be appropriate for firms that sell products under several different brand names, in different countries where language is an issue, or that experience high sales fluctuations between brands. Packaging postponement is best utilized when the product is sold in several different package sizes and the sales fluctuations of the different sizes makes forecasting difficult.

Labelling postponement may be appropriate for firms that sell products under several different brand names, in different countries where language is an issue, or that experience high sales fluctuations between brands.

Assembly postponement may benefit companies manufacturing goods which share a number of common components, but are differentiated during the final assembly process, or when the assembled product is much bulkier than the unassembled components. Products made from ubiquitous materials or which are too bulky or costly to ship are candidates for manufacturing postponement. Acquiring the materials and manufacturing the product near the customer is more cost effective than shipping finished products.

Manufacturers attempt to balance inventory holding costs and stockout costs, a problem compounded when forecasting customer demand is difficult. Postponement strategies allow manufacturers to defer the completion of work in process inventory until demand for the individual finished products becomes clear. While this strategy involves foregoing economies of scale in exchange for certain diseconomies of scope, careful application can result in significant cost savings and better response to customer needs. ■

David M. Bukovinsky, PhD., CPA (inactive) is associate professor, department of accountancy, Raj Sooin College of Business, Wright State University. Gregory A. Graman, PhD, is assistant professor of operations management, School of Business and Economics, Michigan Technological University.



Demystifying concessionary loans

Concessionary or subsidized loans are an endemic feature of international business and a critical element in schemes developed by national governments to stimulate the exportation of capital goods.

By Jacques A. Schnabel



In August 2009, the Canadian government's provision of \$173 million in subsidized financing to the Scandinavian Airlines System (SAS) via Export Development Canada for the purchase of eight aircrafts produced by the Canadian airplane manufacturer Bombardier Inc illustrates how the attractiveness and availability of concessionary loans has formed the basis of a decade-long international trade subsidy dispute between Bombardier and its main rival in the regional jet market, namely Embraer (Empresa Brasileira de Aeronáutica SA). Many other national governments provide similar types of subsidized financing via their export promotion agencies, e.g., the U.S. Export-Import Bank, the Japanese Export-Import Bank, the Australian government's Export Finance and Insurance Corporation, and the French COFACE (Compagnie Française d'Assurance pour le Commerce Extérieur).

In the wake of the subprime-mortgage financial crisis, subsidized loans have become an important measure employed by governments to provide a fiscal stimulus to their ravaged economies. A case in point is the Canadian government's provision of such loans in 2009 via its Canada Account to General Motors, Chrysler, and Air Canada. Similar loans, but on a much smaller scale, are being offered to Canada's hog farmers by the federal government to ameliorate the battering the industry has recently experienced from the steep rise in the Canadian dollar, the new U.S. country-of-origin labelling rules, and the "swine flu" virus.

In the realm of international development assistance, concessionary loans play a critical role. Although Canadian firms are unlikely to obtain directly such loans, they may be involved in consortia that are recipients of such financing.

A metric called the NPVcl or net present value of the concessionary loan addresses how to measure the wealth created for the firm's owners as a result of receiving a concessionary loan. It is a refinement of the well-known net present value (NPV) criterion designed for the evaluation of capital budgeting proposals, which measures the gain in the firm's market value that results from undertaking a venture. However, whereas NPV's focus is on investments, that of NPVcl is on financing opportunities.

NPVcl is applied initially to subsidized financing that is denominated in Canadian dollars or the borrowing firm's domestic currency and subsequently to subsidized loans denominated in a foreign currency. Loans that entail different repayment structures are likewise considered.

A metric for value creation from a concessionary loan

All loans require the payment of interest and the repayment of principal, the sum of which is referred to as the loan's debt-service payment. While interest payments are a tax-deductible expense, principal repayments are not.

NPVcl refers to the present value of the difference between two streams of debt-service payments associated with obtaining S amount of initial financing. It is the present value of the after-tax debt-service payments associated with obtaining S from the firm's usual, unsubsidized source that charges an interest rate of R_u minus the after-tax debt-service payments associated with obtaining S from the firm's subsidized source that charges a concessionary interest rate of R_c . All present value calculations employ R_u as discount rate.

Define U as the amount of financing the firm would have elicited from

its unsubsidized source of debt financing (say, its banker) had it offered that unsubsidized source the same debt service payments as its concessionary loan. The value of U can be obtained by calculating the present value of the concessionary loan's debt service payments employing R_u as discount rate. Finally, denote as PVITSL the present value of interest tax shields lost by the firm because it accesses a subsidized loan that charges a lower interest rate rather than an unsubsidized loan that charges a higher interest rate. In other words, since interest payments are less, the tax savings from claiming interest payments as tax-deductible expenses are thereby reduced.

It is easy to show that NPVcl may be interpreted as the sum of two effects, namely, the initial period effect measured by (S-U) and the subsequent period effect measured by PVITSL. The initial period effect measures the extra debt financing elicited by the firm when the loan is initiated because it accesses a subsidized source rather than an unsubsidized source, holding constant the stream of debt-service payments. The subsequent period effect measures the present value of the interest tax saving lost after the concessionary loan is initiated.

The preceding discussion suggests that the following equation captures the metric for value-added to the borrower of a concessionary loan.

$$NPVcl = (S-U) - PVITSL \quad (1)$$

The next three sections present numerical illustrations of this formula for loans that are structured in a variety of ways. A loan denominated in Canadian dollars that requires that the principal be repaid in equal annual installments is first considered. Then a loan denominated in British pounds sterling that requires equal annual debt-service payments is analyzed.

A Canadian dollar concessionary loan

Consider a Canadian firm that obtains \$1,000,000 in debt financing at a concessionary rate of six per cent, which is two percentage points less than its usual, unsubsidized rate of eight

per cent. The loan stipulates that the principal be repaid in equal annual installments over a four-year period. The firm's tax rate is 40 per cent.

The debt-service payments associated with this subsidized loan are reflected in Table 1.

The amount of financing obtained or S is \$1,000,000. U or the amount of unsubsidized financing that would have been obtained had the firm offered the stream of debt-service payments given in the last column of the table to its unsubsidized source is merely the present value of those debt-service payments employing a discount rate of eight per cent, the firm's unsubsidized cost of debt. U equals \$957,008. The initial period effect of this concessionary loan equals \$42,992, e.g., the firm is able to obtain \$42,992 more in debt financing because of its access to a subsidized source.

To calculate the PVITSL, the debt-service payments associated with obtaining \$1,000,000 in unsubsidized debt financing that reflects an interest rate of eight per cent are required. These are provided in Table 2.

The differences in interest payments between the concessionary loan and the unsubsidized loan are shown in Table 3.

Year	Difference in Interest Payment
1	20,000
2	15,000
3	10,000
4	5,000

Discounting to the present these differences in interest payments at eight per cent and then multiplying the resulting present values by the 40 per cent tax rate, the present value of the interest tax shields lost as a result of the concessionary loan is calculated as $PVITSL = \$17,197$. Employing equation (1), the value created from this concessionary loan or NPVcl equals $\$42,992 - \$17,197$ or $\$25,795$.

Year	Principal at Start	Principal Repayment	Interest Payment	Debt-Service Payment
1	1,000,000	250,000	60,000	310,000
2	750,000	250,000	45,000	295,000
3	500,000	250,000	30,000	280,000
4	250,000	250,000	15,000	265,000

Year	Principal at Start	Principal Repayment	Interest Payment	Debt-Service Payment
1	1,000,000	250,000	80,000	330,000
2	750,000	250,000	60,000	310,000
3	500,000	250,000	40,000	290,000
4	250,000	250,000	20,000	270,000

Foreign-currency concessionary loan: Analysis in the foreign currency

Whereas the previous section dealt with a concessionary loan denominated in domestic currency, e.g., Canadian dollars, this and the subsequent sections deal with a concessionary loan denominated in a foreign currency. Consider the same Canadian firm described in the previous section, but this time assume that the firm is able to access a British pound sterling loan (denoted £) with principal amount of £ 600,000 at a concessional interest rate of seven per cent. In contrast to the loan considered in the previous section, this loan stipulates the annual debt-service payments will be constant over the four-year life of the loan. What is the value created for the firm's owners as a result of obtaining this loan?

One approach to answering the question is to first determine NPVcl as in the previous section, with all calculations denominated in £s. Then the resulting NPVcl in £s is converted into NPVcl in Canadian dollars.

A critical parameter that must be estimated at the outset is the firm's unsubsidized cost of debt or R_u denominated in £s, as this is the discount rate employed in the present value calculations. In this regard, the firm in question may have to query its bankers for advice. Alternatively, the firm may infer what its R_u in £s would be from its R_u denominated in Canadian dollars, e.g., eight per cent from the previous section, and the notion that financial markets would rationally require the same real rate-of-return, e.g., the rate-of-return with inflation removed, from the firm's borrowings in different currencies. Such a notion is referred to in International Finance as Real Interest Parity. Assume that the Canadian inflation rate is two per cent whereas the British inflation rate is three per cent. Applying the real interest parity relationship, the following equation is solved for the unknown parameter X , the firm's inferred unsubsidized cost of debt financing denominated in £s.

The quantity on the left-hand side of equation (2) is one plus the real rate-of-return on unsubsidized Canadian dollar

$$\frac{1 + 8\%}{1 + 2\%} = \frac{1 + X}{1 + 3\%} \quad (2)$$

Year	Principal at Start	Principal Repayment	Interest Payment	Debt-Service Payment
1	£600,000	£135,137	£42,000	£177,137
2	£464,863	£144,596	£32,540	£177,137
3	£320,267	£154,718	£22,419	£177,137
4	£165,548	£165,548	£11,588	£177,137

Year	Principal at Start	Principal Repayment	Interest Payment	Debt-Service Payment
1	£600,000	£131,087	£54,353	£185,440
2	£468,913	£142,962	£42,478	£185,440
3	£325,950	£155,913	£29,527	£185,440
4	£170,037	£170,037	£15,403	£185,440

borrowings whereas the right-hand side expression equals one plus the firm's unknown real cost of unsubsidized financing in £s. Solving equation (2) for the unknown parameter, the firm's R_u denominated in £s, is found to have a value of 9.1 per cent, which is the discount rate that will be employed in all present value calculations performed in this section.

The debt-service payments associated with this concessionary loan are provided in Table 4.

Whereas S , the amount of financing obtained, equals £ 600,000, U , the present value of the debt-service payments detailed in the last column of the table discounted to the present at an interest of 9.1 per cent, equals £ 573,134. The latter figure represents the amount of financing the firm would have elicited from a bank that charges the firm the unsubsidized interest rate in £ of 9.1 per cent were the firm to offer the same debt-service payments. Thus, the extra financing obtained by the firm or the initial period effect of this concessionary loan is £ (600,000 – 573,134) or £ 26,866.

Turn now to the subsequent period effect of the concessionary loan or the present value of the interest tax shields lost, e.g., PVITSL. As in the previous section, the debt-service payments on an unsubsidized loan must first be generated. These are given in Table 5.

The annual differences in interest payments between the subsidized and the unsubsidized loans are thus provided in Table 6.

Year	Difference in Interest Payments
1	£12,353
2	£9,938
3	£7,109
4	£3,815

The present value of the interest tax shields lost as a result of obtaining the concessionary loan is the present value, discounted at 9.1 per cent of these differences in interest payments multiplied by the firm's 40 per cent tax rate. PVITSL equals £ 11,144. NPVcl denominated in £s equals

the initial period effect of £26,866 minus the subsequent period effect of £11,144 or £15,723.

To convert NPVcl denominated in £s to NPVcl in Canadian dollars, simply multiply the former by the current spot rate, which equaled \$ 1.179 per £ on the date this article was written. The British pound sterling denominated concessionary loan's NPVcl in Canadian dollars equals \$18,531.

Foreign-currency concessionary loan: Analysis in Canadian Dollars

An alternative approach to assessing the value created by a concessionary loan denominated in a foreign currency involves converting all the foreign currency debt-service payments to Canadian dollars and then using the six per cent Canadian dollar unsubsidized cost of debt to discount all cash flows. Under certain conditions, the resulting NPVcl measured in Canadian dollars of the concessionary loan will equal the same figure of \$18,531 arrived at in the previous section.

The requirement to ensure consistency of these two approaches to calculating the NPVcl in Canadian dollars of a foreign currency denominated loan is that the foreign currency forecasts satisfy what is known in International Finance as Purchasing Power Parity. This theory is based on the intuitive notion that high inflation currencies tend to depreciate with respect to low inflation currencies.

For the specific situation considered here where the Canadian inflation rate equals two per cent and the British inflation rate equals three per cent, the exchange rates or values of the £ projected for years $t = 1, 2, 3,$ and 4 are generated via the Purchasing Power Parity expression:

$$1.179 \left(\frac{1.02}{1.03} \right)^t$$

The specific exchange rate projections are given in Table 7.

Applying these exchange rate projections to the subsidized loan interest payments and debt-service payments provided earlier, the following Canadian dollars cash flows required to service the concessionary loan are calculated (Table 8).

Year	Projected value of £ in Canadian dollars
0	1.179
1	1.167
2	1.156
3	1.145
4	1.133

In Canadian dollars, the £600,000 of financing provided by the concessionary loan equals \$707,160 at the quoted current exchange rate of \$1.179 per £. U equals the present value of the concessionary loan's debt-service payments given in \$s, as provided in the last column of the table, discounted at 8 per cent. The resulting value of U equals \$675,495. The initial

Table 8

Year	Interest Payment in \$s	Debt-Service Payment in \$s
1	49,021	206,747
2	37,611	204,739
3	25,660	202,752
4	13,135	200,783

period effect of the concessionary loan equals \$(707,160-675,495) or \$31,665.

To calculate the subsequent period effect or PVITSL, the interest payments of the unsubsidized loan, previously given in £s are converted into \$s using the same exchange rate forecasts provided earlier. This results in Table 9 of interest payments associated with the unsubsidized loan.

Table 9

Year	Interest Payment in \$s
1	63,438
2	49,097
3	33,797
4	17,460

Calculating the annual differences in interest payments between the unsubsidized loan and the subsidized loan, Table 10 is obtained.

Table 10

Year	Difference in Interest Payments in \$s
1	14,418
2	11,486
3	8,137
4	4,324

PVITSL is the present value of these annual differences in interest payments given in \$s using the unsubsidized Canadian dollar interest rate of eight per cent as discount rate. This calculation yields a PVITSL of \$13,134.

NPVcl denominated in \$s is again generated by subtracting the subsequent period effect or PVITSL value of \$13,134 from the initial period effect or (U-S) value of \$31,665. The resulting NPVcl denominated in \$s equals \$18,531, which is identical to the NPVcl number generated earlier by analyzing the £ denominated cash flows rather than the Canadian dollar cash flows.

To summarize this and the previous section, if a firm were to receive a concessionary loan denominated in a foreign currency two protocols for calculating the value-added

Concessionary or subsidized loans provide the borrower an interest rate discount, so that instead of paying its usual, unsubsidized rate of R_u , the debtor pays a lower concessionary rate of R_c .

provided by such a loan may be applied. One approach entails conducting all the analysis in the foreign currency to derive the NPVcl denominated in that foreign currency. The final step involves translating that NPVcl into domestic currency, e.g., Canadian dollars, by applying the current exchange rate. A second approach entails translating all the foreign currency debt-service cash flows into Canadian dollars and then discounting the latter to the present to derive the NPVcl in Canadian dollars. These two methods yield the same NPVcl in Canadian dollars if two international financial parity relationships that are based on intuitively appealing notions, namely real interest parity and purchasing power parity. The first parity relationship is based on the view that the firm's cost of debt when stripped of the effect of inflation should be the same regardless of the currency in which the firm's debt is denominated. The second parity relationship is based on the idea that a higher inflation currency will depreciate vis-à-vis a lower inflation currency.

The preceding examples provide a metric for determining the value-added created by a concessionary loan for the loan's recipient, namely NPVcl or the net present value of the concessionary loan. The NPVcl was shown to be comprised of two parts, the initial period effect that measures the extra financing provided by the concessionary loan over an unsubsidized loan that requires the same debt-service payments, and the subsequent period effect that measures the interest tax savings lost because the interest payments of a concessionary loan are less than those of a subsidized loan. To illustrate its versatility, the metric was applied to loans that entail different debt-service payment structures which are Canadian dollar denominated as well as foreign currency denominated. ■

Dr. Jacques A. Schnabel is a professor of business (finance) at the school of business and economics at Wilfrid Laurier University in Waterloo, Ont.

Readers should note that, because the loans are analyzed employing Excel spreadsheets in which computations are exactly correct, the calculations reported in this article, which have been rounded off, are subject to potential approximation errors.

**WELLS
FARGO**

One strong team, ready to work with you

Introducing Wells Fargo Capital Finance in Canada

Wachovia is now a part of Wells Fargo. Together, we're making it easier for Canadian companies to find innovative, flexible financing by bringing together our Canadian businesses under a new name.

Wells Fargo Foothill Canada, Wells Fargo Business Credit Canada, and Wachovia Capital Finance Corporation (Canada) have teamed up as:

Wells Fargo Capital Finance

By bringing these businesses together, we're better positioned to help companies across Canada secure the financing they need to reach their short- and long-term business goals. From traditional asset-based lending and accounts receivable financing to customized lending for industry- and situation-specific needs, we'll work with you to provide tailor-made financing that can grow and change with your business.

Find out more about how we can work with you today.

Wells Fargo Capital Finance

1-800-626-2805
wellsfargocapitalfinance.ca

Together we'll go far



© 2010 Wells Fargo Capital Finance. All rights reserved. Wells Fargo Capital Finance is the trade name for certain asset-based lending, accounts receivable and purchase order finance services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, N.A.; Wells Fargo Business Credit, a division of Wells Fargo Bank, N.A.; Wells Fargo Credit, Inc.; Wells Fargo Distribution Finance, LLC; Wells Fargo Capital Finance, Inc.; Wells Fargo Capital Finance, LLC; Wells Fargo Retail Finance, LLC; Wells Fargo Retail Finance II, LLC; Wells Fargo Trade Capital, LLC; Wells Fargo Trade Capital Services, Inc.; Wachovia Capital Finance Corporation (Central); Wachovia Capital Finance Corporation (New England); Wachovia Capital Finance Corporation (Western); and Wells Fargo Capital Finance Corporation Canada. Wells Fargo Capital Finance Corporation Canada (also doing business in Quebec as Société de financement Wells Fargo Capital Canada) is an affiliate of Wells Fargo & Company, a company that is not regulated in Canada as a financial institution, a bank holding company or an insurance company.



The better way to measure

Environmental costs represent a large portion of costs incurred by companies. The first challenge is how to define them.

environmental costs

Today, the importance of the environment is widely recognized by companies. With an increase in environmental legislation, corporations realize that they have to factor the environment into their everyday management decisions. However, because some corporations are too focused on earnings and financial costs, the impact of their operations on the environment can only be taken into account if it is quantified in dollar terms — this is significant since environmental costs are often grossly underestimated. According to a 2006 Statistics Canada study, Canadian firms are estimated to have spent a total of \$8.6 billion on environmental protection, including 44 per cent for capital expenditures and 56 per cent for operating expenditures. This underestimation is due to widespread “hidden” costs. In a study published in 2001¹, U.S. researchers revealed that for every dollar of environmental costs identified as such by companies, there were hidden environmental costs of \$10. Companies can’t manage what they can’t measure; therefore, they need to measure their environmental costs in order to manage and reduce them; or perhaps, turn environmental management into a strategic advantage.

What to include in environmental costs

The first challenge is how to define environmental costs. One solution is to use a classification developed by the United States Environmental Protection Agency in 1995. This classification makes a distinction between internal costs

(borne by a company) and external costs (assumed by society as a whole, but generated by the company’s operations). Internal costs include conventional costs (e.g., direct and indirect materials, energy, etc.), potentially hidden costs (e.g., site investigation and preparation, audit, disclosure of information, follow-up of data, etc.), potential costs (e.g., penalties, fines, legal fees, etc.) and costs related to corporate image and relationships (e.g., reputation, campaign to influence perceptions, etc.). Moreover, external costs refer to environmental degradation and to adverse impacts for human beings, their property and their welfare. There is a debate about whether or not external costs should be part of corporate cost management. However, more stringent regulations in terms of environmental liability are increasingly internalizing costs that have heretofore been considered external. This distinction between internal and external costs is crucial to measuring environmental costs.

Life-cycle costing, environmental balance, full-cost accounting, total-cost accounting and activity-based costing are costing methods used by companies. These methods are not mutually exclusive and a number of parameters are common to several methods.

Life-cycle costing

Life-cycle costing is based on a more global approach of life-cycle analysis. There are two major methods based on a product’s life cycle, e.g. from research and development to disposal (the “cradle to grave” approach) or its reuse/

recycling by the producer (the “cradle to cradle” or C2C approach), taking into account factors such as transportation. Life-cycle analysis, a method recognized by ISO 14000 standards, consists in analyzing each and every flow of input and output materials for each product. More specifically, in environmental terms, this approach analyzes the actual and potential impacts of these flows on the environment. As such, it includes three stages: (i) an inventory of all flows related to energy, water, raw materials, air and emissions; (ii) a follow-up of the qualitative or quantitative measure of the induced environmental impact; and (iii) an interpretation of the results and an assessment of opportunities for reducing environmental impacts. This approach only makes it possible to include environmental impacts, and not environmental costs.

There is a debate about whether or not external costs should be part of corporate cost management.

Life-cycle costing recognizes the environmental costs generated by a company throughout a product’s life cycle, using two types of analysis jointly (on a weighted or unweighted basis) or individually: (i) the financial life-cycle cost that discounts monetary impacts from the environment to the firm, and (ii) the environmental life-cycle cost that monetizes all environmental impacts that were identified during the life-cycle analysis, e.g., impaired resources. Life-cycle costing demonstrates that costs can be several times higher than investments over a product’s life cycle. This makes life-cycle costing especially relevant for products with a long lifespan or with relatively high operating costs, such as real estate and highways. In addition, the discounting of costs, e.g. the recognition of time, makes it possible to compare the costs of two products. However, this advantage may also be the main drawback of this method, as it raises the problem of correctly planning for future costs and selecting an appropriate discount rate. In fact, discounting specific environmental costs is controversial, since environmental impacts increase over time. It is therefore not unusual for costs to be nil today, but exceedingly high a few years from now, which is contrary to the very principle of discounting. Accordingly, discounting environmental costs could lead to minimizing financial interest for projects that reduce future environmental costs.

Moreover, these two methods raise the same problem of uncertainty as to future repercussions. It may be a good idea to use sensitivity analyses, scenarios, and ranges to allow for the probability that certain contingencies will occur. A more meaningful restriction relates to the fact that these methods exclude consideration of all types of

costs. Intangible costs, including those driven by relations with stakeholders, are not considered, nor are contingent costs, since it is not easy to relate such costs to a specific phase in the life-cycle of a product, making it highly improbable that they will be included in life cycle methods.

Environmental balance

The environmental balance method consists in identifying, and then measuring, the flows of inputs and outputs of a firm, a service, a process or a product in terms of energy, water, materials, waste or emissions. It can therefore be used at the inventory stage of the life-cycle analysis or as an initial step of many other methods. The underlying assumption of this method is based on the law of conservation of thermodynamic masses—total inputs are by definition equal to total outputs plus the net accumulation of materials in the system. All inputs become outputs, hence the term “balance.” The part of a flow that actually goes into the production of goods can be used to indicate the percentage loss of materials and, accordingly, the opportunities to improve the production process. Similarly, a large number of environmental performance indicators can be determined from the data produced by an environmental balance. Traditionally, an environmental balance is performed in physical, non-monetary terms (kilograms, kilowatts, etc.). Moreover, a sub-category of environmental balance, called material flow analysis (MFA), allows a company to include an allocation stage of flows to each of its various products.

Two major criticisms have been levelled at the environmental balance method. First, its input/output analyses fail to measure environmental impacts, as they relate strictly to a company’s use of natural resources without regard to their value for the environment. The second major criticism is that this method fails to provide monetary information. However, the value of flows could be estimated in monetary terms if required. In addition, the environmental balance is generally used only as a prerequisite to the use of other methods.

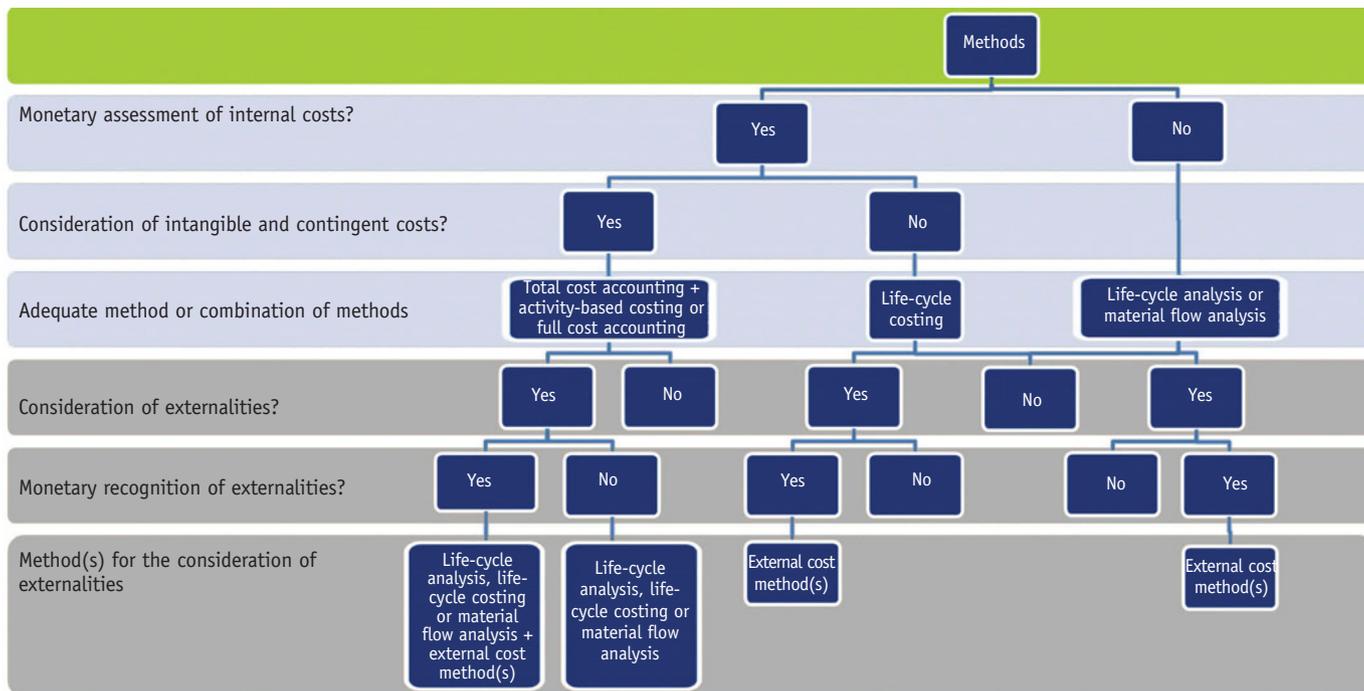
Full-cost accounting

The full cost represents an allocation of all costs to a product (materials, labour, overhead, etc.) including potential and actual environmental costs. With this approach, it is possible to obtain enhanced operational knowledge and to select products with a lower cost (whether it be environmental or not). However, in environmental terms, full cost often refers to a consideration of the monetary value of external costs. This raises the problem of how complex it is to monetize the cost of externalities.

Total-cost assessment

The total-cost assessment method, developed by the Tellus Institute, is similar to full-cost accounting. Whereas

Figure 1 Decision tree for combinations of methods



the latter approach is generally used to measure the cost of products, total-cost assessment is often carried out to measure the cost of capital investments. Additionally, the classification of costs used for a total-cost assessment requires the identification of costs that are specifically related to the environment. The full-cost accounting method deals with all of the costs related to a product, and does not require that environmental costs be identified.

Life cycle costing is based on a more global approach of life cycle analysis.

The major advantage of total-cost assessment is that it includes more of the costs relating to a capital investment or a product than life-cycle costing, e.g. intangible and contingent costs, while still taking the entire life cycle into account. Thus, it measures direct and indirect costs, contingent and intangible costs with due consideration for risks and, accordingly, the related probabilities that they will occur. In addition, external costs can be included in a total-cost assessment, and this method can be applied simply by using software containing a database to assess external costs related to pollutants and compute them according to the probability that they will occur.

Activity-based costing

One of the primary problems with measuring and

managing environmental costs is related to the allocation of such costs to the activities or products that generated them. In fact, many companies treat environmental costs as overhead and don't identify them as related to the environment, which contributes heavily to the underestimation of environmental costs. Activity-based costing can therefore enable a firm to allocate environmental costs to activities, and then to products, overcoming any inaccuracies related to their inclusion in overhead. It should be noted, though, that using this approach requires the prior identification of environmental costs. Activity-based costing can be used the traditional way or by inserting an "environmental" driver to allocate environmental costs either to activities first and products second, or from an "environmental" activity to the products that generate the costs.

How to measure external environmental costs

Although there are several methods to measure external costs, the three major methods are: 1) control costs, 2) restoration costs and 3) damage costs.

1) Control costs

The underlying assumption for this method is that the cost of environmental impacts (including pollution) for a company would be equal to the cost of installing, operating and maintaining technologies that might have enabled the company to avoid such damage to the environment. The logic is based on marginal cost, e.g. the cost of an

additional unit of damage is estimated by the cost that the company would have been required to spend to avoid such damage. This is the most simple method of measuring external costs, and the easiest to justify, as it generates the cost that a company would actually have incurred to avoid the production of externalities or that it will incur in future should regulations require it to reduce the damage that it causes. One way to obtain these costs is to refer to the costs incurred by businesses in countries where regulations are more stringent or to engineering or environmental consultant studies. However, this method does not really estimate the cost of environmental damages, but rather a theoretical value for the company.

In fact, many companies treat environmental costs as overhead and don't identify them as related to the environment, which contributes heavily to the underestimation of environmental costs.

2) Restoration costs

It is also possible to estimate externalities based on the cost of restoration or treatment of the damage that has been caused. For instance, when the Exxon Valdez struck a reef in 1989, the 11 million gallons of oil that were spilled generated over \$1.25 billion in restoration costs. Still, the applicability of this method is restricted by the lack of data on costs incurred by the company and other firms in the industry.

3) Damage costs

This methodology is used to estimate the cost of the damage per se. It includes a number of methods designed to estimate, scientifically or economically, the cost of damages to the environment. The methods include, notably a) the market price method and b) the conditional assessment method.

- a) **Market price method:** The cost is equal to the value of similar goods on the market. One example would be the difference in price between two perfectly identical homes, on perfectly identical lots, one of which is polluted. The difference in the selling price of the two homes (and of all other homes in the vicinity) would constitute, under this method, an estimate of the cost of the pollution-related damage. However, the absence of a market for most environmental assets makes this method hard to apply.
- b) **Conditional assessment method:** This method implies that an affected population is asked directly how much it would be willing to pay (willingness to pay) or to

accept (willingness to avoid) for an improvement or a deterioration in the quality of its environment. The sum of the amounts provided is deemed to represent the cost of the externalities. This method is therefore based on a survey and remains highly subjective.

Selecting methods of measurement

There are a large number of differences between these various methods. Indeed, not all of them make it possible to monetize environmental costs or to consider all types of costs. Similarly, some methods only allow for the identification and/or allocation of environmental costs.

Figure 1 is structured around four issues: (i) willingness to monetize environmental impacts, (ii) consideration of intangible and contingent costs, (iii) consideration of externalities, and (iv) monetary recognition of externalities.

Environmental costs represent an increasingly large portion of the costs incurred by companies (internal costs) and society as a whole (external costs). Several methods exist to measure the costs incurred by companies, including those based on a product's life cycle, environmental balance, full-cost accounting, total-cost accounting and activity-based costing. Moreover, the environmental costs borne by society, but related to a company's operations, can also be taken into consideration using a method such as cost of control, of restoration or of the damage itself. The selection of these methods should be combined with the company's existing methods to avoid excessive costs that relate to a change in method. A cost-benefit analysis on whether to change or modify a cost-management method should be performed. However, it is important to realize that the measurement and management of environmental costs allow companies to allocate such costs to activities and to the products that generated them and, accordingly, to avoid making non-optimal decisions about selling prices, product mix and capital investment. Similarly, they also enable the company to increase stakeholders' awareness of the costs incurred by the company and to encourage management and employees alike to reduce environmental costs. ■

Clémence Rannou is a CMA candidate. Jean-François Henri, PhD., CMA, is a professor at the School of Accounting of Laval University's Faculty of Administration.

1 Joshi, S., Krishnan, R., & Lave, L. (2001). Estimating the hidden costs of environmental regulation. *The Accounting Review*, 76 (2), 171-198.



Finish First with **E-Learning!**

CPLD credits made easy

Take Advantage

FREE courses for CMA members include:

- Strategic Management Certificate
- E-Biz is Good Biz, Level 1
- Privacy Preview
- A Primer on International Trade

Stay Competitive

Access a full range of courses in key topic areas such as:

- Management
- Leadership
- Business functions
- Communications
- Career advancement

Boost Knowledge

Each of these CMA Canada courses qualifies for 9 CPLD credits. Courses developed by CMA Canada include:

- Balanced Scorecard
- Redesigning the Finance Function
- Strategic Cost Management
- Customer Profitability Analysis



**Certified
Management
Accountants™**

Start e-Learning today!
www.cma-canada.org/eLearning

Access is available 24/7 from any Internet connection.
You will need to sign-in with your member ID.



A world of opportunity



After exploring new territories, Rob Harding, CMA, sees the value of having international experience.

By Arda Ocal

M

ost of us have an aspiration to travel in some capacity. Whether it's to popular destinations, across the country or internationally, the desire to explore is there.

For some, that desire is innate—born curious, wanting to discover parts of the world as often as possible. For others, including Rob Harding, CMA, MBA, travel finds you.

Harding is currently the vice-president of finance and CFO of Athabasca Oil Sands Corp., based in Calgary. His career journey starts and ends in the Stampede City, but certainly doesn't remain there for his life's journey. And like the trials and tribulations faced by a world traveler, Harding's career adventure would prove to be just as tumultuous.

"I originally came out of high school not totally sure what I wanted to do," he says. "I was good with numbers and sciences; my father was a banker, so I enrolled in business (at the University of Calgary). The large class environment didn't suit me so I withdrew after a year and a half," Harding recalls.

After joining the Royal Bank as a customer service representative (as a summer student after that first year of university and then continuing part-time), it opened his eyes that he didn't want to follow his father's footsteps. Harding's trainer/mentor at the bank, Connie, later became his wife and it was Connie's brother-in-law, Lyle that first introduced Harding to the CMA designation.

"I had only known about the CA designation," Harding explains. "I explored (the CMA) further and found that I really liked it. It started with a numbers foundation, but went far beyond that into the strategy and visionary part of business. It was for me."

In 1989 Harding switched over to SAIT—Southern Alberta Institute of Technology, and completed a two-year business administration diploma with an accounting major before joining Trimac Transportation in 1991.

He and two others at Trimac decided to enroll in the program—there was one problem with the plan. The other two passed the entrance exam. Harding didn't.

"We had a lot going on with family that year and I missed enrollment by two to three per cent," Harding says. "I think I got a 58 per cent, a passing grade is 60 per cent." I went home, and it was deflating. I started to question if it was truly something I should pursue. My son Nick was around 13 at the time and he said to me 'You can do it, I believe in you.' He had his own challenges in school, needing extra attention. It was truly motivating for me to hear that."

Harding adjusted his strategy, rewrote the CMA Entrance Examination the following year, passed, and obtained his designation in 1996.

The designation opened doors for Harding who then found himself at Fluor Daniel Canada in a management reporting role. While there, he saw the company grow from 400 to 1600 employees, and shrink back down to 300. After four years and a couple of roles, it was time for something new.

"While at Fluor, I became involved with international projects, which were quite interesting to me. But there aren't a lot of accounting positions overseas—and those positions that did exist went to employees from the American headquarters."

One day, while looking through the job postings of a newspaper, he found an accounting opportunity—in Qatar. He jumped at the chance.

"I ran it by Connie and she encouraged me to go for it. There were two jobs available. Of all candidates I ended up coming in third. A couple of weeks later, I received a call and was told that one guy had dropped out, and they asked me if I was still interested."

Harding accepted and in October 1999 he moved to Doha, Qatar to work with RasGas Company Limited as a revenue and cost analyst. Every day his commute was by bus up to project site from Doha, an hour drive through the desert each direction.

Harding and his wife stayed in Qatar for three years and finished life at RasGas as head of project accounting. "Coming back, because I was a direct hire, I wasn't eligible for employment insurance, recruiting firms wouldn't speak to me until I was physically living back in Canada, and I had to give a two-month notice in Qatar," he says. "Basically, I came back to Canada unemployed."

Having that international experience, however, proved to be valuable, as offers from all corners of the world started coming in.

I had a couple of rotation opportunities in Nigeria and other parts of Africa. But one particular offer from Sherritt International really intrigued me.

"I had a couple of rotation opportunities in Nigeria and other parts of Africa. But one particular offer from Sherritt International really intrigued me."

Sherritt International is based in Toronto, with their oil and gas division in Calgary, but has an office in Varadero, Cuba, which is where Harding ended up moving.

"This time, though, I asked for a trip to Cuba first so we could ask the right questions before we moved and feel more comfortable. First we dreamed of sand and warm weather and ended up with Qatar. We learned some lessons and refined our dreams to include greenery, fresh fruits and be closer to home, among other things."

Despite trying to do their due diligence, they still encountered some problems moving to Cuba.

"We didn't ask if we could pay per visit at the hotel gyms—we couldn't as most hotels are all inclusive so unless you are staying there you cannot use the facilities or restaurants," he says. "It took nine months to find a house to rent, despite numerous empty examples throughout the town; we lived in a hotel until then. We had a sea container full of belongings that never left Calgary because Cuban customs wouldn't allow it in. We got to see first hand how their unique political system worked. It was a great working experience with numerous

challenges and learning opportunities. And we also had a lot of fun with the people.”

Through all of his experiences, Harding learned a lot about international business culture, especially while in Cuba.

“I learned about the art of negotiation, and the hierarchy of business culture there. Above you, you are permitted to talk to one or two levels higher than you, nobody higher. Your superior would have to talk to those too high for you to communicate with. It was quite different from what I was used to in both Canada and Qatar.”

I was directly involved with trying to close a large joint venture deal with Petro-China and almost simultaneously working on what became Canada’s largest energy IPO to date.

In June 2004, Harding returned to Canada and joined Total E&P Canada shortly after as controller. He was the third Canadian hired for the French outfit’s expanding Canadian office. He stayed with them until August 2007, seeing the company grow to over 200 employees.

Finally, Harding joined Athabasca in September 2007 as controller. In June 2008 he was promoted to vice-president of finance and CFO, and was involved with the company’s most interesting projects.

“I was directly involved with trying to close a large joint venture deal with Petro-China and almost simultaneously working on what became Canada’s largest energy IPO to date,” Harding explains. “It was quite an interesting time. Our chairman wanted the IPO ready as soon after closing the joint venture as possible. It was a lot of work and we experienced rapid growth both before and during that time. We went from two to 12 people within the finance and administration group alone. At the corporate level we went from 10 employees to 70.”

Harding’s experiences at Total and Athabasca are somewhat similar in that he was tasked with growing the finance, HR and administration functions of rapidly growing organizations in an efficient and practical manner. “Applying the knowledge gained from the CMA program, I first evaluated the culture I was operating within. Where was I likely to gain quick wins and where would I face the most resistance? From there I was able to formulate a high level multi-year plan with milestones along the way.”

His first step was to present the plan to senior management, but also was strategic to ensure that those milestones he felt would be quick wins were presented as

the first on his milestone chart. “Once you get a few quick wins you have momentum and the ability to demonstrate results. From there you try different ways of achieving your end results. Be flexible. Strategy involves creativity and persistence. Each person you deal with has a different personality and values things in different ways. It doesn’t mean you won’t achieve the majority of your plans, it just may mean you have to try a few different approaches to reach success.”

Another thing Harding focuses on is the appropriate strategy for the various stages of company growth.

“When you are a start-up type company, you are going at 120 per cent doing everything from A to Z. As the company transforms to more moderate growth and longer term views, you are able to modify your strategy to the new needs.”

Not only was his professional life across the world, but his continued education spanned the globe as well — the CMA designation was a foundation for Harding to build upon his desire to further his education. Harding took some project management courses and completed his CAPP (Canadian production accounting certification) while overseas. In fact, he completed his MBA through Manchester University; originally starting it in Qatar, continuing in Cuba, and wrapped it up in Calgary.

Throughout all of his experiences, he credits the CMA designation for many of his fortunes.

“I look at it as being, from a career perspective, my first major milestone that created the foundation to go onto many other opportunities,” he says. “One of the things that was actually enlightening while doing my MBA was going through some of those sessions because it allowed me to reflect on the CMA and how high quality the program is. This is something CMA Canada can be very proud of. Having the CMA is just the beginning, but it gives you the foundation of accounting and business, and opens your eyes to strategy and where you can create your opportunities.”

Despite his busy schedule, Harding takes time to pass his knowledge onto others.

“I mentor different individuals, both pre- and post-designation, in the CMA, CA and CGA programs. I teach them not to underestimate what you’re able to accomplish in any given role. ‘Do you have to be at executive level before making an impact? No. You can apply CMA to your role anywhere.’ It’s about how you view your challenge and how you can add value. But you have to evaluate each situation like a case study and variables change regardless of how similar things may seem at first.”

What’s the one thing he misses from travelling now that he’s back in Calgary where he grew up?

“I pretty much have the same hobbies, but I lived close to the water in Cuba and Qatar. Unfortunately, Calgary’s oil industry isn’t close to the water.”

Arda Ocal is a Mississauga, Ont.-based writer and on-air personality with Rogers TV.



Encryption—The last line of defense

No security system is perfect, and all measures, no matter how elaborate, are subject to failure.

By Jacob Stoller

In January of this year, 8,600 Ontario teachers received letters from the Ontario Teachers Insurance Plan (OTIP) that their personal information, including names, addresses, birth dates, and social insurance number, had been compromised. In a burglary that police initially characterized as a “smash and grab,” laptops containing personal information were stolen along with a number of other items.

Many questions in the case remain unanswered, but it was clear that the data in question had not been encrypted. Had this precaution been taken, the crisis could have been averted.

“Realistically speaking, there have been enough media reports of lost backup tapes, stolen laptops, and the loss of data that is associated with it, that this really shouldn’t be a surprise to anyone anymore,” James Quin, lead analyst for London, Ont.-based Info-Tech Research, says. “Encryption really shouldn’t be optional; it should just be a cost of doing business.”

Encryption is one of the most powerful weapons in the security war, because it makes data useless when it falls into the wrong hands. Using readily available software, organizations can selectively store data on any media device—a disk system, a backup tape, a laptop hard drive, or even a smart phone—in encrypted or scrambled form that requires a special code or key to make it intelligible.

The OTIP breach was typical in two respects. First of all, an estimated one million laptops per year are stolen—the Gartner Group has estimated that one in 10 laptops will be stolen or lost during their lifetimes. Secondly, the incident involved personal identifiable information (PII), which accounts for the vast majority of stolen data.



“There has been a tremendous monetization of cyber crime over the last few years,” Quin says, “and the information that is predominantly stolen is personally identifiable information—stuff that people can use for identity theft and for direct monetary access. They will steal credit card information, they will steal your health information so they can access your health insurance, they will steal your social insurance numbers so they can build false identities to apply for credit in your name. A much smaller sliver of the data that is stolen is R&D and intellectual property.”

According to statistics from *The Symantec Internet Security Threat Report* published in April, 37 per cent of breaches were due to theft or loss of data-carrying devices. Although the incidence of breaches where identities were actually exposed was only four per cent, businesses face



the embarrassing task of warning their clients for all breach incidents because it's virtually impossible to determine the inclinations and capabilities of the thief.

Disclosing breaches to affected parties has yet to become a legal requirement in Canada, but that could be changing—most of the U.S. has mandated such disclosure, and a similar law recently went into effect in Alberta. Many of these laws, however, don't require disclosure when the data is encrypted.

Building a protection strategy

The big advantage of encryption over any other security measure is that it is effective regardless of whether information was compromised through a loss, theft, or a network attack by an outside hacker. According to Quin, encryption is really a last resort. "In most cases, before encryption can really be of value to you, all of your other security mechanisms have failed," Quin says. "Your firewalls have not kept people out. Your intrusion detection has not sensed that there are intruders in the network and they're breaking into databases. Your users have lost laptops for which you gave them security locks to make sure that they couldn't lose their laptops. So encryption is really a last line of defence security mechanism."

Encryption systems, like any security system, have to be managed, and this is the most challenging aspect of implementation.

The issue for most companies is where to use encryption. "You don't encrypt everything, it's just too darned expensive," Quin says. "The first thing is, you've really got to figure out what it is that you need to encrypt. This is broken down by two overarching categories. The first is the sensitivity and the criticality of the data. The other is the potential mobility of that data. For example, a backup tape is potentially more mobile than a disk storage system. It's easier to carry around a laptop than it is to carry around the server."

Quin suggests that determining what is sensitive and what is not can be a daunting task. "If you're addressing the issue on a data sensitivity basis," says Quin, "you need to determine what is sensitive

data and what constitutes as confidential data? And that can be a fairly lengthy and time-consuming process, especially for small organizations."

Managing the keys

Encryption systems, like any security system, have to be managed, and this is the most challenging aspect of implementation. "Part of what you look at with your overall encryption solution is how much security you get with the encryption," says Kenneth Schneider, vice-president & CTO, security, Symantec Corporation, "but the big thing is, how do you manage those keys? When users lose their key how do you help them recover it? It's the management structure that goes around the keys that's the critical part of any of these encryption products."

"Make sure that when you are investing in an encryption solution, it can do centralized key management for you, particularly when you're looking at laptop encryption," Quin advises. "You then have to set up a system that ensures that you're following a process called key escrow. What the software does is take a copy of all the decryption keys, and it locks them in a vault which can only be accessed by people who have the appropriate key. You then actively monitor every instance where the vault is accessed."

Performance issues

The cost of encrypting laptops, which Quin estimates to be between \$50-\$100 apiece, can add up, but the good news is that the performance degradation associated with encryption is shrinking. "Up until about three years or so, the performance impact of encryption on a laptop was at around 11 per cent, which is fairly noticeable," says Quin, "whereas nowadays, with the enhancements that have been made in the way encryption software runs, and performance enhancements in laptops—more memory, bigger CPUs—the hit is down to about three or four per cent. For most users this is negligible."

Although the technology keeps improving, even encrypted data is not 100 per cent secure. Keys could be compromised by an insider—an incident that is rare, but not unprecedented. Furthermore, encryption itself is potentially vulnerable. A research group at Princeton University showed in 2008 that it is possible to steal an encryption key from a laptop by freezing the memory chip that holds the information, allowing a sophisticated program to identify the code. Exceptions like this affirm what security consultants invariably advise companies—technology is an important security tool, but is no substitute for eternal vigilance and sound security policies. ■

Jacob Stoller (jacob@stollerstrategies.com) is a Toronto-based independent writer and researcher.

Marketplace



No. 1 Accounting, Tax & Payroll Franchise
The Small Business Specialists since 1966
400 offices strong

DO YOU WANT TO BRANCH OUT ON YOUR OWN?

Padgett offers a fresh yet proven alternative to the challenges of going it alone

As a Padgett franchise owner, you will have access to time-tested systems and marketing techniques as soon as you open your doors for business. You can count on superior one-on-one training, ongoing courses and seminars, a dedicated franchise support team and state-of-the-art systems.

We're helping to grow success stories, one entrepreneur at a time.
 For more info call 1-888-723-4388 ext. 222, or visit www.smallbizpros.com

t 5 f g h n a 7 i
 q p r v 2 u % t l
 n w t h e a s v h
 l e f x m a s o n
 c t b g r o u p m
 + o q z 1 f e 3 u
 a 0 e 8 c n d o t

Mississauga

2 Robert Speck Pkwy, Suite 690
 Mississauga, ON L4Z 1H8
 tel 905 804 1100

Toronto

40 Sheppard Ave W, Suite 512
 Toronto, ON M2N 6K9
 tel 416 733 9393

(strategic search partners)

www.masongroup.ca

Lang Michener LLP
 Lawyers – Patent & Trade Mark Agents

When you prefer your business lawyer to also be a CMA

- tax and commercial litigation
- employee fraud
- contract/commercial disputes
- directors' liability
- emergency court orders
- environmental issues
- shareholder disputes
- protection of trade secrets
- construction liens
- collections



David B. Debenham,
LLB, LL.M, MBA, CMA, CFI, CFE, DIFA
 50 O'Connor Street, Suite 300
 Ottawa ON K1P 6L2
 Tel: 613-232-7171 ext. 103
ddebenham@langmichener.ca

langmichener.ca

Ottawa Toronto Vancouver Hong Kong

Master of Financial Accountability

Get ready for a tough new world of leadership and governance. Learn to manage risk and transform business practices with new knowledge that complements your existing skills.

Executive-style, part-time format focuses on:

- Corporate ethics
- Regulatory requirements & legislative standards
- Effective information systems
- Transparency in reporting

Get details and an invitation to an info session at 416 736 5744 or email mfac@yorku.ca

www.yorku.ca/mfac



SIMPLY ACCOUNTING TRAINING

Sage approved one-day seminars presented across Canada
 Each course worth 7.5 Verifiable C.E.C.'s
www.AlanCohenCGA.com

OUTSOURCE YOUR BOOKKEEPING

Minimize your overheads
 Accuracy of work
 Reliability and Accountability
 No job is too big or too small
 We stand behind our work

Contact
 Subhash Sharma MBA, CMA
 ENS ASSOCIATES INC.
 7780 Woodbine Ave., Unit 16
 Markham, ON L3R 2N7
 Tel: 416-439-4648
 Fax: 416-619-0781



ENS ASSOCIATES INC.
 ACCOUNTING AND TAXES

ADVERTISER INDEX

CMA Ontario www.cma-ontario.org/PDI	INSERT 416-977-7741
Lannick Associates www.lannick.com	9 416-340-1500
Microsoft Dynamics www.Microsoft.ca/dynamics/ERP	OBC
Robert Half Finance & Accounting www.roberthalf.ca	13 800-474-4253
Softrak Systems www.softrak.com/CMA2010	7 800-663-9799
Staedtler www.staedtler.ca	IBC 800-448-4342
The Director's College www.thedirectorscollege.com	15 866-372-1778
Wells Fargo www.wellsfargocapitalfinance.ca	27 800-626-2805



Canadians may fear it, but a recent study calls foreign direct investment a plus

The benefits of foreign direct investment outweigh the drawbacks

By John Cooper

In the zeitgeist of Canadian business, it almost smacks of heresy—an argument for rather than against foreign direct investment. But that’s what business professor Walid Hejazi is claiming in a recent study for the Montréal-based Institute for Research on public policy—and experts in the field agree.

According to Hejazi, whose report is entitled *Dispelling Canadian Myths about Foreign Direct Investment*, Canadian concerns about foreign direct investment (FDI) have little merit, as it brings in new technology and boosts workers’ pay levels. As well, Canadian investment outside Canada stimulates exports. The worries continue, however, with concerns about the takeover of stalwarts like Dofasco, Inco, Alcan and the Hudson’s Bay Company—all icons as rooted in Canadian identity as polar bears, loons and Tim Hortons.

A professor of international competitiveness at the Rotman School of Management, Hejazi says the benefits of FDI outweigh the drawbacks, citing findings indicating that foreign firms are more innovative and productive than their Canadian counterparts, they pay higher wages and they import significant amounts of technology.

“Because we are patriotic, there’s almost a fear of the Americans taking over,” says Hejazi. “Whenever an American or other foreign company takes over, we Canadians feel that we’re losing our sovereignty. The stock of inward FDI (investment coming into Canada) has held steady at 30 per cent for about 40 years, but we tend to treat it as something new.”

The reality is that foreign companies help Canadian firms survive, Hejazi says. “What’s remarkable, when you look for instance at the GM



example [of government bailouts] in Oshawa, people were saying, ‘don’t close. Stay! Because you don’t have a Canadian alternative.’ ”

Yet on a business level, “people see the benefits of foreign companies; (on average) they pay bigger salaries and employees are working for more technology-intensive companies and when these companies interact with other companies there is a spillover benefit. These employees become much better trained as they are able to use leading-edge technology,” resulting in their being hired by competitors, spreading the benefits of their expertise to other firms.

Jean-Michel Laurin, vice-president of global business policy



for Canadian Manufacturers and Exporters, acknowledges FDI's benefits. "An area where there is a lot of foreign investment is in manufacturing, the steel industry for instance. The positives outweigh the negatives. If you're part of an international company and you're part of foreign direct investment coming into Canada, you have access to a much larger pool of capital."

One challenge for Canada's entry into global markets is that homebrew companies are not as deeply penetrated into global supply chains as are other international entities, says Hejazi. "When foreign companies come in they allow Canadian firms to benefit from connecting with the global supply chain."

Canadian angst over FDI also focuses on the potential "hollowing out" of Canadian head office functions. But Hejazi says that foreign firms have in fact increased head office activities, by finding value in investing in Canadian operations. However, Bernie Wolf, a professor of economics and international business at the Schulich School of Business, while agreeing that "in many instances FDI brings in new technology, boosts workers' pay and increases competitiveness," is concerned about the head office issue.

"The problem that I see is twofold: first of all, the control issue—that decisions are made far away from Canada, and that might make the ultimate decision different from what might be made here," says Wolf. "The second issue is that when you tend to lose (decision-making) control you lose a lot of head-office, higher-paid executive types. Our MBA grads, instead of being hired here, get hired elsewhere."

And those foreign dollars just keep coming. A rise in energy prices over the last decade (despite the fall in oil prices during the 2008 financial crisis) triggered major foreign investments in Canada. According to Foreign Affairs and International Trade Canada, the stock of inward FDI in Canada at year-end 2009 stood at \$517.6 billion, an increase of \$12.7 billion (2.5 per cent) from 2008. The stock of Canada's outward FDI (or Canadian direct investment abroad) at year-end 2009 stood at \$603.1 billion, down \$34.2 billion (or minus 5.4 per cent)

from 2008—due in part to the appreciation of the Canadian dollar. In 2007, 21.3 per cent of corporate assets represented foreign investments in Canada; in the same year, 52.8 per cent of manufacturing assets represented foreign investments in Canada.

Despite this, Canada's overall attractiveness did fade somewhat, especially in light of continental free trade; firms continue to locate production facilities for the North American market at a higher rate in the U.S. and Mexico. A study by the Organization for Economic Cooperation and Development (OECD), blames a restrictive Canadian business climate and tight regulations and investment limits, especially in finance, transportation and communications.

The key to creating a better Canadian business climate is the creation of policies that boost Canadian firms' competitiveness, combined with lower tax rates to assist Canadian firms to compete more effectively in global markets.

Hejazi agrees with the OECD findings. "Canadian government and policy makers tend to criticize the OECD study, but we are restrictive," and that needs to change," he says. For example, "in telecommunications I think absolutely we should be open. Cell phone rates in Canada are the second highest in the OECD. Generally the perception is that by allowing more foreign competition, communication costs will fall dramatically. If the costs associated with telecommunications can be reduced, that will improve Canadian competition."

And on the international stage, Canadian multinationals are major global players, with significant investments outside the country growing in the past 30 years. In terms of dollar value, Canadian companies own more foreign operations than foreign companies own here. In 2009, Canadian global leaders included 86 firms (38 headquartered in Ontario), including Celestica, McCain, Research in Motion (RIM) and Open Text, based on Institute for Competitiveness and Prosperity ratings in accordance with three criteria: the company's ranking in the Report on Business Top 1000, revenues exceeding \$100 million and a place among the top five firms in their global market segment.

Hejazi sees Canadian international investment as a key starting point for market expansion, with domestic benefits in engineering and design. Canada is no longer a host economy, but a source economy for international dollars. This is true in several sectors, especially the mining industry. In a submission to the Competition Policy Review Panel, the Mining Association of Canada cited its members strong



global view

global presence—by the end of 2006, Canadian mining companies had \$62 billion in direct investment in over 100 countries, or 12 per cent of all Canadian direct investments

abroad, compared to foreign investments of \$38 billion in Canada.

The key to creating a better Canadian business climate is the creation of policies that boost Canadian firms' competitiveness, combined with lower tax rates to assist Canadian firms to compete more effectively in global markets, Hejazi says.

Wolf calls for a more aggressive strategy to boost entrepreneurship. "I would like us to be less defensive and more offensive. I think that we should work to improve entrepreneurship in this country to make sure that people know how to run, grow and take businesses to the next step. We need to make sure that Canadian firms are run on a world standard. That's probably where we fall down and we need to do more."

"We like to think we are proudly Canadian, but the reality is different," Hejazi says. "There is a big difference between gross domestic product (GDP) and gross national product (GNP). GNP is always Canadian-owned. GDP is something produced in Canada, but by international companies, and you can name a thousand of them ... then if you ask for something produced under GNP you get just one or two things. In Canadian culture, we know what is foreign-made here in Canada, but we don't know what Canadians are doing internationally."

"We are basically in a situation where our companies should be so well run that they are less likely to be taken over by foreigners," Wolf adds. It's important to have support programs to help firms develop "and we do have those, we have fairly generous R&D grants and we have taxation levels down, but you only get taxed if you make profits. I'm supportive of trying to help innovation and improve technology. If you want more RIMS in Canada, then you need to support the post-secondary school establishment more than we have in the past." ■

John Cooper is a Whitby, Ont.-based freelance writer.



As a member, you have exclusive access to a growing list of **discounts from over 450 national and local businesses** with savings on everything from computers and dining, to shoes and travel from companies like...



workperks®

... an innovative and fully outsourced employee discount solution to help ALL of your staff save money

Enhance corporate culture and staff engagement with your own WorkPerks® program. Your staff will have private access to a growing list of discounts on items for home, work and play.

WorkPerks® is a low-cost value add. Help your staff stretch their hard earned dollars. **Create your own WorkPerks® program today and we'll add 3 months to your first year's license.** WorkPerks® is available through CMA MemberPerks™.

start saving

All you need is your Member ID to start saving
<http://cma-canada.venngo.com>

MemberPerks™ is a trademark, and WorkPerks® is a registered trademark of Venngo Inc.



triplus®
ideas take flight



reddot design award



Good ideas go hand in hand
with quality writing instruments.

Well thought out details, intelligent
technology, tremendous writing comfort
and an especially long lifespan -
all these make the award winning
STAEDTLER triplus range of products
an indispensable companion for
all of your ideas, every day.

 **STAEDTLER®**
your inspiration!

www.staedtler.ca



"We **HAVE TO** manage hundreds of people and projects..."



AND make it easier to control costs and manage cash flow



AND create custom workflows and processes



AND access up-to-date data for better decisions



AND automate our paper processes



AND Microsoft Dynamics® ERP helps us work more efficiently and provide better customer service."

Microsoft Dynamics® ERP fits your company and business processes, not the other way around. It gives your people easier access to real-time actionable information for better decision-making which can help improve ROI.

To learn more about the efficiencies Microsoft Dynamics ERP can create for your business, go to microsoft.ca/dynamics/ERP



Because it's everybody's IT business