## CANADA'S NEXT 150 YEARS: BUILDING A FOUNDATION FOR PROSPERITY

## Address to the Canada Foundation for Innovation Annual Public Meeting Ottawa

Dr. Heather Munroe-Blum Chairperson, CPP Investment Board December 5, 2014

**CHECK AGAINST DELIVERY** 

MERCI POUR VOTRE GENTILLESSE, GILLES. JE REMERCIE ÉGALEMENT LA FONDATION CANADIENNE POUR L'INNOVATION DE M'AVOIR INVITÉE. JE SUIS TRÈS CONTENTE D'ÊTRE AVEC VOUS CE MATIN À CETTE ASSEMBLÉE PUBLIQUE ANNUELLE.

THIS IS MY FIRST PUBLIC SPEAKING ENGAGEMENT SINCE I BECAME CHAIRPERSON OF THE CANADA PENSION PLAN INVESTMENT BOARD (OR CPPIB AS IT'S COMMONLY KNOWN), AND IT GIVES ME THE CHANCE TO COME BACK AND TALK ABOUT A PASSION WE ALL SHARE...

...AND THAT, OF COURSE, IS INNOVATION.

BOTH THE CFI AND THE CPPIB ARE THE PRODUCTS OF INNOVATION, AND THEY REPRESENT THE CRUCIAL ROLE THAT INNOVATION PLAYS IN ADVANCING ECONOMIC AND SOCIAL WELL-BEING IN CANADA.

CFI AND CPPIB WERE BOTH FOUNDED BY THE FEDERAL GOVERNMENT IN 1997. BOTH OPERATE AT ARMS' LENGTH FROM GOVERNMENT, YET SERVE THE PUBLIC INTEREST. BOTH HAVE CLEAR MANDATES THAT DEMAND LONG-TERM VISION, AND A COMMITMENT TO TRANSPARENCY AND ACCOUNTABILITY.

FOR THE LAST TWENTY YEARS, I'VE BEEN STUDYING HOW INNOVATION PLAYS OUT IN AN INTERNATIONAL CONTEXT. THIS INTERNATIONAL ENGAGEMENT IS AMPLIFIED IN MY NEW ROLE AS CHAIRPERSON OF CPPIB – AN ORGANIZATION THAT SEARCHES THE GLOBE TO FIND THE BEST LONGTERM INVESTMENT OPPORTUNITIES.

IN FACT, I JUST RECENTLY RETURNED FROM A BOARD VISIT TO CHINA. DURING OUR TIME THERE, AMONG THOSE WE MET WITH WAS A COMPANY IN WHICH CPPIB FIRST INVESTED IN 2011 THROUGH OUR PRIVATE INVESTMENTS TEAM...AND WHICH TODAY IS THE LARGEST E-COMMERCE COMPANY IN CHINA AND ONE OF THE MOST VALUABLE PUBLICLY TRADED COMPANIES IN THE WORLD.

OF COURSE, I AM SPEAKING ABOUT THE ALIBABA GROUP.

WHAT WE FOUND AT OUR VISIT TO ALIBABA WAS A BRILLIANT EXAMPLE OF HOW CHINA IS BUILDING A COMPETITIVE EDGE. WHILE STILL EARLY DAYS, ALIBABA HAS BUILT AN OUTSTANDING ORGANIZATION BY DEVELOPING TOP TALENT, UTILIZING PROGRESSIVE TECHNOLOGY, ENGAGING STRONG PARTNERSHIPS, AND THINKING LONG-TERM. AND, CRITICAL TO THEIR SUCCESS IS BENCHMARKING EVERY ONE OF THESE ELEMENTS, AGAINST THE BEST, **GLOBALLY**.

THEY ARE LEVERAGING THESE ESSENTIAL INGREDIENTS TO HELP CHINA'S SMALL- AND MEDIUM-SIZED ENTERPRISES TO SUCCEED. THEIR STATED MISSION IS TO "HELP THE LITTLE GUY".

INVESTING EARLY IN COMPANIES LIKE ALIBABA IS JUST ONE EXAMPLE OF HOW CPPIB INNOVATES TO SERVE THE INTERESTS OF THE CPP'S 18 MILLION CONTRIBUTORS AND BENEFICIARIES.

TWO YEARS FROM NOW, CANADA CELEBRATES ITS 150<sup>TH</sup> BIRTHDAY... AND WE HAVE A GREAT DEAL TO CELEBRATE.

THE QUESTION I WANT TO ADDRESS THIS MORNING IS, "HOW DO WE ENSURE OUR SUCCESS FOR THE **NEXT** 150 YEARS?"

"SUCCESS" HAS MANY DEFINITIONS.

FOR ME, THE BROAD DEFINITION MUST INCLUDE BOTH ECONOMIC PROGRESS AND SOCIAL COHESION. THE TWO ARE INTERDEPENDENT, AND ARE EQUALLY ESSENTIAL TO NATION-BUILDING AND PROSPERITY.

EN EFFET, LES SUCCÈS PASSÉS DU CANADA, CEUX QUI LUI ONT DONNÉ SON IMAGE MONDIALE, MONTRENT QUE L'ÉCONOMIE ET LE BIEN-ÊTRE DE NOTRE POPULATION SONT DES PRIORITÉS À LONG TERME POUR LE CANADA. CETTE MÊME DYNAMIQUE DOIT CONTINUER DE S'APPLIQUER DANS LES 150 PROCHAINES ANNÉES.

THIS MORNING I WILL ASK TWO QUESTIONS:

FIRST, HOW WELL IS CANADA DOING WHEN IT COMES TO BUILDING THE INTELLECTUAL INFRASTRUCTURE THAT UNDERPINS INNOVATION?

SECOND, HOW DO WE MAKE SURE THAT THIS FOUNDATION IS STRONG ENOUGH TO SUPPORT CANADA'S SUCCESS OVER THE NEXT 150 YEARS?

LET'S START BY DEFINING "INTELLECTUAL INFRASTRUCTURE".

A GOOD REFERENCE POINT IS THE DEFINITION OF PHYSICAL INFRASTRUCTURE; THAT IS, "THE SYSTEMS, SERVICES AND FACILITIES THAT ARE THE NECESSARY FOUNDATION FOR ECONOMIC ACTIVITY".

INTELLECTUAL INFRASTRUCTURE ALSO SERVES AS A FOUNDATION FOR ECONOMIC ACTIVITY. IT IS A NATION'S EDUCATIONAL CAPABILITIES, ITS ABILITY TO ATTRACT, RETAIN AND NURTURE TOP-TIER TALENT, AND ITS NETWORK OF TOP-CALIBRE RESEARCH PROGRAMS AND FACILITIES – THE COMBINATION OF WHICH DETERMINE THE NATION'S ABILITY TO INNOVATE.

JEFFREY SIMPSON APTLY COMPARED PHYSICAL AND INTELLECTUAL INFRASTRUCTURE IN A RECENT COLUMN IN THE GLOBE AND MAIL. HE WROTE THAT, "PHYSICAL INFRASTRUCTURE IS IMPORTANT, BUT BRAINPOWER INFRASTRUCTURE IS MORE IMPORTANT STILL."

I KNOW THAT BRAINPOWER FLOURISHES WHEN ENGAGED, WELL-PREPARED PEOPLE FROM DIVERSE BACKGROUNDS WORK TOGETHER IN AN ENVIRONMENT THAT ENCOURAGES THE OPEN EXCHANGE OF IDEAS AND PRACTICES... AND WHERE PARTICIPANTS FROM AROUND THE WORLD BRING FURTHER OPPORTUNITIES FOR LEARNING AND COLLABORATION.

C'EST CE GENRE D'ASSOCIATIONS QUI PERMET DE TROUVER DE NOUVELLES SOLUTIONS AUX PROBLÈMES ET D'ÉLABORER DE NOUVEAUX PRODUITS ET SYSTÈMES QUI RÉPONDENT À LA FORTE DEMANDE MONDIALE.

TO OPTIMALLY LEVERAGE THE GREAT PHYSICAL INFRASTRUCTURE THAT CFI SUPPORTS, IT TAKES A COMMITMENT TO INTELLECTUAL INFRASTRUCTURE. AND TO ACHIEVE THE INNOVATION UPON WHICH THE FUTURE OF CANADA DEPENDS, IT TAKES BOTH TOGETHER...

IT TAKES TWO TO TANGO.

THE BEST APPROACH TO BUILDING AND MAINTAINING THIS DOUBLE-BARRELLED INNOVATION SYSTEM IS TO STAY AHEAD OF THE GAME. THIS REQUIRES STRATEGIC LONG-TERM PLANNING, AND ONGOING INVESTMENT... WHICH IS WHY MR. SIMPSON, IN THE COLUMN I JUST MENTIONED, ENCOURAGED THE NEW PREMIER OF ALBERTA TO "PUT MARGINAL TAX DOLLARS INTO ALBERTA'S UNIVERSITIES AND COLLEGES". I

AND IT IS WHY THE FEDERAL GOVERNMENT ESTABLISHED THE CANADA FOUNDATION FOR INNOVATION...THE ARGUMENT FOR STRENGTHENING CANADA'S INTELLECTUAL INFRASTRUCTURE WILL NEVER BE STRONGER.

WE'RE ALL FAMILIAR WITH THE SAYING, "FOLLOW THE MONEY". IN THE INDUSTRIAL AGE, FINANCE FOLLOWED INDUSTRY; IN THE INFORMATION AGE, FINANCE FOLLOWS TALENT, TECHNOLOGY, AND SCIENCE.

MOST OF US HERE ARE OLD ENOUGH TO REMEMBER FIRST-HAND HOW THE INTERNET CHANGED OUR LIVES. NOW CONSIDER SOME OF THE TECHNOLOGY AND SCIENCE DISRUPTORS THAT HAVE EMERGED IN JUST THE PAST FEW YEARS:

- ...CLOUD TECHNOLOGY...
- ...BIG DATA...
- ...THE REVOLUTION IN GENOMICS...
- ...MOBILE INTERNET...
- ...3D PRINTING...
- ... ADVANCED ROBOTICS...
- ...THE INTERNET OF THINGS...

LIKE THE ADVENT OF THE INFORMATION AGE, THESE DISRUPTORS ARE RADICALLY TRANSFORMING HOW WE WORK, HOW WE PLAY, HOW WE LEARN, HOW WE CONSUME... AND SOME WOULD EVEN SAY, HOW WE THINK.

WITHOUT QUESTION, THESE, AND OTHER DISRUPTORS, ARE TRANSFORMING THE GLOBAL ECONOMY, AND MORE TO THE POINT, THEY ARE TRANSFORMING WHAT WILL BE REQUIRED TO COMPETE AND SUCCEED IN THE GLOBAL ECONOMY.

WE'RE CANADIANS, AND WE LOVE HOCKEY, SO ALLOW ME TO USE A HOCKEY ANALOGY TO DESCRIBE THE NEW COMPETITIVENESS PARADIGM. WE'RE PLAYING ON FASTER ICE, ON A BIGGER RINK, AND THE RULES ARE CHANGING EVERY SECOND. IN **THIS** GAME, IT IS BRAINS, NOT BRAWN THAT WILL PUT US ON THE SCOREBOARD.

LET'S GO BACK TO THE DEFINITION OF SUCCESS I MENTIONED EARLIER – A DEFINITION THAT INCLUDES BOTH ECONOMIC PROGRESS **AND** SOCIAL WELL-BEING. FROM BOTH OF THESE PERSPECTIVES, CANADA IS UNDENIABLY ONE OF THE MOST SUCCESSFUL COUNTRIES IN THE WORLD.

AND YET WE FACE A MONUMENTAL TASK, BOTH IN MAINTAINING WHAT WE HAVE ACHIEVED, AND IN MAKING PROGRESS AGAINST CHALLENGES THAT DEFY EASY SOLUTIONS.

IN THE INTEREST OF TIME, I'LL MENTION ONLY A FEW OF THESE CHALLENGES:

OUR POPULATION IS AGING RAPIDLY.

IN 2006 THERE WERE JUST OVER 5 CANADIANS OF WORKING AGE – 15 TO 64 –TO EACH PERSON AGED 65 YEARS AND ABOVE.

FORTY-TWO YEARS FROM NOW, WHEN MY DAUGHTER RETIRES, THERE WILL BE ONLY 2.2 WORKING AGE CANADIANS FOR EACH PERSON AGED 65 YEARS AND ABOVE. LESS THAN HALF.

THAT'S A RAPID AND STEEP DECLINE IN WHAT IS KNOWN AS THE "OLD-AGE/DEPENDENCY RATIO."

MANY OF OUR FIRST NATIONS PEOPLES, ESPECIALLY THOSE LIVING ON RESERVES, ARE SUFFERING FROM HIGH LEVELS OF UNEMPLOYMENT, LOW LITERACY RATES, AND SUBSTANDARD LIVING CONDITIONS – AND ALL OF THE SOCIAL PROBLEMS THESE ENGENDER.

WE HAVE TOO MANY CANADIANS EXPERIENCING UNEMPLOYMENT AND UNDER-EMPLOYMENT.

BUT, BY FAR, THE BIGGEST STRAIN ON OUR PUBLIC FINANCES IS HEALTHCARE.

OUR SPENDING IS AMONG THE HIGHEST IN THE DEVELOPED WORLD, YET WE HAVE PERSISTENTLY LONG WAIT TIMES FOR BASIC SERVICES LIKE EMERGENCY CARE AND ACCESS TO SPECIALISTS OR ELECTIVE SURGERY<sup>iv</sup>. AND, ALL TOO LITTLE EMPHASIS STILL, ON HEALTH PROMOTION.

IN THE MEANTIME, HEALTHCARE COSTS CONTINUE TO RISE ANNUALLY AND DEMANDS FOR WAGE INCREASES AMONG HEALTHCARE PROFESSIONALS CONTINUE UNABATED, SETTING UP FUTURE SHOWDOWNS WITH CASH-STRAPPED PROVINCIAL GOVERNMENTS.

FINALLY, ALL CANADIANS – BUSINESSES AND INDIVIDUALS ALIKE – FACE THE CHALLENGE OF REDUCING OUR ENVIRONMENTAL IMPACT.

THE TASK OF MEETING THESE CHALLENGES IS MADE MORE DIFFICULT IN A COUNTRY WITH THE SECOND-LARGEST GEOGRAPHY IN THE WORLD; A DISPERSED POPULATION SMALLER THAN THAT OF CALIFORNIA; LONG, COLD WINTERS; AND A RESOURCE-DEPENDENT ECONOMY.

WITH RESPECT TO CANADA BECOMING AN "INNOVATION NATION", WE ARE NOT SINGAPORE. WE ARE NOT ISRAEL. WE ARE NOT EVEN GERMANY. THAT IS WHY WE NEED A UNIQUELY-CONFIGURED INNOVATION ECOSYSTEM.

POUR RÉSOUDRE CES PROBLÈMES, NOUS DEVRONS UTILISER TOUT NOTRE POUVOIR D'INNOVATION ET TOUS NOS RÉSEAUX DE CELLULES GRISES.

CEPENDANT, IL Y A DE BONNES NOUVELLES...

SI NOUS INVESTISSONS DANS UNE INFRASTRUCTURE INTELLECTUELLE COMPLÉTÉE PAR DE SOLIDES INFRASTRUCTURES PHYSIQUES, NOUS AUGMENTERONS NOTRE CAPACITÉ À TROUVER DES SOLUTIONS INNOVANTES À CES DÉFIS ÉCONOMIQUES ET SOCIAUX ET NOUS ACQUERRONS UN AVANTAGE CONCURRENTIEL SUR LE MARCHÉ MONDIAL.

LET'S SPEND A FEW MOMENTS TAKING STOCK OF OUR INTELLECTUAL INFRASTRUCTURE – IN OTHER WORDS, OUR NETWORK OF UNIVERSITIES AND RESEARCH FACILITIES THAT UNDERPIN OUR ABILITY TO ATTRACT, RETAIN AND NURTURE TOP-TIER TALENT.

I'LL START BY TOUCHING VERY QUICKLY ON SOME OF THE FACTORS THAT SUPPORT CANADA'S INTELLECTUAL INFRASTRUCTURE.

OUR UNIVERSITIES PROVIDE EXCELLENT VALUE FOR DOLLAR INVESTED. THEY ARE THE SECOND-LARGEST PERFORMERS OF RESEARCH, AFTER THE PRIVATE SECTOR NOTWITHSTANDING THAT FEDERAL FUNDING SUPPORTS ROUGHLY 22% OF THE COST OF THIS RESEARCH, VERSUS 40 TO 60% IN THE US, THE UK, AND AUSTRALIA. VI

SPEAKING OF FEDERAL FUNDING, CFI IS A TRANSFORMATIONAL CONTRIBUTOR, AND ITS GRANTS ARE FUNDING GROUND-BREAKING PROJECTS.

WHETHER IT IS RESEARCH ON THE DEVELOPMENT OF NANO-ROBOTICS, WATER MANAGEMENT, TECHNIQUES TO ENHANCE CROP YIELDS, THE DIAGNOSIS, MONITORING, TREATMENT AND PREVENTION OF WORK-RELATED INJURIES AND DISEASE<sup>VII</sup>, OR THE SECRET LIFE OF INDOOR PARTICLES...THE CANADA FOUNDATION FOR INNOVATION IS CLEARLY DOING THE "HEAVY LIFTING" IN SUPPORTING OUR COUNTRY'S INTELLECTUAL INFRASTRUCTURE WHILE SIMULTANEOUSLY ENHANCING ECONOMIC AND SOCIAL WELL-BEING.

IT IS NO SURPRISE THAT OUR POST-SECONDARY SYSTEM SCORES WELL ON GLOBAL RANKINGS. AMONG THE OECD, WE HAVE THE HIGHEST PERCENTAGE OF THE POPULATION GOING ON TO UNIVERSITIES AND COLLEGES<sup>VIII</sup>, AND SEVERAL OF OUR UNIVERSITIES ARE AMONG THE TOP 100 IN THE WORLD.

OUR STRONG NETWORK OF UNIVERSITIES AND RESEARCH FACILITIES ARE ONLY PART OF THE 'INTELLECTUAL INFRASTRUCTURE' STORY.

## WE ALSO HAVE:

- ...A WELCOMING BUSINESS CLIMATE, WITH THE LOWEST CORPORATE TAXES IN THE G7...
- ...A ROCK-SOLID REGULATORY AND LEGAL ENVIRONMENT...
- ...THE SOUNDEST BANKING SYSTEM IN THE WORLD...
- ...A TOP-TIER CREDIT RATING...
- ...AN ECONOMY WITH ONE OF THE BEST JOB CREATION RECORDS IN THE DEVELOPED WORLD...
- ...HIGHLY LIVEABLE CITIES...
- ...A STABLE DEMOCRACY...
- ...A HIGH LEVEL OF SOCIAL COHESION AND LOW LEVEL OF INCOME DISPARITY RELATIVE TO OTHER COUNTRIES...
- ...A MULTICULTURAL WORKFORCE...
- ...AND LAST BUT NOT LEAST, AN ACTUARIALLY SOUND NATIONAL PENSION SYSTEM.

HOWEVER, DESPITE THIS STRONG FOUNDATION, WE ARE NOT DOING AS WELL AS WE SHOULD IN CRITICAL AREAS. FOR EXAMPLE...

...BUSINESS INVESTMENT IN R&D IS DECLINING AS A PROPORTION OF GDP...

...THE OECD SCORES US 22ND ON ITS COMPETITIVENESS RANKING AND THE WORLD ECONOMIC FORUM PUTS US IN 26TH PLACE...IN A SIMILAR FINDING, THE CONFERENCE BOARD OF CANADA GIVES US A "D" ON INNOVATION, PLACING US 13<sup>TH</sup> AMONG 16 PEER COUNTRIES<sup>ix</sup>.

NOW IT IS HUMAN NATURE TO BELIEVE WE ARE DOING OK, BUT THESE RANKINGS SUGGEST THAT CANADA IS RESTING ON ITS LAURELS.

WHILE A POSITIVE SELF-IMAGE IS PART OF A HEALTHY MIND AND HELPS US LEAD SUCCESSFUL LIVES, COLLECTIVELY, THIS FEELING OF "I'M ALL RIGHT, JACK" PUTS US ON, AS MARLON BRANDO MIGHT SAY, "A ONE-WAY TICKET TO PALOOKAVILLE".

THE WORLD IS CHANGING TOO FAST...

OTHER NATIONS ARE AGGRESSIVELY TARGETING THEIR ADVANCEMENTS IN EDUCATION, SCIENCE AND TECHNOLOGY, AND BUILDING GLOBAL NETWORKS.

AND CANADA'S CHALLENGES ARE TOO IMPORTANT AND TOO URGENT...FOR US TO REST ON OUR LAURELS.

IN TODAY'S WORLD THERE IS NO COMFORTABLE CENTRE.

IT'S EITHER MOVE FORWARD OR FALL BACK.

WE DON'T HAVE TIME HERE TODAY TO DRAW UP A BLUEPRINT FOR THE NEXT 150 YEARS. BUT MAYBE WE CAN DO A QUICK SKETCH.

FIRST, WE NEED TO CHANGE THE PERSPECTIVE AND **THINK, PLAN AND ACT FOR THE LONG-TERM.** THAT MAY SOUND LIKE A PLATITUDE, ALONG THE LINES OF, "WE SHOULD GET MORE SLEEP." BUT IF YOU THINK ABOUT IT, MODERN LIFE IS DOMINATED BY SHORT-TERM OBJECTIVES AND STRATEGIES.

WHETHER WE ARE TALKING ABOUT THE DEMANDS OF INVESTORS FOR SHORT-TERM GAINS AND THE RESULTING DEARTH OF LONG-TERM CAPITAL...

- ...THE DECLINE IN PERSONAL SAVINGS RATES AND THE RISE OF PERSONAL DEBT IN ADVANCED ECONOMIES...
- ...THE TENDENCY OF GOVERNMENTS TO BASE DECISIONS ON POLLS AND ELECTION CYCLES RATHER THAN ON SOUND PUBLIC POLICY...
- ...OR THE TENDENCY OF CORPORATE MANAGERS TO REJECT CAPITAL PROJECTS THAT CREATE JOBS AND STIMULATE GROWTH BECAUSE THEY'VE OVERLY DISCOUNTED THE VALUE OF FUTURE CASH FLOWS FROM THOSE PROJECTS ...
- ...WE LIVE IN AN INCREASINGLY SHORT-TERM WORLD.

THERE ARE NOTABLE EXCEPTIONS TO THIS SHORT-TERMISM.

THERE IS "AUSTRALIA IN THE ASIAN CENTURY", A COMPREHENSIVE WHITE PAPER BY THE AUSTRALIAN GOVERNMENT THAT CHARTS THEIR COURSE TO THE YEAR 2025.

CLOSER TO HOME, THERE IS "FOCUSING CAPITAL ON THE LONG TERM," A JOINT VENTURE BY CPPIB AND MCKINSEY & COMPANY AIMED AT ENCOURAGING CORPORATE DIRECTORS AND BUSINESS MANAGERS TO PLACE **LONG-TERM** VALUE CREATION UPPERMOST IN THEIR STRATEGIES AND DECISION-MAKING.

AN EXAMPLE OF THIS THINKING IN ACTION IS CPPIB'S FOCUS ON ASIA AND OTHER EMERGING MARKETS IN SEEKING OUT THE LONG-TERM INVESTMENT OPPORTUNITIES THAT BEST FULFIL OUR MANDATE.

THAT LEADS ME TO MY NEXT SUGGESTION, WHICH IS FOR US -- ALL CANADIANS -- TO BE MORE OUTWARD-LOOKING.

RECENTLY, BANK OF MONTREAL'S VICE-CHAIR KEVIN LYNCH TOLD AN OTTAWA AUDIENCE THAT WE'RE LIVING IN A TWO-SPEED WORLD. AND THE FAST LANE BELONGS TO ASIA.

YET CANADA'S TRADE RELATIONSHIPS ARE OVERWHELMINGLY IN THE SLOW LANE ECONOMIES. 90% OF OUR CURRENT TRADE IS WITH THE OECD, AND LESS THAN 5% WITH CHINA.

CANADA IS A NATION OF NEWCOMERS, WITH ALL THE CULTURAL AND LINGUISTIC ADVANTAGES THAT ACCRUE FROM A DIVERSE POPULATION AND WORKFORCE.

IT'S HIGH TIME WE BEGIN SYSTEMATICALLY LEVERAGING THESE ADVANTAGES FULLY IN THE GLOBAL MARKETPLACE.

THE STRENGTH OF CANADA'S "INNOVATION ECOSYSTEM" DEPENDS ON STRATEGIC NETWORKS OF ORGANIZATIONS – PUBLIC AND PRIVATE, GOVERNMENT AND NON-GOVERNMENT –INVESTING IN BOTH OUR PHYSICAL AND INTELLECTUAL INFRASTRUCTURE, TO OPTIMIZE OUR INNOVATION POTENTIAL.

IF WE DO THIS, ALL ELSE WILL FOLLOW.

IF WE DO THIS, OUR BUSINESS ENTERPRISES WILL BECOME MORE INNOVATIVE, MORE ENTREPRENEURIAL, MORE LEADING EDGE... MOVING US TO THE CUSP OF ADVANCES IN SCIENCE AND TECHNOLOGY THAT ARE TRANSFORMING THE GLOBAL ECONOMY.

IF, TOGETHER WITH ALL OUR STRENGTHS IN THE LIBERAL ARTS,

...WE PUT MORE EMPHASIS ON SCIENCE, TECHNOLOGY, ENGINEERING AND MATH—THE SO-CALLED STEM DISCIPLINES — AND IF WE ENHANCE LITERACY IN THESE DISCIPLINES FROM THE EARLIEST STAGES OF A CHILD'S COGNITIVE DEVELOPMENT...

...THEN WE WILL GIVE CURRENT AND FUTURE GENERATIONS THE MEANS TO BUILD PROSPERITY FOR THEMSELVES, THEIR FAMILIES AND THEIR COMMUNITIES.

IT IS WORTHY OF NOTE IN THIS REGARD, THAT OF THE 2014 DISTINGUISHED CANADA-GAIRDNER LAUREATES, THE VAST MAJORITY WERE RECOGNIZED FOR BASIC SCIENCE BREAKTHROUGHS, WHICH FROM JUST THIS YEAR'S CLASS OF LAUREATES ALONE, HAS RESULTED IN ECONOMIC BENEFIT OF OVER \$100 BILLION IN PROFITS, AND IMMEASURABLE GAINS IN QUALITY OF LIFE AND PRODUCTIVITY.

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MY FINAL SUGGESTION IS THAT WE NEVER, NEVER LOSE SIGHT OF THE TRUE MEANING OF PROSPERITY.

THE MOST SUCCESSFUL NATIONS HAVE THE GREATEST SOCIAL COHESION; THE LEAST INCOME DISPARITY; THE LEAST SECTARIAN DISCORD; AND THE LOWEST BARRIERS TO UPWARD MOBILITY.

I'D LIKE TO REPEAT THAT...

THE MOST SUCCESSFUL NATIONS HAVE THE GREATEST SOCIAL COHESION; THE LEAST INCOME DISPARITY; THE LEAST SECTARIAN DISCORD; AND THE LOWEST BARRIERS TO UPWARD MOBILITY.

EN MATIÈRE DE PROSPÉRITÉ, L'ÉCONOMIE ET LE BIEN-ÊTRE SOCIAL SONT LES DEUX FACES DE LA MÊME PIÈCE.

NE L'OUBLIONS PAS LORSQUE NOUS POSONS LES FONDATIONS DU CANADA POUR LES GÉNÉRATIONS FUTURES.

THANK YOU LETTING ME SHARE THESE THOUGHTS WITH YOU THIS MORNING.

<sup>&</sup>lt;sup>i</sup> "Some free advice, Mr. Prentice", Globe and Mail, September 13, 2014, page F2 <a href="http://www.theglobeandmail.com/globe-debate/some-free-advice-mr-prentice/article20566425/">http://www.theglobeandmail.com/globe-debate/some-free-advice-mr-prentice/article20566425/</a> ibid

<sup>&</sup>quot;Investing on the World Stage for Canadians", Mark Wiseman, CD Howe Institute, Sept. 26, 2013. Original source: Statistics Canada: Statistics Canada, "Canadian Demographics at a Glance" published January 2008; <a href="http://www.statcan.gc.ca/pub/91-003-x/91-003-x2007001-eng.pdf">http://www.statcan.gc.ca/pub/91-003-x/91-003-x2007001-eng.pdf</a>

<sup>&</sup>quot;Free" Health Care in Canada Costs More Than It's Worth: Huffington Post: http://www.huffingtonpost.ca/nadeem-esmail/canada-free-health-care b 3733080.html

<sup>&</sup>lt;sup>v</sup> According to CIHI, rate of increase was 2.1% this year, down from average 7% growth from 2000-2010. See 'Health-care spending projected to grow at slowest pace in 17 years', Globe and Mail, Oct. 30<sup>th</sup>, 2014: <a href="http://www.theglobeandmail.com/news/national/health-care-spending-projected-to-grow-at-slowest-pace-in-17-years/article21384941/#dashboard/follows/">http://www.theglobeandmail.com/news/national/health-care-spending-projected-to-grow-at-slowest-pace-in-17-years/article21384941/#dashboard/follows/</a>

vi AUCC

vii Memorial University: http://www.mun.ca/safetynet/

viii Kevin Lynch presentation, Observation 6

<sup>&</sup>quot;How Canada Performs": http://www.conferenceboard.ca/hcp/details/innovation.aspx