

EVALUATING INTERNSHIPS:
LESSONS LEARNED FROM TWO EXPERIENCES

by

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DEDICATION

Dedicated to the memory of K.V. Zachariah.

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ABSTRACT

This thesis is an evaluation of two internships undertaken by the author in Halifax, Canada and Beijing, China. It includes a portfolio of research prepared during the internships. The papers are critically reviewed, a skills assessment is conducted, and areas and themes beyond skills assessment are reflected upon. It is found that the internships have been very positive experiences which have contributed to the research methods, professional maturity, and skills development of the author. An area of improvement suggested by the author is for all stakeholders to structure a portfolio assessment prior to internship, to improve both the evaluation and the efficacy of the experience.

LIST OF ABBREVIATIONS USED

ABEL	Adventure Based Experiential Learning
ACEA	Atlantic Canada Economic Association
AIMS	Atlantic Institute for Market Studies
API	Administración Portuaria Integrales
BOO	build - operate – own
BOOT	build - operate - own transfer
BOT	build - operate - transfer
CMA	Canada Marine Act
CN	Canadian National (railway)
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
CPA	Canada Ports Authority
CPI	corruption perception index
CPI	consumer price index
CTID	China Telecom Information Development
DoT	Department of Transport
FILO	First In Last Out
FM	Ferro Mexicana
GDP	Gross Domestic Product
GHP	Greater Halifax Port
GLC	Government Linked Corporation

HPH	Hutchison Port Holdings
HSPA	High Speed Packet Access
ICT	Information and Communication Technologies
IMX	Intermodal Excellence
KCS	Kansas City Southern
LPC	local port cooperation
NAFTA	North American Free Trade Agreement
NavCan	Navigation Canada
NHB	National Harbours Board
NMP	National Marine Policy
NSBI	Nova Scotia Business Initiative
PAO	Programa Operativa Anual
PSA	Port of Singapore Authority
PUMEX	Puertos Mexicanos
SCT	Secretaria Central de Transportación
TFM	Transportación Ferroviaria de México
TOC	Tanganyika Oil Company
WBPRTK	World Bank Port Reform Toolkit
WIL	workplace integrated learning

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CHAPTER 1 INTRODUCTION

The idea of an internship has ancient precedents. Apprenticeships were the norm for entering professions or crafts in pre-modern times, and the majority of learning would have occurred by similar processes - imitation and experience.

Internships are also not new within modern industrialized societies. They were traditionally used as a training and entry mechanism for young people into particular workplaces. However, shifts in the structure of labour economies and employment have altered this traditional internship structure. Many students (including myself) now generally seek out several internships in succession; these 'serial interns' feel that they are fortified against a precarious economy with a wide range of experiences. As a result the average age of interns may also be rising. Anecdotal evidence from my stay in Beijing suggested that the average age of interns in diplomatic missions was about thirty years of age. An additional factor is that several "high-demand" internships these days are unpaid or even demand payment from the intern.

Under these circumstances it is worth re-evaluating the internship. There are several obvious benefits to internships, such as work experience and job acquisition skills including networking. Other benefits are less obvious - the increase in self-efficacy after an internship, or larger social benefits. The method of learning, through experience, also matures the capacity of interns in terms of competencies and outlook. Even so it is necessary to consider if the increasing costs of internships outweigh these benefits.

During my tenure as an MDE student at Dalhousie, I was fortunate to win placements in two internships which were both prestigious and personally rewarding. It is from that vantage point that I hope to evaluate my internships here, and the lessons learned from them. In light of the changing nature of internships and the work world, it is hoped that this evaluation will be beneficial to educators, intern hosting organizations and students contemplating internships.

1.1 STRUCTURE OF THE THESIS

This thesis contains 3 parts. Given that this is an evaluation, the first part is a Theory of Change. This includes a literature review in Chapter 2 and methodology in Chapter 3 for how lessons learnt from my internships are to be deduced.

Chapters 3 through 6 are a portfolio of my internship based learning. They contain manuscripts of the papers produced during internships. Chapter 3 is based on work undertaken at the Atlantic Institute for Market Studies during my time there as a summer intern in 2006. The paper was completed and published in 2007. Chapters 4 and 5 are reports written for the Economic Section of the PERPA (Political Economic Relations and Public Affairs) division at the Canadian embassy in Beijing. They were written between September 2008 and March 2009, while I was an intern in the Economic Section. These papers are each the culmination of months of work during internships which are linked to my MDE program. Together they form a portfolio of work that are included here as independent contributions to my thesis. However, they also serve as data for the further analysis of lessons learned from internships.

In Chapter 7, I subject the analysis conducted within these internships themselves, to a meta-analysis. Chapter 8 contains observations from the internships not directly related to the research papers produced. Chapter 9 contains concluding remarks on these, some recommendations for my former internship programs and the MDE program; and some suggestions for future research.

PART I THEORY OF CHANGE

CHAPTER 2 LITERATURE REVIEW

This chapter will interrogate the assumption that internships provide a valuable experience different from graduate school. To provide a background for the thesis investigation, it deals with the big questions; from defining experiential education and its role in educational theory, to ideas of internships as a form of sociocultural learning.

In order to evaluate lessons from internships, two distinct bodies of literature are drawn upon. The first concerns internships as a kind of experiential learning. In his MDE thesis, Dewar (1997) made the claim that while particular examples of experiential learning can differ markedly in content, they share a certain “style.” This is elaborated further by Chapman:

Sometimes people want a definition of experiential education to be presented in terms of content just as science, history and math are. Actually, experiential approaches are better understood in terms of style, and any topic can be explored using such techniques. Whatever is being studied, the point is to place the students into 'a different, more direct relationship with the material. Students are actively engaged, exploring things for themselves, rather than being told answers to questions. (Chapman, 1992)

Dewar goes on to emphasize the process of experiential learning as more important than the outcome. Such an emphasis on the process or journey is not limited to experiential education: formally, this idea has been incorporated into western education since the time of Socrates. It is therefore worthwhile to briefly examine the history of education and the role of experience within it. The following section owes much to Dewar (1997), building on his brief history of experiential learning and then expanding on it with the ideas of other thinkers such as Wilhelm von Humboldt and Paolo Freire.

2.1 EXPERIENTIAL LEARNING IN THEORIES OF EDUCATION

In western civilization, education theories are usually traced back to the pre-Socratic or Sophist school of Greece. The Sophists focused on conveying excellence and virtue to their students, and employed an ‘empty vessel’ model to do so. In this model, the students were like empty vessels that had to be filled with knowledge ‘poured’ into them by their

Sophist teachers. Rote learning and repetition formed the bulk of this educational approach. Sophists were highly esteemed in Greek Antiquity and were able to convey great deals of information as well as a set of ethical practices. However, in such an approach experience plays no part: the student's role is only to learn the correct answer from the teacher.

The Sophists school was criticized by Socrates. Diverting from the Sophists focus on supplying correct answers, Socrates used a different approach. He questioned why a particular answer was given. Through a series of such questions, the assumptions behind the answer would be revealed. Crucially, this was a continuing process, in opposition to the 'final knowledge' provided by the Sophists. It also enhances the role of the student, who through the process of dialogue, contributes to the form to the thing being learned.

Plato expanded this approach to emphasize the process over the end product itself. I.e. the dialogue process (now called *dialectic*) was more important than any answer in itself. Here the educational philosophy is already beginning to resemble experiential learning somewhat. The "journey" of learning corresponds to the kind of explorations necessary for deriving knowledge and making decisions in new settings (a point which would be further elaborated by John Dewey, see below).

Aristotle further modified the Socratic-Platonic philosophy of education. He believed that reality was constantly changing, and therefore senses and experiences provided a valid gauge of this changing reality:

All men by nature desire to know. An indication of this is the delight we take in our senses; for even apart from their usefulness they are loved for themselves ... With a view to action, experience seems in no respect inferior to art, and men of experience succeed even better than those who have theory without experience.¹

Aristotle's reference to experience being not "inferior to art" places it for the first time on a level with theoretical study. The "delight . . . in our senses" could be pursued by both

¹ Aristotle (1948) quoted in Dewar(1997)

paths, and, as for Plato, that “delight” itself is more important to the learning process than any particular end goal or information that is attained.

Aristotle’s ideas on experience do not seem to have directly influenced later western classical thought. In fact, the rote memorization of ‘Classics’ including, ironically, Aristotle, became the norm in higher learning in Europe through the middle ages.

The next challenge to this ‘classical learning model’ came about during the enlightenment. The idea of a student as an empty vessel to be filled was questioned by enlightenment thinkers such as Wilhelm von Humboldt. Education in the sense of teaching as “filling” their students like vessels, he felt, was not productive. True education could only be “awakened in the mind: one can only provide the thread along which it will develop of itself.” This implies that students develop at their own pace and according to their own needs and inclinations; a situation that certainly mimics experiential learning. Thus it is no surprise that von Humboldt places the experiences of the learner at the centre of all educational processes: "The cultivation of the understanding, as of any of man’s other faculties, is generally achieved by his own activities, his own ingenuity, or his own methods for using the discoveries of others" (cited in Chomsky, 1970, p. 398). Anticipating by 200 years the idea of the ‘active learner,’ von Humboldt felt the student should not stop with absorption of knowledge, but rather:

he must ... reshape that material with all the energies of his own activity and appropriate it to himself so as to create the interaction between his own personality and nature in a most general, active and harmonious form. (ibid)

Wilhelm von Humboldt believed that education should fulfill the purpose of life, which he conceived of as “giv[ing] the fullest possible content to the concept of humanity in our own person . . . through the impact of actions in our own lives” (Hohendorf 2000).

Echoing Aristotle’s ‘men of experience,’ von Humboldt felt this “ultimate task of our existence . . . can only be implemented through the links established between ourselves as individuals and the world around us.” More so than Aristotle, however, this view has a direct corollary in the modern idea of the internship as the extension of the classroom

(See Chapter 3). I.e. while valuable theory can be learnt in the classroom, this can only aid the “ultimate task” when complemented by action, relying on the modification and re-absorption of learned material by experience.

The cultivation of the understanding, as of any of man’s other faculties is generally achieved by his own activity, his own ingenuity, or his own methods of using the discoveries of others . . . (ibid).

The ideas of Wilhelm von Humboldt find ready corollaries in the most progressive schools of thought of the 21st century. They were less well received in 18th century Prussia: indeed they were so ahead of their time that standard 20th century histories of education mostly ignore him. For example, the discussion of education in classical antiquity here draws very heavily on Ian Dewar’s MDE thesis; but Dewar makes no mention of von Humboldt.

In terms of influence, therefore Dewar’s contention that “the origins of modern experiential education began to take shape in America with the writings of John Dewey” is probably right. In his influential “Education as Experience” Dewey articulated a philosophy “which directly impacts what occurs in the school or other learning setting.” Approaching education not only as a teacher, but as a philosopher and social theorist, Dewey emphasized the connection between experience and learning:

I assume that amid all uncertainties there is one permanent frame of reference: namely the organic connection between education and personal experience; or, some kind of empirical and experimental philosophy. (Dewey (1928) quoted in Dewar (1997))

Once again, Dewey rejected the idea of a student as an empty vessel, reintroducing instead an enlightenment metaphor of student experience as a flower being tended to by a gardener (the teacher here serving more of a coaching function, or supplying the correct conditions for growth as a gardener might). While emphasizing the importance of experience to education, Dewey also introduced the idea of some experiences being miseducative:

The belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative ... some experiences

are miseducative ... any that has the effect of arresting or distorting the growth of further experience ... engenders callousness... produces lack of sensitivity and of responsiveness... Everything depends upon the quality of the experience which is had. (ibid)

This provides an interesting framework for the analysis of my internships. What constitutes genuine education and what lessons were learned in this sense? Conversely, do internships contain within them the danger of miseducation? What should be done to avoid this danger? Do any methods or any evidence present themselves for resolving into educative and miseducative experiences?

Moving towards the latter half of the 20th century, Paulo Freire is the only theorist considered here who is not “European” (although that term is used very liberally when applied to ancient Greeks). Perhaps this has contributed to the resonance his ideas have had in post-colonial societies, particularly in Asia, Africa, and Latin America.

Some of Freire’s ideas are congruent with Dewey and other thinkers considered here so far. For instance, Freire too was critical of the empty vessel model of education, which he termed “the banking model,” where authoritarian teachers were expected to make “deposits” of knowledge into students. Freire’s condemnation of this model went beyond previous thinkers, in that he imbued a political purpose to this model. Freire felt that the banking model was perpetuated by oppressors, a class of people who were responsible for the marginalization of the “students” in this banking model of education. Accordingly, Freire proposed an educational program which was as opposed to the banking model as possible - real learning could only be borne out of the lived experiences of the students themselves.

Working initially with adults, Freire believed that their previous experiences were a key factor in contributing to their own learning. His theory of learning stressed the idea of praxis. In his definition, this meant theory and action coming together. For Freire, genuine education is problem posing, leading to the ‘students’ themselves discovering truths based on their own experiences.

While an intern is almost by definition someone with a privileged background, making the use of this “oppressor” framework not particularly instructive, Freire’s advancements to the theory of experiential learning are highly relevant. Both my internships dealt with issues pertaining to the regions they took place in (Nova Scotia and China respectively) and my understanding of those regions, i.e. my “lived experiences” were transformed by my independent research in to those areas; this is a very Freirian process that is further considered in Chapter 7 and 8.

Also in the 20th century, the ideas of Kurt Hahn took experiential learning in a very different direction. Hahn introduced several innovations. First he adopted experiential learning models within the schools he founded, at Salem school in Germany in 1920, and later at the Gordonstoun School in Scotland. His later school and educational programs, encompassed within the “Outward Bound” movement, have had a lasting impact till the present day. Second, his approach to experiential learning was grounded in outdoors learning and wilderness experience. In this understanding, nature becomes a classroom writ large; wilderness hardships become metaphors for the challenges of life. It follows from this understanding that the experience cannot be too easy – in fact the use of a “discomfort zone” – a place of personal growth which could only be reached by transcending the “comfort zone” became an abiding theme of Outward Bound schools and programs. Hahn’s emphasis on challenge and risk taking in a positive sense has been called adventure education or adventure training. Today, there are a variety of Outward programs which incorporate wilderness exposure into their training. Outward Bound programs are also, however, used in programs which have limited access to, and place little emphasis on wilderness areas. For example, inner city New York schools which are “Outward Bound” schools do not have a large nature emphasis. These schools may facilitate “learning expeditions” for students which are in fact research projects. These teacher facilitated projects are akin to von Humboldt’s thread on which a path is laid out for students to proceed in their own way. Again, the theme that is common in these very different styles of expedition is getting beyond the comfort zone to the growth zone. Put differently, the spirit of adventure once again occupies a central place in the learning process (as it did for von Humboldt and other enlightenment thinkers).

Hahn's "discomfort zone" as a concept sheds some very interesting light on internships. A similar discomfort, "reality shock," has often been identified as a benefit of internships. This is in fact merely a special case of culture shock i.e. adaptation to a professional workplace, from the somewhat different culture and expectations of being a student. When an internship occurs overseas, then the more familiar kind of "culture shock" comes into play.

In his 1997 MDE thesis, Dewar makes some thought-provoking claims regarding culture shock. After establishing that culture shock is a major cause of ineffectiveness among professional expats, Dewar posits that Adventure Based Experiential Learning (ABEL) could mitigate the impact of culture shock. ABEL methods are already used a number of settings, as for example in corporate training sessions. These methods could be adapted, Dewar claims, to prepare professional for overseas postings, thus increasing their overall effectiveness.

2.2 INTERNSHIPS LITERATURE REVIEW

Saliently, my internships have some features in common with the type of training module Dewar advocates. Internships are partly sheltered: some level of guidance is available and there are usually supervisors available to serve (sometimes informally) as mentors. The level of responsibility is also lower, so interns are unlikely (or perhaps unable) to make strategic blunders similar to a newly transplanted manager might. My internships occupied a space between the discomfort zone of "extreme culture shock" from landing in China, and the 'sheltered challenges' of well-structured office environments and tasks. I shall consider the implications of this in Chapters 7 and 8.

The educational literature reviewed above has much to say about learning methods in general and experiential learning in particular; this will make valuable contributions to the analysis of internships in chapters 8 and 9. Internships, of course, are not the only form of experiential learning. Experiential learning can even be simulated in classroom learning, via case studies (McAllister 2004), student prepared portfolios and journal reflections, student run businesses, etc. Even in-class discussions may be counted as a

kind of experiential learning (Karns 2005). Internships, as much as other forms of experiential learning which are affiliated with university programs are “designed to assist a student to make the transition from dependent institutional learner into the role of autonomous interdependent professional practitioner.”²

The most common metric of assessing these experiential learning approaches is to evaluate student perceptions of these experiences. Early papers utilising this method sought to gauge the professional development of the student (Groves et al 1977), or an increase in their personal and social efficacy (Beinstien 1976).

More recent scholarship has ranked internships in relation to other forms described above. Karns (2005) finds that students perceive internships to be the most effective part of their learning process, while diaries, online discussion, and course websites were perceived as the least effective forms of learning. Ehiyazarayan and Barraclough (2009) also found internships to be the most preferred learning form, followed by, respectively, student operated businesses, in class discussions, and case analysis.

Thus, there is some justification for the conflation in this thesis between experiential learning and internships, and the application of the experiential learning theories of the great thinkers (see previous section) to internships. At least in terms of student perception, internships are the ultimate learning experience³.

Internships do not have a unique definition in the literature. Grady (2006) states that “the internship is one form of experiential learning which is an extension of the classroom.” This is a comforting definition since it implies that much of the structure of a classroom carries over to internships. In fact, internships can be arranged in a variety of structures,

²Bates et al 2013. See also Bates et al 2004.

³I should hasten to add here that this pertains to learning where the content is of primary importance. Other experiences, where the content is merely a vehicle for passing a broad range of skills – as are wilderness adventures, traditional sports programs, boy scouts, and other ‘character building exercises’ - are not considered here. For a discussion of wilderness/outdoor adventure, see the previous section. For a comparison of the culture shocks of outdoor adventure and overseas postings, see chapter 8.

or even created a new based on needs and opportunities⁴. Secondly, this is a very faculty-centric view: the review of student perspectives shows that students may prize internship learning more than what is offered in the classroom⁵. Perhaps a brief history of internships will serve as a better clarifier.

Incorporation of experiential learning in universities is documented as early as 1906 at the University of Cincinnati, with a system of cooperative education (Thiel and Hartley 1997, Sovilla and Varty 2011). While today's internships tend to be structured near the end of a course of postsecondary study, or immediately following graduation, co-op education tends to alternate work and study terms⁶. However, these co-op terms were modeled on the teaching practicum, a "model used in the field of education where practice teaching is a requirement for certification" (Thiel and Hartley 1997). These teaching practica are still used in education programs today, and are usually the culminating course in an education degree – as such they are again closer to modern internships in structure.

Internships (and coop programs), when they are formally incorporated into university programs, are usually subject to some degree of evaluation. This can take the form of student perceptions (as described above) and feedback. Equally, coop/internship educators may seek feedback from employers (Thiel and Hartley 1997) or faculty.

Since the 1970's, a more formal literature has emerged to evaluate and appraise internships. One common method is an evaluation based on student perceptions of their experience. Students have reported over several decades that the increase in their self-efficacy has been one of the most rewarding aspects of completing internship programs (Beinstein 1976, Bates et al. 2013). Based on Bandura (1977), Coll and Kalnins define self-efficacy as "a personal belief about the ability to perform a particular task or

⁴Robert M. Koka, Robert A. Finka & Jennifer Adams Aldricha. Outside the box: creating your own internship opportunities. *Journal of hospitality and tourism*. Volume 12, issue 3, 2000.

⁵This seems to hold even over the lifetime of former students: see Lin 2003.

⁶A pattern that continues to be used by universities. This has the advantage that coop earning can significantly contribute to student tuition. Co-op terms and internships are not always distinguished in the literature. In the review above, I have used my judgment to describe author viewpoints on internships when they have used the term co-op.

behaviour.” This is a more specific, less ambivalent term than confidence and thus more useful. Student’s increased self-efficacy is in turn linked to other positive behaviours, such as persistence in tasks and increased willingness to take risks.

One term that is becoming popular, both in the literature and in university guided programs, is workplace integrated learning or WIL. While WIL originally described co-op education, the term is now applied to any experiential learning that is integrated into a university program. Such an application is in fact consistent with the older definition of internships as “structured and career relevant work experiences obtained by students prior to graduation from an academic program.” This definition allows me to draw on older literature concerning internships as well as newer papers examining WIL in the paragraphs below.

As mentioned above, student perceptions of their internship has formed one of the major branches of internships literature. Students have highlighted their change in self-efficacy (Beinstein 1976, Bates et al 2013, Raelin et al 2011), and this view is found in personal student reflections as well.⁷ Students also feel a sense of self improvement in related areas. Self-efficacy, self-confidence, and self-esteem are all improved by the process of internships (Coll and Kalnins, 2009). However, self-efficacy occupies a very special place in the literature, not just on internships, but on sociocultural learning and even behavioural psychology in general (Bandura 1982, 1986, 1994, 1997). In the internship context, this can lead to improved academic success (Knouse et al 2011); in a workplace setting, this translates into lowered “reality shock” (Taylor 1988) due to the anticipatory socialization⁸ accomplished in the intern environment. Underachieving students have a sense of accomplishment because they have overcome “expected failures” (Hall 2008). Meanwhile, high performing interns are rewarded with a higher salary upon graduation (Gault et al 2010), and all internships lead to students becoming more marketable to

⁷These comments by a former student intern are typical: “After this internship I know not only can I handle doing long in-depth research, but that I enjoy doing it.” Dori Wilson, 2013 internship report. Mimeo, Sewanee: The University of the South.

⁸Anticipatory socialization refers to adaptation to new cultural situations, and the subconscious emulation of behaviour in these new cultural environments. See Calanan and Benzing (2004), Bandura (1986)

employers (ibid). In a study of business alumni, Gault et al (2000) found that the former interns had a lower time to acquire their first position, increased monetary compensation, and increased overall satisfaction at work. Calanan and Benzing (2004) also found a positive correlation between internships and obtaining career related employment beyond graduation; but they did not find any greater confidence in a fit between intern qualifications and employer expectations.

It has been pointed out that literature based largely on perception rather than learning outcomes is problematic (Duke 2002). In recent years, however, there is a growing literature based on employer surveys as well (see for example Gault et al 2010, Sator and Amundsen 2011). Other research has shown that post internship students have higher academic performance, higher rates of retention in university, higher starting salaries, etc.⁹

The literature can broadly be divided into two approaches. The quantitative approach (common to most of the papers cited above) involves surveying two groups of students. This may be either the same cohort before and after internships (to assess, for example, changes in self-efficacy), or the interns against a control group of students who did not have internships. The groups can then be subjected to a comparative study using statistical analysis (Coll and Kalnins 2009).

An alternative approach is what Coll and Kalnins (ibid) call the interpretative approach. This is a largely qualitative study, but may include quantitative methods (surveys, etc.) The primary difference is to rely on depth, and the richness of data (obtained, for example, from interviews with interns), rather than the breath of data and statistical analysis. This approach, of course, is mirrored in my thesis; therefore it is discussed at some length below.

Consistent with the quantitative approach, Coll and Kalnins (ibid) identify four criteria traditionally used for assessing the scientific rigour of papers on internships. These are

⁹In addition to the citations above, see also the review of literature in Zegwaard and Coll (2011)

internal validity, external validity, reliability, and objectivity. These criteria are suitable for large scale, reproducible studies, but less suitable for interpretative studies. In its place, they propose the criteria formulated by Guba and Lincoln (1989) where credibility replaces internal validity, dependability replaces reliability, confirmability replaces objectivity, and transferability replaces external validity.

For statistical studies, internal validity has to do with correct control conditions, such that variation in the dependent variable(s) is actually due to the independent variable in the study – or “how well the research findings match reality” as Coll and Kalnins put it. In its place, credibility again fulfils this function – matching reality – by the depth of engagement with the interviewee.

This thesis is based on participant observation and reflection. I.e. as I am reflecting on my own experience I am both the interviewing researcher and interviewee subject. This seems to complicate the idea of depth of engagement – how deeply can I engage my own thoughts and reflections? An answer to this is provided in Hodges and Ayling (2007), who recommend a portfolio model of learning. They argue that

The model has truth value (i.e., is **credible**) in that the stakeholders are informed participants who, through continuous ‘long conversations’ have been actively involved in the construction of the student’s learning. The model has **transferability** (applicability) in that the conditions and context of the learning can be adequately described to enable a third party to determine contextual similarity. The model also has **dependability** in that the assessment validation process is a form of internal moderation, which acts as an ‘audit’ of the evidence produced within the contextual parameters described in the portfolio. Finally, the model can be said to provide for **confirmability** of data through the evidential nature of the portfolio and the triangulation that occurs through the integrated nature of the formative and summative methods employed. (ibid)

The “portfolio model” which they define is one in which portfolio assessment is “the evaluation of performance by means of a cumulative collection of student work.”¹⁰ In

¹⁰(Koretz, 1998, p. 309-334)quoted in Hodges and Ayling (2007)

line with this definition, chapters 3 through 6 are in fact the cumulative collection of my research output produced during internships.

It is therefore held that the portfolio of work in Chapters 3 through 6, complemented by the meta analysis of chapter 7 and further reflections in chapter 8, will produce an evaluation that is credible, transferable, dependable, and confirmable, in the precise sense that these terms are used by Hodges and Ayling (2007), and Coll and Kalnins (2009). How this process will come about is presently described in Chapter 3.

CHAPTER 3 METHODOLOGY

The following 3 chapters will contain papers that were written during the internships. These are left as is as snapshots of my intellectual development, political thinking, and the time they were written. These papers were either peer reviewed and published (as was the AIMS paper) or approved for internal government circulation by a senior expert (as was the “Chinese investments” paper in Chapter 5, approved by the Economic Section in Beijing). As such these are rigorous analytical pieces which form a portfolio of internship based learning and contribute independently to the thesis.

However, they also offer insights into the environment and circumstances in which they were written. In this capacity, they are themselves analysed to contribute to the meta-analysis in chapter 7.

This chapter will explain the methodology used for analysing experiential learning in this thesis. The primary method used will be to analyse my published papers, as detailed below. An additional method will be to engage in personal reflection on the experience itself, incorporating insights from the “culture shock” framework as appropriate, and including a discussion of the development of tangible skills and intangible personal growth.

3.1 ASSESSING THE PORTFOLIO: TOOLS FOR EVALUATING CHAPTERS 4-6

The papers included in Chapters 4 through 6 stand as the “end products” of their respective internships. They give insights into the environments they were written in and the skills developed. They can be used to elucidate the lessons learnt from these internships. In order to do this, I will subject each of these papers to critical study.

Since these were research internships, the papers are instructive in terms of the research techniques and skills that were developed in order to write them. More subtly, writing these papers also influenced my thinking on a range of academic and policy issues; management, governance, international trade, and political economy more generally.

One method for evaluating the influences of these internships is to subject the papers produced in them to critical scrutiny. In Chapter 2, one solution to the problem of assessing internships effectively was the proposal by Hodges and Ayling (2007) to use a “portfolio assessment.” Hodges and Ayling are suggesting that the structure for this be predetermined by a participatory panel of students, professors, and external evaluators at the internship. This is a proposition that I consider further in Chapter 9. Here however, it should be noted that I underwent no such process prior to or after my internships. In the absence of such a process, a two pronged approach is used instead. Competencies such as skills acquisition, as well as intangibles such as personal growth, are considered outside of the portfolio framework (chapter 8).

This still places an onus of responsibilities on the portfolios papers: they must “come alive” to reveal the details of the atmosphere they were written in (i.e. the internship placement) and how this experience influenced the writing process and outcomes. Two methods are considered for this.

The first is critical review of research, conducted in much the same way academics in the social sciences critically evaluate a new paper. There are three areas of the paper that can be critically interrogated. The research themes can be questioned, the methodology used can be critically analysed, and lastly, the conclusions drawn from the paper can be subjected to critical scrutiny. There are two purposes to this interrogation. The first is to test the validity of the paper, or portfolio papers, as a piece of research. This is the standard research critique alluded to above. Equally important, however, for this thesis is another purpose. At each stage, the meta-analysis (i.e., the analysis of the analytical methods used in my research papers) will also be trying to deduce how the analytical process under scrutiny was changed by the environment. In other words, how have the circumstances of the internship: the office atmosphere, the orientation of colleagues and the institution, the different expectations of public policy inquiry, changed the nature of that particular analytic process? These questions are considered in the sections below.

Another approach, developed for this thesis, is to track the evolution of my thinking about a research or public policy issue, using as “landmarks” a trail of documents which I produced before and during the internships.

3.1.1 Interrogating the research question

The first part of any research paper to be scrutinised is the research question itself. What themes are being considered and why? Why is the question framed in that particular way? Asking these question yields insights into the experience of my internships. For instance, the AIMS paper (in chapter 4) focuses on governance in ports. It is worth asking why a research question on the Halifax port is framed in terms of port governance. As shown in chapter 7, interrogating this theme yields interesting and significant results.

A similar question can be asked of the paper which is reproduced in chapter 5, a paper on Chinese OFDI or outward foreign direct investment. As is well known, China’s outward FDI is a very small fraction of the FDI entering the country from foreign investors. Two questions to ask, then, are why this research question was chosen, and whether I would have arrived at such research questions in other settings – say, in a graduate class instead of the internship atmosphere.

There are in fact at least two reasons why a research theme would look different for me as a graduate student and as an intern. Perhaps the most significant is the chance to engage in “original research.” In academia, I did not have a comprehensive view of the literature to know what questions were currently being asked, nor the sophistication in economics to address the burning issues being discussed in top journals. In the applied policy settings of my internships, however, I was able to address questions for which the demand came from public issues rather than academics. The implications of this are considered in Chapter 7.

Another motivation for accepting the research themes that were either proposed or altered by the intern host institution was the unique resources that they provided to address these Issues. At the Canadian embassy in Beijing, several computer software programmes provided very rich data on trade and other statistics. More importantly, both internships

provided access to a number of experts in the sub-fields being investigated. In the case of the Beijing internship, interview with these locals based experts actually constituted one of the primary methods of investigation, which brings me to the next section.

3.1.2 Interrogating the methodology

The second part of the research paper to be considered is the methodology. As already mentioned the internship papers were heavily influenced by personal interviews. Another aspect of both these papers was the need to construct a narrative, to understand what was actually happening in both of the cases under consideration. This type of interpretive study (see Chapter 2) was quite different from the methods used for economics papers in my graduate classes. The validity of this methodology and the way its use altered the papers are analysed in Chapter 7. Meanwhile, the gains in self-efficacy produced by successfully designing a new methodology to answer new questions is analysed in chapter 8.

3.1.3 Interrogating the conclusions

The last part of the paper to be interrogated is the conclusions. First, on the basis of the research questions and methodology, is it valid to reach the conclusions that are stated in the research paper? Also relating back to the motivation, it is also possible to ask if the framing of the research conclusion limits the conclusions that can be reached. These questions are considered in Chapter 7.

3.1.4 The Evolution of Themes: Lessons from Cross Comparisons

An alternative approach is to compare papers produced at several times to see how the progress of the internships altered my viewpoints and writing over time. This is an especially useful approach for my AIMS work. I was interested in the Halifax port prior to my internship, and coauthored a paper on the port in 2005. Later I adapted excerpts from this paper in a research proposal for AIMS. After this, on the advice of a senior policy advisor at AIMS, I revised the proposal dramatically, making it a comparative study of the Halifax port and Lazaro Cardenas. Months later, the final product again

differed somewhat from the proposal. A small portion of this is due to the normal shifting in research in the progress of an investigation. However, there is much to suggest that, in keeping with Freire (see Chapter 2), the “lived experiences” of the internship experience significantly contributed to this change of focus, methodologies, and general outlook. By combining the documentary evidence from these papers with recollections from the internship experience itself, I am able to evaluate the impact of these influences in Chapter 7.

A similar documentary record does not exist for my internship at the Canadian embassy in Beijing. Partly this is because I did not have any knowledge of the topic - Chinese investments into Canada - prior to commencing the internship. Equally, due to the security protocols of the embassy, I was not able to keep a record of early drafts of papers and other documents for myself. However, the paper produced in chapter 6 - comparing social unrest in Europe with predictions for China - is compared to an article I wrote years later on inflation in Malaysia and Thailand. The methodology used in my embassy paper on social unrest was one that had not occurred to me previously - to gauge the possibility of social unrest by using macroeconomic indicators. Both the methodology and the framing of this research question taught me serious lessons, which I went on to use in an article several years later. This process is also detailed in chapter 7.

3.2 ASSESSING THE EXPERIENCE: BEYOND THE PORTFOLIO ASSESSMENT

When Hodges and Ayling (2007) argue in favour of portfolio assessment as a “holistic approach” to assessing an internship, they are using a slightly different definition of portfolio than is used in this thesis. Their idea of a portfolio included an explicit evaluation of skills and competencies. Which skills and competencies are to be developed is an a priori decision made by students (future interns), academic evaluators, and internship hosts in consultation with each other. In this highly structured internship, the portfolio is indeed a holistic assessment.

From my internships, the portfolio of internship based learning is also used to gauge the lessons learned from internships. However, given that these internships were far more

open ended and independent than the structures that Hodges and Ayling (2007) suggest, an additional skills component is required to determine skills development in my internships.

Different interns may report different skills and competencies developed by their experiences. A useful framework is provided by Gault et al. (2000). After exhaustively reviewing the internship literature, they identify four skill categories in which career skills are improved, namely communication skills, academic skills, leadership skills and job acquisition skills. Communication skills include oral and written communication plus proposal writing, academic skills include analytical ability, computer applications, creative thinking, information search, and problem solving, leadership skills have to do with teamwork and relationship building, and job acquisition skills include resume writing, job interviewing, and networking. These thirteen skills are an excellent framework for my own skills assessment, which occurs in Chapter 8.

Lastly, neither the skills approach nor the portfolio approach adopted above can independently shed light on some of the most important lessons learned in internships. Coll and Kalnins (2009) identify four themes in internships which are beyond mere job preparation and employer expectations. These are: the personal growth of the intern, contributions to broader social and educational goals, (structural) issues in internships, and employer views. The last of these are not considered here, although incorporating employer views could be a basis for extending this research (see chapter 9). The other three themes are all addressed in Chapter 8.

PART 2 PORTFOLIO OF INTERNSHIP-BASED LEARNING

CHAPTER 4 GOVERNANCE AND LEADERSHIP

This chapter is a manuscript of a paper published by the Atlantic Institute of Market Studies in 2007. It is based on my work there in the summer of 2006, when I held the Manning Centre Internship. At that time I conducted a comparative study of the ports of Halifax, Canada, and Lazaro Cardenas, Mexico. The port of Lazaro Cardenas had just gone through a dramatic expansion and I studied the importance of governance to the growth of the port.

Utilizing the lessons of Lázaro Cárdenas' success, this paper concluded that Halifax could improve its performance through the following:

- adopting a strategic business development plan;
- ensuring competitive tariff levels;
- attracting “leader firms” to invest in infrastructure;
- building strong relationships among port administration, shippers, shipping lines, and railways;
- targeting any public efforts to maximizing utilization of existing capacity before embarking on expansion;
- aggressive marketing;
- ensuring that all board members are well versed in port issues
- expanding the range of means through which the port may raise revenue; and,
- rationalizing the roles of the many government agencies that currently are involved in port affairs.

4.1 INTRODUCTION

In the modern world, the success of regional and national economies is based on their ability to trade. A significant portion of this trade is conducted through seaports. Thus, ports occupy a unique position in society as agents for economic development. For this reason, there is a benefit to the local economy exceeding the benefits to port users. In addition to the commercial advantages, ports are also used for naval defence purposes. As a result of this strategic position, ports have traditionally been considered far too important to fall out of public hands. Instead, they have been historically controlled and operated by governments.

The status of the government owned and operated port has, however, been challenged in recent years. There are several reasons for this. Politically, the philosophy of government as a provider of all utilities was reversed by the regimes of Margaret Thatcher, Ronald Reagan and Brian Mulroney, among others. Economically, increased trade under globalisation, the introduction of modern information technology, and other technological changes in the shipping world have all contributed to an increasingly complex system. There is a perception that private sector operators have a superior ability to respond to complex and rapidly changing market conditions.

Containers have played a significant role in this system. New intermodal transport networks allow transport to continue seamlessly from sea to rail or road. This has changed the functions of the ports themselves. Previously ports could serve a small hinterland around them. The local port was the only source of overseas goods for this local hinterland. But with modern technology supporting intermodal transport networks, the range of possibilities is greatly expanded. The hinterland of a port now extends hundreds of kilometres into the interior. Conversely, many hinterlands were no longer captive markets to the local ports. If other ports could bring goods in more cheaply, the local port would lose business.

Competition is not something that has been traditionally associated with the public sector. To operate in this new environment, the port system requires a certain level of dynamism

to respond to competitive market forces and changing conditions. For this reason, public policy on ports in almost every coastal country now allows some level of private sector involvement.

Policy makers tend to assume that privatization automatically results in improved performance. The idea is that management will be more sensitive to process and costs, as well as performance targets. Management in turn will take direction from a Board of Directors. But what really happens to governance in a port when reforms are implemented?

In Canada, port reform was carried out via the Canada Marine Act of 1998. While the Canada Marine Act and associated port reform process was supposed to leave ports autonomous and in the hands of community interests, the reality was that the federal government via the Department of Transport retained control of Board appointments and membership. In a system which is subject to Ministerial abuse and domination, the best governance may be eluded. Less government (interference) could be the solution to better governance.

Consider the case of two ports: one in Halifax, Canada and the other in Lázaro Cárdenas, Mexico. Both of these are deep-water ports which enjoy natural and geographic advantages. With their strategic location and low congestion, they are also both well placed to function as ‘gateway ports’ for traffic into the United States. That is, they can capture some of the increasing traffic into North America (mostly between rapidly developing Asian countries and the United States) in order to expand their own transport industries.

While Halifax has had some success with this, Lázaro Cárdenas has been truly stellar. Container traffic has grown at an average of seventy five percent over the last two years.¹¹ This paper will question why Halifax has been unable to match the growth of

¹¹ It should be noted that Lázaro Cárdenas is a Greenfield site. That is, it is a new port with no prior container operations, so the growth numbers are not directly comparable to Halifax. Yet several other ports, such as Savannah, have also seen dramatic growth. Between 2004 and 2005 container traffic in Savannah

Lázaro Cárdenas. It argues that governance problems have affected the growth potential of both ports. Two aspects of the governance problem are explored.

The first issue considered is the corporate governance of the Port Authority, emphasizing the role of the Board of Directors. This paper questions whether the strategic vision of the current Board limited the potential of growth in Halifax. It asks why stakeholders in Mexico have envisioned that a small fishing-and-steel town will soon have container traffic exceeding Oakland or Seattle, while Halifax, with a much richer Maritime history, is receiving only marginal gains (which have as much to do with increasing market demand as with any positive action on the part of the port).

The second relevant issue is cluster governance. I argue that Halifax's underperformance as a gateway port is linked to a failure to attract and coordinate various stakeholders. These include dedicated terminal operators, shippers, carriers, third party logistics companies, and the local rail monopolist (CN in this case). The Canadian case is contrasted with Lázaro Cárdenas, which has seen high levels of coordination between port authorities, federal and state governments, a world-class terminal operator (Hutchison), and crucially, the rail line (Kansas City Southern de Mexico). Peter de Langen (2006) has written of the importance of coordination between such private firms. He defines cluster governance as "the mix of, and relations between, various mechanisms of coordination used in a cluster." This is an issue which not been given sufficient emphasis either by local port authorities or the federal department of transport.

In addition to governance, the management at the port, as well as the policy framework within which the ports operate, are all considered.

The various governance structures that are possible for ports are derived from the port reform process. The next section considers a number of models which have been proposed for the port devolution continuum, and the limitations of these models. Section

grew 14.4%, while traffic in Halifax grew by 4.7%. During the same period traffic in Lázaro Cárdenas grew by 204.9 %. Source: "North American Container Traffic" compiled by the American Association of Port Authorities. Available at <http://www.aapa-ports.org/pdf/2005_NORTH_AMERICAN_CONTAINER_TRAFFIC.pdf>

4.5 then looks at the actual governance structures in various countries. All of the countries considered here have undergone significant reforms within the last two decades. This section also details the port reforms in Canada and Mexico.

Section 4.5.4 and 4.5.5 discuss the ports of Halifax, Canada and Lázaro Cárdenas, Mexico respectively. The impact of the port reforms in these two ports will be analyzed.

The governance structure in Lázaro Cárdenas is not perfect; indeed there is much room for improvement there. Yet the Lázaro Cárdenas experience is overall a success which contains valuable lessons for Halifax. These lessons are presented in Section 4.8.

Based on my findings, I make recommendations for public policy which could improve the relevant governance factors for ports. These include business recommendations, governance recommendations, and a set of proposed amendments to the Canada Marine Act.

4.2 MODELS OF PORT PRIVATIZATION

In one respect, port reform has been like the reform of various other public utilities and firms. Around the world, the focus of public sector reform has been to devolve control to lower government levels or community interests, to less the financial burden on the public purse, and gain some of the purported efficiency of the private sector.

The literature on port reform is motivated by these same concerns. The majority of this literature constructs categories based on how far the reform process has gone. Examples of this include the World Banks Port Reform Toolkit (2003), and the UNCTAD Guidelines for Port Reform (1998). These are intended to be a policy guide for countries attempting reform. Such models detail the extent of privatisation, and then try to find some optimum level.

An alternative approach is found in the Matching Framework model, where local conditions dictate the optimal structure for the port. Some of these models are explored below.

4.2.1 The World Bank Port Reform Toolkit

The World Bank Port Reform Toolkit (hereafter WBPRTK) proposes four models for ports. The traditional government-run model¹² is similar to the Service Port, which the WBPRTK says are ports with a “predominantly public character.” In these ports, all functions are controlled by the (public) Port Authority, which is itself usually under the Ministry of Transport or some equivalent ministry (WBPRTK 2003, Brooks 2004). The Port Authority is also the sole employer of port labour for cargo handling services, while the director of the port reports directly to the Minister.

A variant of this is the Tool Port. As in the Service port, the Port Authority owns all the infrastructure and super structure. However, the superstructure is available for use by private companies, which handle operations on board vessels as well as on the quay and apron. Problems with this model mostly relate to the fragmentation of cargo services. Tool Ports typically have a number of small companies providing cargo handling – in addition, the Port Authority itself continues to undertake some cargo-handling operations. This structure carries the potential for conflict between the various cargo handling companies, stevedoring services, and the Port Authority. In addition, strong stevedoring companies are not developed, and the lack of infrastructure ownership deprives companies of any stable role in the port and limits their expansion possibilities.

The Landlord Port is one of the most common types of port today.¹³ This is a mixed public/private model in which infrastructure is leased to private operators and/or industries. The maintenance of infrastructure remains the responsibility of the Port Authority, which carries out maintenance of wharfs and dock, dredging operations, etc. The Port Authority is also responsible for the long term development of the land, economic development, and the majority of regulatory functions.

¹² The government run ports are traditional only in the sense that this was the system in existence in most developed countries by the late 1970's, and the system that continues to exist in many developing countries today. Jean Grosdidier de Matons (1996) notes that these government run authorities were themselves created to counter the monopolistic tendencies of the private ports which were ubiquitous in the nineteenth century.

¹³ Canada Port Authority (CPA) ports and Integral Administration Ports (API) in Mexico would both fall under the broad description of 'Landlord Port.'

Lastly, there are entirely Private Sector Ports, with land ownership and regulation in private hands.¹⁴ Fully private ports are disfavoured in most countries as they exclude public control entirely. There is also a concern that private land can fall into the hands of speculators or be otherwise used for non-ports purposes. In such cases, the loss of port lands may be to the detriment of the public or the economy at large.

Mary Brooks (2004) has criticised the World Bank PRTK for its overly simplistic approach. In reality, the variety of functions in ports is performed by various levels of government or by the private sector, in response to specific local conditions and in harmonization with the economic development strategy of the government. This variety cannot be accommodated by the neat categories of the WBPRTK. More significantly, the WBPTRK provides no guidance to governments on how to reform their ports systems.

4.2.2 UNCTAD models

The United Nation Conference on Trade and Development (UNCTAD) has also modeled the port reform process in the hope of providing guidance to countries attempting port reform. The UNCTAD (1998) framework allows for much broader categories than the WBPRTK. In addition the UNCTAD report acknowledges that the modelling is only for descriptive purpose, and that any adaptation of these models will require extensive modification to suit local conditions. The UNCTAD (1998) report documents four different forms of privatization.

Comprehensive privatization refers to the outright sale of all port assets (including all associated land and water areas) and services to a (private) company. This comprehensive nature makes it similar to the Private Service port model of the WBPRTK (2003) or what is termed ‘extreme privatization’ by Baird (2000) and Hochstein (1996).

¹⁴ While there are indeed cases of fully private ports (such as the fully private ports in New Zealand and Britain), such ports as ‘extremely rare’ (Hochstein 1996) by world standards. Because they have withdrawn any ‘public interest’ functions for the port entirely, Baird (1999) refers to this model as ‘extreme privatization.’

If only part of the assets and activities undertaken in the port are transferred to the private sector, this is termed partial privatization. For example, towage and pilotage services could be privatized, or a concession¹⁵ could be granted to a private company to operate a container terminal.

While both these categories describe the *extent* of privatisation, two other categories describe the *quality* of privatisation. Full privatization refers to full ownership by the private sector, but part privatization indicates that while ownership has been transferred to a consortium, the government retains significant interest in that consortium. The UNCTAD model is unique in that it distinguishes not only the extent of privatisation, but also the quality of privatization. Under this system, there can be comprehensive and full privatisation, but also comprehensive part privatization. Other possibilities are partial privatization in full or in part. The UNCTAD model, the WBPRTK model, and several others are shown on the figure below.

<i>Increasing Private Sector Involvement and Control</i> →				
WBPRTK (2003)	Public Service	Tool	Landlord	Private Service
Hochstein (1996)	(I) Operating	(II) Mixed	(III) Landlord	"extremely rare"
UNCTAD (1995)	Managerial Measures'	Deregulation	Commercialization Corporatization	Privatization
UNCTAD (1998)	n/a	Partial, Part	Partial, Part or Full	Comprehensive, Full
Baird (1996)	Public		Public/Private	Private/Public, Private
← <i>Increasing Public Sector Operations and Control</i>				

Table 1. Models of port privatization in the literature.

¹⁵ Technically, a concession should only be considered full privatization if it results in full land ownership by the concessionaire. However, it appears the UNCTAD report does not make this distinction.

4.2.3 Other models

Baird (2000) finds that there are three elements of port activity which can be privatized. These are the port regulator, port landowner, and port operator. A public port is one in which all these elements are undertaken by the public sector. When the public sector retains the regulator and landlord functions, but operations are performed by the private sector, this is called the Public/Private port. This is essentially the same as a Landlord Port. Another model is classified as Private/Public. This is essentially a private port, in terms of operations and land ownership. However, regulations are carried out by a separate government agency. Finally there are fully private ports. Here the port is owned and operated privately, and is self-regulated. While many British ports conform to this model, it is rare elsewhere.

Anatoly Hochstein (1996) discusses four ‘grand strategies’ for port reform. These are commercialization, liberalization, privatization, and port administration modernization.

Commercialization refers to decentralized decision making and autonomous management. Management has full control over all port related decisions; in turn, they are held accountable for the performance of the port. This gives the port the ability (in theory) to function as a business. Hochstein states that “the objective is to combine the best features of both public and private enterprises.” In order to achieve this, the port authorities must be freed from certain public responsibilities such as “union rules and legislated work practices” in addition to freedom from “certain administrative, legal and policy constraints.”

Liberalization involves removing the monopoly power of the government over ports, and allowing private ports to compete in the market. Hochstein argues that as ports cannot be truly commercial without competition, liberalization is a natural complement to commercialization.

Privatization in Hochstein's definition involves the 'transfer of functions' to the private sector¹⁶. While it may involve transfer of ownership (though sales of assets, build-operate transfer schemes, or joint ventures) it may also be limited to "public sector management practices" such as lease and operating contracts.

Port administration modernization refers to largely superficial reforms, in that the existing structures and institutional arrangements are not changed. Reform is limited to efficiency gains through computerization or some changes in management processes.

These strategies result in three different models of ports. Operating ports are those fully controlled by government and are akin to the 'Service' port in the WBPRTK model. 'Mixed' ports are those in which the public and private sectors both provide some services, similar to the Tool port. Lastly Hochstein also refers to a landlord port, where concessions are granted to the private sector to operate the ports. While Hochstein acknowledges that there are several fully private ports, he considers these "extremely rare" and they not highlighted in the model.

All of the models discussed above use different categories, and often use the same term (such as privatization) to mean different things. Yet they all distinguish various categories along the spectrum from fully public to fully private. This approach can clearly be seen in another UNCTAD (1995) study, in which various reforms are considered which would lead to models similar to the ones here. In this system, the mildest reform process is the "managerial approach." Here, efficiency is gained by streamlining the operations of management, but the basic public service framework of the port is left intact. The study acknowledges that a lack of local decision making power is one of the key problems in centralized/public service ports. Hence it recommends decentralization, but with some external control being provided either by market forces or regulation.

¹⁶ Note that this is in contrast to several other definitions in the literature. Mary Brooks (2004) refers to the concession-based, landlord port system as "outsourcing" rather than 'true privatization'. Jean Grosdidier de Matons (1997) agrees that "privatization takes place only when there is a sale of public property to individuals."

Going further along the reform process, “deregulation” is stronger than just managerial reforms. In the UNCTAD (1995) study ‘deregulation’ does not imply that all government restrictions and regulations should be abolished. Rather, it means that the regulatory regime should be modified to promote competition. This could be done by removing restrictions on investment, or by deregulating the price of port labour. This is still close to the Public Service port model, as the social objectives of the port can remain in place.

Commercialization is the process by which broad social objectives are replaced by economic objectives for the port. In the UNCTAD model this does not include contracting out services.

Further reform can come about by corporatization. While they can remain in public hands, corporatized (public) ports enjoy the same legal status as private companies, with the government as shareholder¹⁷. The land and assets of the port are transferred to the port corporation.

Finally, there is privatization. The UNCTAD (1995) study takes a broad view of privatization, defining it as “transfer of ownership and control of an existing enterprise, activity or service from the public to the private sector.” Divestment of government assets and contracting out services both count as privatization under this scheme.

These models (with the exception of UNCTAD) all recommend a single optimal solution for all ports. Commenting on the models of Baird and others, Baltazar and Brooks (2001) write “The recommendations possess the quality of being absolute, of being critical factors for successful ASD [Alternate Service Delivery] implementation.” In contrast to this, they develop a ‘Matching Framework model,’ where the optimal strategies and structures are those that are suitable for local conditions.

When public policy favours private sector involvement, port reform consists of shifting the port model rightwards along the spectrum in Figure 1. In developed countries, this usually involves moving approximately from the Public Service Port to the Landlord Port.

¹⁷ Or, as in the case of Canada, the port Authority can be a non-share non-profit corporation.

In developing countries, reform away from the public service model frequently results in something slightly left of the Landlord Port model¹⁸. For example Canada Port Authorities are Landlord Ports. The Integrated Port Administrations (APIs) in Mexico are almost Landlord ports, but they do not have the independent port authorities which are typically found in this model. To understand this institution better, some arrangements of the Landlord Port are explored below.

4.3 THE LANDLORD PORT

With the exception of a few fully privatized ports, in countries like Britain and New Zealand, most developed countries have some variant of the Landlord Port. The fundamental institution of the Landlord Port is the port authority. The Port Authority is either the owner or the long term lessee of port lands. As such the Port Authority has the right to lease lands to terminal operators. These leases, called concessions, can take various forms. The Port Authority and concession arrangements are explored below.

4.3.1 Port Authority

In both Landlord Ports and Tool ports, the Port Authority plays a crucial role in marketing the port, maintaining superstructure etc. These models assume that there is still some public good aspect to the ports. The Port Authority exists to make investments that are beneficial to the economy but will not be undertaken by private actors.

Jean Grosdidier de Matons (1997) argues that port authorities are actually public trusts; therefore they are supposed to run in a manner that maximises public benefit (e.g. by increasing traffic) rather than the profit of the Port Authority. Thus port authorities that are “commercialized” are self-serving and should be abolished, while more publicly oriented authorities should be preserved.

¹⁸ Shashikumar (1998) notes that this is the intent of port reforms in India. However, Estache *et al.* (2001) see the landlord port as an intermediary step in Mexico (and other Latin American countries) on the road to full privatization.

In Halifax, the Port Authority is actively involved in maintenance, marketing, and coordination of port activities. While the Port Authority does not own the land, it has the ability to grant leases to terminal operators. In Mexico, the functions of Port Authority are split between the Federal Secretariat of Transport (SCT) and the local port administration (API). Both ports are operated as non-profit entities and are required to reinvest all profits in the ports. The Port Authority may be a corporation, governed by a Board of Governors similar to private industry. This is the case in the ports of Halifax and Lázaro Cárdenas.

4.3.2 Concessions and BOT arrangements

The concessions offered by landlord ports today offer a variety of ways for a private operator to extract revenue in return for creating infrastructure. In the ports of Lázaro Cárdenas and Halifax, the concession arrangements are close to what Jean Grosdidier de Matons (1996) calls “French type concessions.” Under this scheme (commonly known as Built-Operate-Transfer or BOT in the literature) the private sector partner¹⁹ incurs capital costs “upfront” by making significant infrastructure investments). These costs are recovered via the lease agreement. Under the BOT scheme, at the end of the lease agreement²⁰, the terminal (with the entire infrastructure upon it) returns to control by the Port Authority.

At other ports, some other schemes include full ownership for the terminal operator (Build-Operate-Own or BOO) and ownership for the lease period followed by transfer back to the Port Authority (Build-Own-Operate-Transfer or BOOT).

While the BOT can be a mechanism for introducing private sector involvement, it also maintains a strong role for the public authority. Baird (1999) writes that “even in BOT arrangements the state will generally retain its public Port Authority, may also impose

¹⁹ The concession could also be granted to a private consortium which includes significant levels of government involvement. This was the case in the original concession to Halterm at the Halifax port.

²⁰ Leases agreements have traditionally been around 30 years. The increasing sophistication of port infrastructure has led to a demand for longer lease terms by terminal operators. In Halifax, sources within the Port Authority claim that a 50 year lease would be a fairer duration to allow for cost recovery and reasonable profits by terminal operators (Anonymous, interview by the author, 24 July 2006).

restrictions on future tariff increases, share in port profits, stipulate minimum throughput targets, and property rights ultimately revert to the state at the end of the contract period.”

4.4 PRIVATIZATION SCHEMES AND GOVERNANCE

The review above shows that there is some discussion of the various privatisation schemes and options, most of which (WBPRTK 2003, UNCTAD 1995, 1998) is motivated as a guide for port reform. All of these pieces suggest that some level of privatisation will cause increased efficiency in the port. However, the mechanism by which this may come about is not explored. If increased efficiency is expected, this presumes that managers are making better decisions. The change in managerial decision making is itself attributed to a new, ‘business-oriented’ policy environment. Yet such an environment does not come about by chance, or merely because there has been some devolution of power away from the federal government. Rather, it reflects a conscious decision by port directors to change the orientation of management. The role of port directors, the institutional framework and the goals set for management are all determined by the governance structure of the port. Brooks (2001) writes that following devolution the new entity must determine its own identity and vision:

In devolution, each devolved entity faces an identity crises: does it co-opt the objectives of government, or identify its own in keeping with the views of the newly created Board, or co-opt those of its community stakeholders?

In a later paper Brooks (2004) clarifies that the strategic vision “depends on the governance model under which it operates and the legislative, economics and social environment in which it operates.”

The following section explores port governance structures in several countries. This begins with the United States, a very relevant case as US ports are in direct competition with both Canada and Mexico. The British case lies very near the full privatization end of the spectrum. This is considered next. A case that would be very hard to classify on this spectrum is the port of Singapore. Singapore demonstrates many of the characteristic features of the fully private corporation. Yet the port is in fact fully owned by a

government holding company. Finally, port governance in the cases of Canada and Mexico is considered.

4.5 SOME PORT GOVERNANCE STRUCTURES

4.5.1 Port Governance in the United States

Most ports in the United States began as private railway ports (Ircha 1995). Public revolts in the late 1800's combined with an activist judiciary led to the eventual conversion of these ports to public authorities (Jean Grosdidier de Matons 1996). US ports lack a national strategy (Ircha 1995). As a result, governance is fragmented with participation by the public and private sectors, and several levels of government all imposing their priorities and requirements upon the ports.

Compared with most other developed countries, the United States provides a high level of subsidies to its ports. A study by MarAd (cited in Brooks 2004) found that in 1996-97, capital was provided by grant loans, grants, and taxes as well as tax-exempt revenue bonds, with only 31.7 % of revenue generated from port operations. The extent of subsidies provided by the federal government may not be readily apparent. For example, the Port of New York/New Jersey maintains on its website that it is “a financially self-supporting public agency that receives no tax revenues from any state or local jurisdiction and has no power to tax. It relies almost entirely on revenues generated by facility users, tolls, fees, and rents.”²¹ But this does not account for the channel dredging operation currently being carried out by the US Army Corps of Engineers, at an estimated cost of 1.6 billion dollars²². This cost has largely been borne by the federal government.

The high level of subsidy has a distortionary effect on port functioning. Helling and Poister (2000) note that “because ports are publicly subsidized, competition does not

²¹“Governance,” <<http://www.panynj.gov/AboutthePortAuthority/Governance/>>

²² “Port Authority, Army Corps Sign Historic Agreement To Begin Major Channel Deepening Project In Port Of NY/NJ,” <<http://www.panynj.gov/AboutthePortAuthority/PressCenter/PressReleases/PressRelease/index.php?id=531>>

ensure efficiency.” In addition “subsidized competition may have created excess port capacity in the United States” (*ibid.*)²³.

This is particularly relevant for ports in Mexico and Canada, who both have to compete with American ports in the NAFTA market. O’Keefe (2003) notes that the difference in capital investment regimes places Canada at a disadvantage vis-à-vis the United States.

4.5.2 Port Governance in the UK

The British port reform process has led to one of the few known case of full privatisation, which has also been called “extreme privatization” (Baird 2000, Hochstein 1996). In most other countries, the reform process involved government devolution, with the private sector being included via lease arrangements. The British process involved the outright sale of port assets. The goals of this process included those similar to the goals of port reform elsewhere, such as improved efficiency and management, and revenue generation for the government. However, the political philosophy of the then Conservative government led to other goals as well. For instance, it was thought that share ownership would be a significant motivator for managers and workers alike. Haarmeyer and Yorke (1993) write that:

Employee share ownership played a vital role in securing employee cooperation in privatizing the ports and increasing the incentive to raise worker productivity. This was basically accomplished by strengthening the link between employee performance and reward. By aligning the interest of employees with that of the company, employee ownership gives workers a direct stake in a company's performance, and hence encourages employees to work more productively.

Yet later assessments of this process were less positive. Baird (1999) comments:

In reality, shares in the ports were acquired very cheaply (to ensure take-up) and as soon as the first offer arrived valuing the port more accurately (i.e., much higher than government), managers and employees were tempted to dispose of

²³ With the competition posed by Canadian and Mexican ports, subsidy may not be the only reason for overcapacity. For instance, if the proposed facilities in various Mexican ports and the port of the Americas all expand to their maximum capacity, mainland US ports may not be able to compete and will have overcapacity.

their shares in return for significant personal gains, as happened at Medway, Clydeport and Tilbury.

In addition, the issuing of shares made the ports privy to the short term interest of shareholders, rather than the long term investment which ports require.

Baird (*ibid.*) also claims that the port lands were vastly under-priced by the government. This allowed the buyer-companies to look very financially healthy because of their low capital costs (and therefore low debts and associated interest payments). In fact, these low interest payments were tantamount to a government subsidy, as they would be much higher if the port lands had been priced at full market value.

Haarmeyer and Yorke (1993) claim that by “1990, the current assets of the company stood at £272.7 million, more than double that at the time of privatization. . . . By far the two largest sectors were investment in the ports themselves and property development.” Yet Baird (2000) found that privatized ports invested less in development than the port authorities they replaced.

Finally, Baird criticized the government for withdrawing from its regulatory role. Brooks (2004) noted that in the British case “the business of port regulation, as distinct from port management, has been minimalist at best; a national ports policy, for example is only implied by the actions of the government.”

The failures of full privatization, as demonstrated by the British case, may have influenced the Canadian government in its decision to use devolution and non-profit corporations rather than the fully privatized model for ports.

4.5.3 Port Governance in Singapore

The history of the port of Singapore (especially pre-1996) shows that public ownership *can* work. However, this was effective only because the government had a commitment (actual, not rhetorical) to making the port run on ‘market discipline,’ for example while hiring and firing workers (Ho 1996). Such arrangements were possible because of the unique combination of *dirigiste* and *laissez faire* in Singapore (*ibid.*).

The policy framework adopted in the 1950's is in fact unique among development policies at that time. While other developing countries attempted to build their economies through government planning, Singapore established a policy of non-interference in port affairs:

.... one of our very first informal conclusions was that we must not without very good reason, or more than absolutely necessary, disturb the present practices of trade and commerce, and that we must not suggest any course calculated to drive trade away from Singapore, since its success has highly come from its reputation as what is described (not entirely accurately) as a 'free' port. We have therefore tried in our deliberations to look at everything within the context of its effect on the competitive capabilities of Singapore, and to frame our proposals accordingly.²⁴

Operating within such a framework, publicly controlled ports in Singapore functioned quite differently from other public ports. Given the difference of this port and other public ports, it is unlikely that Singapore could be a model for a public port system. Indeed, a publicly controlled port that embraced "market discipline" may be impossible in a democracy²⁵.

The changing economic climate caused even the Port of Singapore Authority to switch to a corporate entity in 1997. The former Port of Singapore Authority was converted to PSA International²⁶, a wholly owned subsidiary of Temasek Holdings, a government holdings

²⁴ Report of the Commission of inquiry into the Port of Singapore, Aug-Sep 1957, Legislative Assembly, Singapore, Sessional Paper No. S10 of 1957. Quoted in (Ho 1996).

²⁵ In a democracy with a large public sector, many economic failures could be met with continues pressure on the government to increase public spending. Conversely, decreasing the funding to public projects could become politically unfeasible. For more discussion on the tendencies of democracies with public planning to constantly increase operations, see *The Road to Serfdom* by Fredrich von Hayek.

²⁶ Information on the transition can be found at the PSA website <http://www.internationalpsa.com/about/heritage_f1.html>. While Temasek Holdings does not fully disclose its financial information, it does acknowledge holding PSA International. <http://www.temasekholdings.com.sg/our_investments/ourinvest_tlc.htm#psa>.

company²⁷. Following corporatization, the regulatory functions of the port were transferred to a new statutory board, the Maritime and Port Authority of Singapore. While PSA International is currently one of the largest container terminal operators in the world, with operations in eleven countries, it continues to be a wholly owned subsidiary of a government holding company.

Previously, the Port of Singapore Authority was administered by a Board including a Chairman, three Singapore Government members, and ten shipping community members. Currently the board of PSA includes no government representatives, although the Chairman of the Land Transport Authority is also on the Board.

4.5.4 Port Governance in Canada

In Canada, as part of the devolution in transport support industries, governments deliberately devolved responsibility from the public to the private sector through the implementation of the 1995 *National Marine Policy* (NMP) under the *Canada Marine Act*, 1998. The National Marine Policy makes Canada one of the few countries to actually have a coherent national policy on ports.

Canada experimented with devolution of ports beginning in the 1980's. By this time, the fifteen largest ports in the country were controlled by the central National Harbours Board (NHB), a crown corporation. In the early 1980's, some of the power of the NHB was reduced by the creation of a Local Port Corporation (LPC) at each of the former NHB ports. These LPCs each had a Board of Directors appointed by the Minister of Transport, and the Board in turn appointed a Chief Executive Officer, a custom adopted from the private sector.

²⁷ Temasek Holdings is a government investment company which manages investments in state enterprises, and companies in which the government is at least a 20% stakeholder, called 'government-linked enterprises' or GLC's. These GLC's resemble private corporations more than the state-owned enterprises of other countries (Ramirez and Tan, 2004). The unique institutional culture of public owned enterprises which function as private corporations helps to explain the success of public enterprises in Singapore (including the port) where others have failed.

This arrangement left power largely in the hands of the Ministry of Transport. Funding for the ports continued to come from the government, though some private investment also took place. Mary Brooks (2006 forthcoming) charges that the availability of government funding through this period was influenced by the personal relationships between individual Board members and the Minister.

The next stage in the devolution process occurred in the 1990's. The National Marine Policy reiterated a commitment to safe transportation and clean environment, and to serve remote communities. For the larger ports, however, there was a shift in policy. One objective was to "shift the financial burden for marine transportation from the Canadian taxpayer to the user."²⁸ A goal to "encourage fair competition based on transparent rules applied consistently across the marine transport system" hinted that privatisation now factored into the reform agenda. The policy was also marked by a willingness to allow a reduction in "infrastructure and service levels where appropriate, based on user needs." The National Marine Policy also proposed three different models of ownership for Canadian ports, each with different "organizational structures and management processes" (*ibid.*).²⁹

The Canada Marine Act (1998) introduced the legal framework for significant reform. The devolution process was chosen over full privatization in Canada "to invoke community responsiveness through the creation of not-for-profit stakeholder-focused entities" (Baltazar and Brooks, 2001). As part of the process, the new port authorities were to be run by a community-selected board of governors. Such policies were not unique to ports. During the same period, there were salient reforms in other Canadian transport industries, such as the privatization of CN (one of Canada's two Class one railways) and NavCan (the air navigation system). All these reforms were part of a government attempt to deal with a new political philosophy (devolution and community

²⁸ Objectives of the National Marine Policy are listed on the Transport Canada website at <<http://www.tc.gc.ca/pacific/marine/nationalmarinepolicy.htm#61>>.

²⁹ This paper is concerned with Canada Port Authorities, the structure adopted for the largest ports. The three ports in Canada which carry significant container traffic are Vancouver, Montreal, and Halifax, all of which are Canada Port Authorities.

control) and a new economic reality (the unsustainability of deficit levels and the need to reduce federal government expenditures).

The National Marine Policy suggested that an extensive devolution was planned, which would change the governance of the ports entirely. When the Canada Marine Act was passed, however, the results were less than stellar. A new management structure was specified in the Canada Marine Act which sought to increase local input and autonomy. While community input is now actively sought in Board selection, the (federal) Minister of Transport retains the right to approve candidates. Baltazar and Brooks (2001) find that “the Minister decided on his choice of candidates and was able to reject candidates put forward by local interests.” They thus conclude that “true devolution did not happen for Canadian ports.” The Boards capacity for autonomous decision making was affected as well, since “board decisions could reflect ministerial priorities if the appointees chose loyalty to the Minister over fiduciary responsibility to the entity” (Brooks 2006 forthcoming).

One of the reforms of the Canada Marine Act (1998) was to place limits on the amount of federal government grants available to the newly created port authorities. This seems reasonable considering that one of the primary aims of the devolution process was to keep these ports from being a major drain on the public purse. The problem was that adequate provision was not made for pursuing and receiving funds from the private sector. The Letters Patent of the port allows only for money to be raised through pledging the revenue stream. In the United States there are several other ways in which port authorities can raise money, including issuing bonds and running for-profit subsidiary services. Neither of these is permitted by the Letters Patent of Canadian Port Authorities. Under these circumstances, some port authorities finance themselves the way they always have: with money from the government. Several ports have applied to the Minister of Transport to have their borrowing limits raised. The Port of Vancouver had its limits raised from \$225 million to \$510 million in 2004. In Prince Rupert, major expansions were carried out by funneling federal money through the provincial BC government.

Each Canada Port Authority functions as a corporation. While it does not issue shares, it is supposed to operate with ‘full commercial discipline’ in accordance with the National Marine Policy (1995). This is largely the case in many aspects of the port authorities operations. However, where governance is concerned, Board’s do not follow the ‘best practices’ of corporate governance. Though the primary responsibility to shareholders is not applicable here, most other best practices apply to the non-share corporation as well. Among these are duties to oversee all management practices, and to implement and change the strategic vision of the corporation as required.

The Board itself is not a truly independent organisation. As mentioned above, directors of the Board can be nominated by community interests, but the Minister of Transport continues to control the appointment of directors. In Halifax, the Minister appoints five of the eleven port directors. More specifics on the port of Halifax are found below.

4.5.4.1 The Port of Halifax

The Halifax harbour is the deepest harbour on the east coast of North America. It is the first mainland port inbound to North America from Europe and the Mediterranean, and the last mainland port outbound in the opposite direction. The port is ice-free year round. It is strategically located, approximately 100 km north of the Great Circle Route. After a recent dredging operation, the maximum depth of the port has been increased to 55 feet. While ships currently coming through the harbour are of the order of 5000 TEU, the port is already equipped to handle the 10,000 TEU ships expected in the future³⁰. Because of its proximity to the Great Circle route, it can be used as a First In Last Out port, or FILO (Cirtwill *et al.*, 2001). In terms of tonnage “Halifax was the 6th placed North American port on the Europe trade route and 11th on the Asia & Oceania trade route” in 2001 (O’Keefe 2003).

³⁰ These ships have already been introduced on Asian and Pacific routes.

The reforms of the transport sector in the last decade have had mixed results for the port of Halifax. On the one hand, the port has truly become self-sufficient in terms of financing operating expenses³¹. There has also been an increase in container traffic, and other cargo movement. The port management now has of a workforce with significant private sector experience, who therefore have a ‘business oriented’ mindset.³²

Yet problems remain. The ports have limited ability to generate revenue or to borrow from the private sector (see previous section). Government funding is also far more restricted by the reforms of the Canada Marine Act. It remains to be seen how long the port can sustain growth with limited funding from both public and private sectors.

The port’s many geographic and natural advantages have already been detailed. These are particularly relevant given the changes in ship technology. The increase in container traffic has led to larger ships being more economical. Much of the traffic on longer routes (such as Asia to North America) is now carried on port-Panamax ships. These are ships which are so large (greater than 4400 TEU) that they cannot fit through the Panama Canal. The only way for such ships then to reach the East Coast of North America from Asia is via the Suez Canal. Here Halifax has an advantage. Because of its proximity to the Great Circle Route, it would be one of the closest ports of call for ships coming through the Suez Canal. Calling in Halifax would present a variety of advantages for these ships. Halifax has deeper water than most other ports on the Eastern Seaboard. Thus ships heading for the east coast of North America can dock first in Halifax to lighten their loads and avoid channel draft problems; similarly they can top up loads on the outbound route. Alternatively, Halifax could be the final terminal in an Asian route. Cargo arriving in Halifax could be forwarded by transshipment, rail, or trucking to its final destination.

The post-Panamax ship is a significant technological change that has a major impact on trade and transport. Barry Prentice (2006) has argued that the rise and fall of cities as

³¹ It is worth noting that in the absence of the ability to raise new funds, port profits must also cover capital projects; an aspiration not always met. For example in 2004 capital acquisition was greater than profits plus depreciation meaning that some capital infrastructure was not renewed (Port of Halifax, 2004 Annual Report)

³² Anonymous port executive, Interview by the author, Oct 2005

economic centres can partly be explained by technological change in transport. For instance, the rise of rail in the 19th century led to the rise of Chicago, and the fall of St. Louis, which relied on water transport for its commerce.

The port of Halifax has been the victim of technological change once before. The Halifax port is ice-free year round. Historically, this made Halifax a high traffic port in the winter months (Martin, 1934). However, with the introduction of ice-breaking technology in 1966, the St. Lawrence River became passable in winter (Norcliffe, 1980). Thus the Halifax advantage was reduced, as traversing frozen water is now less expensive than land transport.

This time, the technological change suggests Halifax may regain its advantage. Post-Panamax ships cannot sail up the St. Lawrence. The long-term ability of ports like New York/New Jersey to accommodate these ships is also questionable³³. With the correct infrastructure capability and enlightened management, Halifax could become the pre-eminent East coast port of North America.

Yet this is not happening. Management at the port has been unable to capitalize on these natural advantages. There are a number of possible reasons for this. Governance problems prevent the Board of Directors from having any clear vision for the port (see previous section). Limited funding from both public and private sectors may be another problem. There may also be problems with the coordination of firms within the Halifax Cluster (see sections 4.6 and 4.7).

The Board of Directors at the Port of Halifax has not fully adopted the 'best practices' of a non-profit corporation (see previous section). The Board plays a limited role in directing management. Furthermore, it has limited appreciation of the gateway strategy, and the possibilities for expansion which this affords. Although port management publicly extols

³³ The Port of NY/NJ can currently accommodate these ships because of a recently dredging operation. However, the constant accumulation of silt from the Hudson River suggests its long term existence as the deep water port is dubious.

the virtues of a Board of credible business people, in private there is still frustration over the lack of knowledge of port affairs shown by some Board members³⁴.

While there is room for improvement in Board governance and the gateway strategy, some progress in management's ability to attract port traffic (including gateway traffic) must be acknowledged. In 2002, the Port of Halifax introduced SmartPort, an initiative to help stakeholders to collaborate. SmartPort is focused on marketing and strategy, competitiveness and productivity, and security and regulation. The SmartPort was a valuable initiative in its time, which has had positive repercussions for the port. The gains to Halifax are real, but they should be evaluated in the context of a changing North American market.

There are major traffic increases across North American ports due to increasing trade with Asian markets (China, Southeast Asia, India). Ports on the West Coast of the United States have become nearly saturated. As a result, some Asian traffic is now being sent to the East Coast. There are currently several shipping routes from Asia to the east coast of North America, via the Suez Canal³⁵. One Maersk line, the MECL 2, currently comes to Halifax via the Suez through Algeciras, Spain. The success of the port in getting this line is a testament to both the natural attractiveness of the port and the marketing efforts of the Port Authority.

Yet this is still far below the capacity Halifax can sustain. Halifax was in fact the candidate for a dedicated Maersk terminal in the 1990's. Stronger marketing efforts, summoning the power of the terminal operators as well as the Port Authority, could result in many more such lines.

Ultimately, the Port Authority has limited resources with which to conduct its marketing efforts. To succeed in marketing the port, particularly in distant origin countries, will require a successful collaboration of the Port Authority with other stakeholder interests,

³⁴ Determined by the author from private conversations with port executives.

³⁵ Maersk Line has a Suez route from South East Asia, and APL has a Suez route from India to New York.

such as the port terminal operators, the rail carrier (CN), and others within the port cluster (see Sections 4.6.1 and 4.7.1).

4.5.5 Port Governance in Mexico

Mexican port reform began with the *Ley de Puertos* (Law of Ports) in 1993. Under this law, administration of the ports was devolved to (local) independent port administrations (*Administraciones Portuaria Integrales*) or API's. The API's are publicly owned companies to which the administration of a port (or a group of small ports) is assigned. However, the API is not a Port Authority – this role is retained by the federal government, via the *Secretaria de Comunicación y Transporte* (SCT).

Prior to 1993, only the public agency PUMEX (*Puertos Mexicanos*) was allowed to build port infrastructure and provide port services. This agency was dismantled in 1993, and SCT became the authority charged with approving all concessions and licenses. The API's have the right to grant concessions to third parties (subject to SCT approval). However, as with Canada Port Authorities, they do not have the right to dispose of land, which remains federal government property. Safety is carried out by a separate agency, the *Capitanía de Puertos*.

Actual devolution of power began with the creation of API's in 1994. The *Ley de Puertos* requires API's to contract port operations to third parties rather than carry them out directly. Estache *et al.* (2001) state that theoretically, the API's are an intermediate step on the way to privatisation. However, in practice only one API port (Acapulco) has been privatised, and there is no time line for privatising any other ports.

Each API is managed a by Board of Directors. The Board consists of federal, provincial and municipal representatives as well as some private sector stakeholders. The Board sets the strategic plan for the coming year, called the *Programa Operativa Anual* or POA, at an annual meeting. A representative of the state government (usually the Minister of

Economic Development or the Government secretary) is required to attend the meetings. Recently, terminal operators have been invited to attend as well³⁶.

4.5.5.1 The port of Lázaro Cárdenas

The port of Lázaro Cárdenas is located in the state of Michoacán, on the west coast of Mexico. At 54 ft., it is the deepest port on the Pacific coast of Mexico. The traditional industries of Michoacán are fishing and agricultural products, primarily fruit. The steel industry has also played a large role in the city/port of Lázaro Cárdenas.

Following the creation of API's in 1994, the Mexican government made a rhetorical commitment to 'privatisation.' This meant that concessions for various port operations, including container terminal operations, should have been made available to the private sector. However, policymakers were soon faced with a problem. Prior to the reforms, policymakers had expected that concessioning would result in increasing specialization of ports. That is, each port would cater to a specific market, be it bulk, petroleum products, or containers. In fact, devolution had quite the opposite effect. Ports began competing with their immediate neighbours for the same business. In order to prevent the fragmentation of business, firms were restricted to having one concession per coast³⁷. As Manzanillo already had a container port owned by Hutchison Port Holdings, Hutchison could not bid on a container facility at Lázaro Cárdenas – in fact no container terminal operated during this period.

Legislative changes do not automatically guarantee changes within an institution. It takes time for an institution to adjust to its new role, particularly when the change involves transition from public utility to a business mindset. Until 2001, the Port of Lázaro Cárdenas had no business development. A highly placed executive who was at the port at that time made the following comments:

³⁶ Rodriguez, Esther. Interview by the Author, 8 August 2006.

³⁷ This restriction was introduced by a ruling of the CFC, the Mexican competition agency (Comisión Federal de Competencia Mexicana). The reason given for this restriction was to avoid excessive market power to any one firm following privatization (Estache et al. 2001). The interpretation shown above, (that this ruling was intended to offset market fragmentation) was provided by a former highly placed executive at the port of Lázaro Cárdenas. (Rodriguez, Esther, Telephone Interview by the Author, 8 August 2006.)

Business development in Lázaro Cárdenas did not occur until 2001-2002. Until that time there were no offices and no business development area in the port. In 2001-2002, the port initiated a diversification strategy. Since then, total cargo traffic has increased 43.8%. The diversification strategy included appointment of representatives for sales, promotion, communication, and to liaise with the city (a small town largely dominated by the steel industry). A business action plan was formulated for the port (a first for Mexican Ports) and was sent to the Director General of Ports. This model was subsequently implemented in all Mexican ports.³⁸

The business development plan included a world tour to attract attention for the port. Various firms expressed interest in the port, and acknowledged its natural advantages, but would not commit to investments given the lack of distribution infrastructure.

The infrastructure deficit in Lázaro Cárdenas was serious. In 2001-2002, Lázaro Cárdenas was served by a very poor road network. While rail lines to the port existed, they were poorly maintained. In addition, the rail connection suffered from competition between México's two leading rail lines, FM (Ferro Mexicana) and TFM (Transportación Ferroviaria de México).

To overcome this problem, the business development team at Lázaro Cárdenas used an aggressive two-pronged strategy. On the one hand, they began offering highly competitive integrated tariffs. On the other hand, they continued to aggressively market to shipping lines, and also attracted potential terminal operators for a container terminal.

The final result of this was a concession to an HPH led consortium in 2003. The new container terminal almost immediately began to be called upon by Maersk and other major shipping lines.

³⁸ Rodriguez, Esther, Telephone Interview by the author, 8 August 2006.

4.6 COORDINATION OF FIRMS: COMPARING CLUSTER GOVERNANCE IN HALIFAX AND LÁZARO CÁRDENAS.

The study of governance so far has been limited to port authorities. Indeed, economic analysis of seaports has traditionally been limited to port authorities and harbour activities. However, this method of analysis is beginning to look increasingly myopic and obsolete. The economic and technological changes associated with globalization have made consideration of the entire supply chain, as opposed to the port in isolation, the important phenomena.

Peter de Langen (2004) has used the concept of a “seaport cluster” to analyse the various activities associated with a seaport and its supply chain. A cluster is defined as “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commodities and complementarities.” Thus a seaport cluster includes not only those activities directly related to the port (shipping, forwarding, etc.) but also logistics and industrial firms.

The governance of the port (by the Port Authority) has important implications for the economic performance of the port. However, given the importance of supply chains in freight forwarding, the governance of the entire cluster (including private firms, public bodies, and associations) plays a vital role as well.

This section draws on the cluster governance framework of de Langen to expand the governance analysis to the seaport clusters of Lázaro Cárdenas and Halifax. Following de Langen (2004), four measures of the governance quality of a cluster are examined below: trust, the role of intermediaries, leader firms, and collective action.

4.6.1 Trust: the Reputation Effects of Firms

Trust among the various agents within a cluster is essential for it to function effectively. The reputation of a firm becomes paramount in seaport operations. Here shippers are forced to rely on carriers to deliver their goods on schedule.

In Halifax, there may be some benefits to the presence of CN as the rail carrier. CN is the largest and most profitable Class I rail in North America. However, there are certain negative aspects to CN's reputation in Halifax. CN operates on a strategy known as the IMX (intermodal excellence) strategy. In order to avoid transporting 'empties' (empty containers) with no compensation, CN insists that trains must be 'balanced,' i.e., the number of containers leaving the port must be equal to the number of containers entering it. The balanced train model leaves CN without the capacity to add cars on an outbound route. When a large number of ships arrive at the port, there is therefore congestion as no accommodation is made for increased traffic. CN cannot reliably guarantee time consistency as a result of these policies.

The container terminal at Lázaro Cárdenas (LCT) is a new operation, and hence it is difficult to find trust effects within the cluster. However, it is significant that Hutchison, the container operator, was itself persuaded by the rail operator, Kansas City Southern (KCS), to operate the LCT. This investment came about as a result of the existing relationship between KCS and HPH, based on their previous cluster collaboration in Panama³⁹. The reputation of HPH would have been a persuasive factor for shipping lines to call at the port of Lázaro Cárdenas.

4.6.2 Intermediaries

De Langen (2004) defines an intermediary as an organization within the cluster which can "lower coordination cost and expand the scope of coordination beyond price." They can do these by being a "bridging tie" between firms and other types of partners.

In Halifax, Consolidated Fastfrate is an important intermediary that has recently entered the market. Their transloading cargo service provides an alternate from the Port of Halifax route to Montreal and Toronto; in addition their existence is an important contingency for container traffic along these routes.

³⁹ KCS has a 50% interest in Panama Canal Railway Company (PCRC), which offers ocean to ocean rails for freight and passenger service. <<http://www.kcsi.com/investor/investors.html>>

At the same time, transloading makes empty containers available for local/domestic exporters. Thus, Fastfrate serves as a bridge between the entirely different sectors of distribution and domestic export.

In Mexico, Transport Cargo Services has played an important intermediary role as a route logistics coordinator. This contributed to the creation of a new rail service (by Kansas City Southern) from Lázaro Cárdenas to Jackson, MI. The logistics co-ordinator ensured that the route was along a line which offered further distribution options (Norfolk Southern connects Jackson to Atlanta, GA). They also ensured one additional traffic contributor – Schneider National supplies containers along this line in Mexico at San Luis Potosi and Monterrey.

The Halifax cluster contains regional actors. This makes it difficult for any firms within this cluster to strengthen or coordinate the gateway role. To see this clearly, consider the case of KCS and Hutchison (HPH) in Lázaro Cárdenas. These are both international firms with operations in several markets; they also have a long-term working relationship. KCS had a strong interest in the Lázaro Cardenas-Kansas city gateway, and is therefore tied into the Lázaro Cárdenas cluster. While CN does show an interest in the success of Halifax, it is not as strongly linked to any of the terminal operators, or other actors in the Halifax cluster.

4.6.4 Leader firms

In every cluster, there are “strategic centres” which influence the performance of the entire cluster. In Halifax, there are several firms which could be considered leader firms in the port cluster. Among these are Halterm, CeresCorp, Consolidated Fastfrate, Armour Transport, and Michelin. However, there is no leading firm which occupies the same status as Kansas City Southern in the Lázaro Cárdenas port cluster. Closely linked to KCS is the presence of Hutchison Port holdings (HPH) as the terminal operator at Lázaro Cárdenas.

The history and role of KCS and HPH in Lázaro Cárdenas is discussed further below.

KCS and Kansas City Southern de Mexico

Mexico privatized its rail infrastructure in 1997. This resulted in three major rail concessions being offered to the private sector. One of these was a rail line running south from Laredo, Texas to the port of Lázaro Cárdenas. This line was bought out by a consortium which included Kansas City Southern, a Class One railway based in Kansas City. On December 5th, 2005, this rail (formerly TFM) changed its name to Kansas City Southern de Mexico, and became a wholly owned subsidiary of KCS.

The early initiative of Kansas City Southern formed a crucial role in the success of Lázaro Cárdenas. Michael Haverty, the CEO of Kansas City Southern, was one of the first to realize the importance of a direct line from the heart of America to the Pacific coast of Mexico. His investment led to intense industry criticism of KCS and its balance sheets. The investment was also risky – theoretically, KCS’s concession can be revoked at any time⁴⁰⁴¹.

Haverty and KCS proceeded with investments, despite the risks, because they recognized the unique opportunity afforded by Lázaro Cárdenas. They also had the foresight to anticipate that congestion at other ports, particularly Long Beach and LA (California) would create demand for other ports capable of handling the increasing Asian traffic.

Hutchison Port Holdings

With the rail link from Lázaro Cárdenas to the American hinterland secure, the next step was to ensure that shippers could guarantee necessary volumes for a container terminal operation. Through the end of the 1990’s, Lázaro Cárdenas continued to have low container throughput, indicating that it was only used for occasional shipments. Between

⁴⁰ “The China Kansas City Express,” United Transportation Union, http://www.utu.org/worksites/detail_news.cfm?ArticleID=28483, accessed July 1, 2006.

⁴¹ At the time of this writing, the outcome of the federal Mexican elections is still uncertain, with the maverick leftist candidate A.M. Lopez Obrador contesting the verity of Calderon’s narrow margin. Obrador had promised re-nationalisation and a reversal of some of NAFTA’s economic integration. While an Obrador victory is now highly unlikely, this shows that the position of foreign corporations in Mexico is not fully secure.

2001-2003, container traffic was nearly nonexistent. The next dramatic turn in the Lázaro Cárdenas story occurred in July 2003, when Hutchison Port Holdings, a subsidiary of Hutchison Whampoa, acquired a 51% stake in the Lázaro Cárdenas Terminal Portuaria de Contenedores (LCT). Hutchison Whampoa controls 12% of global container port capacity, and therefore has enormous market power to guarantee volume. Hutchison's size also allows it to make relatively large investments without undue risk. In Phase I of its LCT development project, US \$ 290 million were invested. The fruits of Hutchison's labours were seen when Maersk lines and later APL and CP ships all began service to the port of Lázaro Cárdenas. In Phase II of this project, Hutchison plans to develop an 85-hectare deep-water, green field site with 1,350 metres of berth.

4.6.5 Collective action

The nature of ports clusters are such that all ports face collective action problems. In fact, one of the duties of the Port Authority is to aid in solving some of these collective action problems, primarily by attracting cargo and companies to the port (*ibid.*). The quality of what de Langen terms a "collective action regime" is determined partly by the infrastructure provided for collective action, In this regard, both Halifax and Lázaro Cárdenas fare well. The diagrams below show the complex network of associations, public private organizations and public organizations in the two clusters.

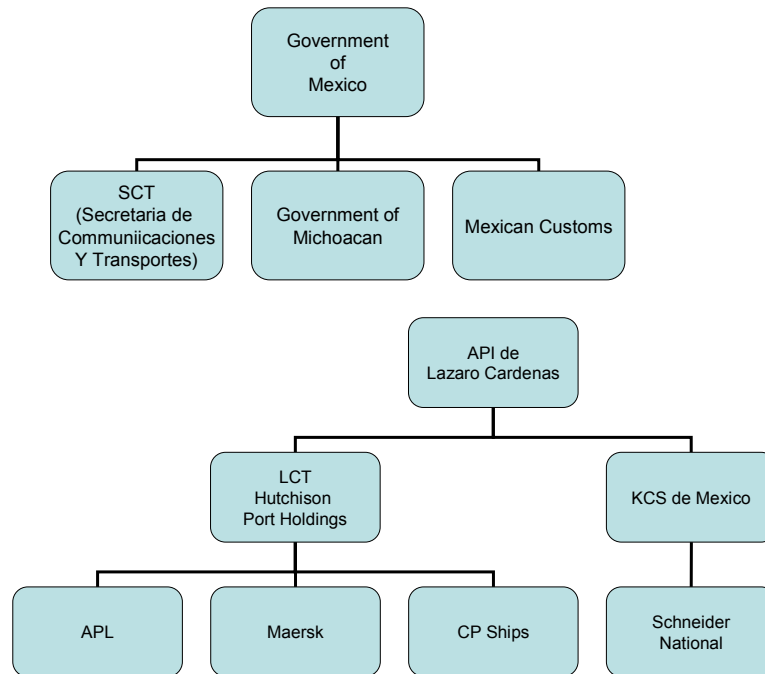


Figure 1. Port of Lázaro Cárdenas Cluster

The port of Lázaro Cárdenas is fairly new. Its container terminal in particular has only been in operation for three years. As a result, many of the public organizations and private organizations found in ports such as Halifax are not present (yet) in Lázaro Cárdenas. However, Lázaro Cárdenas does benefit from the presence of leader firms such as KCS, the reputational effects of firms such as Hutchison, and strong coordination across firms. The relative lack of formal collective action infrastructure may be countervailed by the newness of the facilities. One of the major collective action problems in a cluster is lack of innovation. Because the entire container handling operation is new in Lázaro Cárdenas, this is not a problem.

In the Port of Halifax, the cluster is far more complicated, reflecting the age and complexity of port operations. It should be noted that unlike Lázaro Cárdenas, Halifax is a multi-purpose port, with both hub and gateway functions and multiple destinations.

While the infrastructure for collective action is certainly present at the port of Halifax, it is questionable how well this has been utilized. For example, there are associations such as the Halifax Shippers Association, which are effective in giving a voice⁴² to their member firms. The shipping association is effective in speaking on such critical issues as pilotage, the Canada Border Authority, etc. However, coordination has not been optimal to avoid congestion problems, and to maximise traffic.

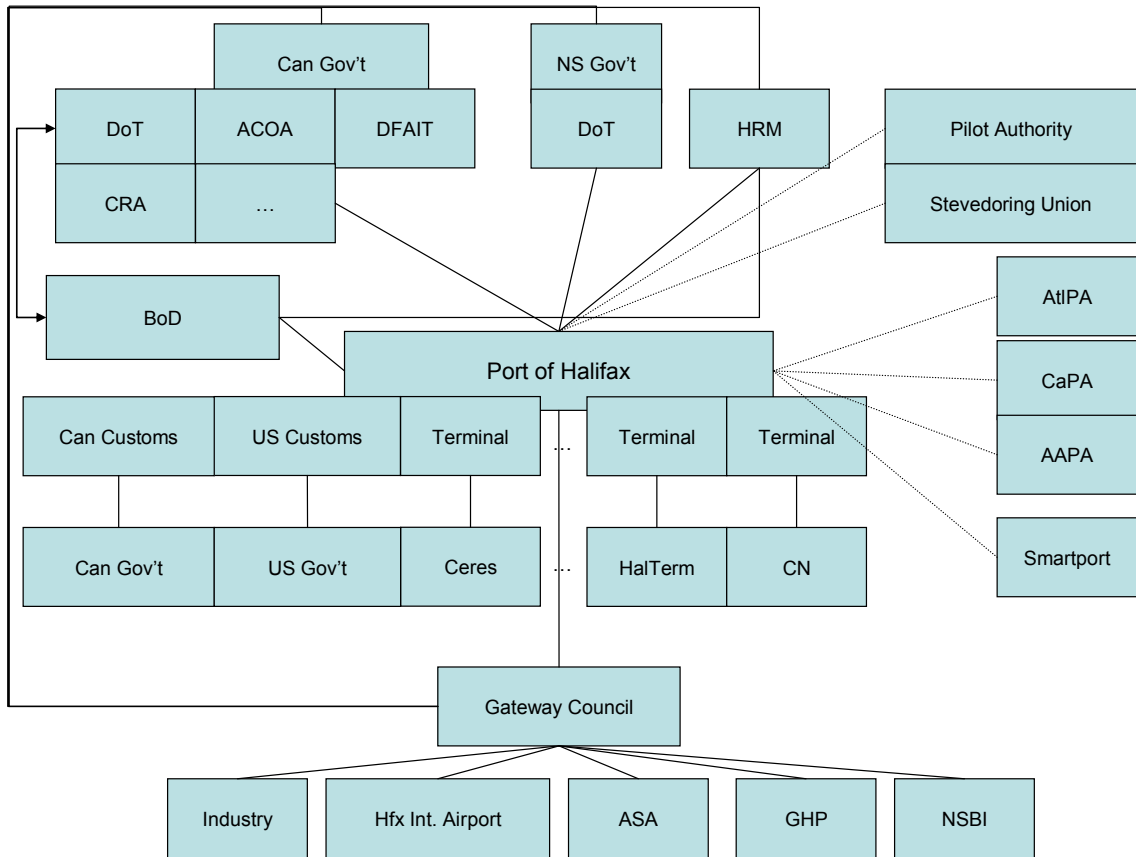


Figure 2. Industry Cluster of the Port of Halifax

⁴² The use of *voice* is one of two key strategies for firms (the other being to exit the market) to deal with organizational decline first proposed by Albert Hirschman (1970). Peter de Langen (2004) has argued that the voice of firms is an essential component in solving the collective action problems of a cluster.

4.7 THE QUALITY OF REGIMES: COMPARING HALIFAX AND LÁZARO CÁRDENAS.

4.7.1 Collective Action Infrastructure

While both clusters seem to have in place some collective action infrastructure, Halifax has both more associations and more public organizations. It is worth noting that Lázaro Cárdenas is inherently subject to government control, given that Lázaro Cárdenas is an API under the jurisdiction of the SCT (Secretariat of Communication and Transport). Even so, Halifax, stands out for the number of public organizations involved. These include: Transport Canada, the Nova Scotia government, Nova Scotia Department of Transport and Public Works, Nova Scotia Business Initiative, and the Office of Economic Development.

These public organizations may play an important role in the port, as well as in related economic development in the region. However, they have not been able to attract the sort of ‘leader firms’ mentioned in regard to Lázaro Cárdenas.

4.7.2 Voice

When competition is invoked as the path to efficiency, the implication is usually that uncompetitive firms will decline and be replaced, so that eventually only efficient firms will share the market. Yet in reality, established firms do not just automatically decline. Interests within and outside of a firm will *voice* their concerns and attempt to reform it. This mechanism was first articulated by Hirschman (1970). The mechanism of voice is useful to analyse a port cluster (de Langen 2004), where the members of the cluster are able to lobby with governments and other stakeholders to improve their interests.

As a cluster, Halifax firms do indeed have a powerful voice via the Halifax Shipping Association. But if we consider a sub-cluster of shippers (and some associated interests, like the Port Authority) their interests are being underrepresented. There have not been any major initiatives to expand the supply chain options available for cargo, or even to coordinate along the existing supply chains. This shows that the Halifax cluster, despite

its sophistication, lacks a mechanism for shippers to voice their concerns on their most critical issues, transit times and time consistency.

At Lázaro Cárdenas, capacity has expanded so much in the last few years that congestion has not become a problem (despite 70% annual growth in container traffic since 2003). The newness of the port, together with the responsiveness of ‘leader firms’ like KCS, may have prevented this from becoming an issue so far⁴³.

4.8 LESSONS FROM LÁZARO CÁRDENAS FOR HALIFAX

4.8.1 Reforming Institutional Culture

The port of Lázaro Cárdenas became an API in 1994. Yet no Business Development Plan was introduced until seven years later (see section 4.5.5). This plan became a catalyst for change at the port. The port diversified operations, strengthened connections with the city, and began an aggressive marketing campaign around the world. The implementation of this plan changed the outlook of the port itself. The opening of the container terminal, the establishment of solid infrastructure connections, and the dramatic increase in traffic were all influenced by this fundamental institutional transformation. The adoption of this style of Business Development plan in all other Mexican API’s demonstrates that the SCT recognized this as an effective approach to change the institutional culture and outlook of Mexican ports.

4.8.2 Overcoming Infrastructure limitations

Like Halifax, Lázaro Cárdenas had many natural advantages, but limited infrastructure capability. In this situation the port/supply chain could be caught in an underdevelopment trap. Shipping lines do not call because of the lack of freight forwarding infrastructure. In turn, transport infrastructure is not built because of low traffic volume.

⁴³ In June of this year, KCS again expanded its services by offering a daily intermodal service from Lázaro Cárdenas up to Jackson, Mississippi with a further connection available to Atlanta. Ronald D. White, “Mexican Port Gets American Connection,” *The Los Angeles Times*, June 22, 2006

The port of Lázaro Cárdenas has been able to overcome this problem using a variety of mechanisms.

First, they offer competitive tariff rates. An integrated tariff rate (per unit such as per TEU) makes the total payable rate transparent to potential shippers. Thus a low integrated tariff rate is highly attractive.

Second, they made aggressive attempts to attract “leader firms” with the ability to draw in infrastructure. Recall how Lázaro Cárdenas profited from the presence of KCS, which itself attracted HPH (Hutchison Port Holdings). Business management at the port (and the efforts of the government of Michoacán) were both key agents in wooing KCS to the Lázaro Cárdenas port.

4.8.3 Dynamic Legislation

The reform process is necessarily long and difficult. An ideal reform process would create a system which is a strategic ‘fit’ (Baltazar and Brooks 2001) for the environment in which it is applied (such as the Canada Port Authorities). But the legislation is never perfect and policy makers have limited knowledge of actual port conditions. For this reason, legislation must be an ongoing process, based on the actual response to policies from ports.

An example of this is provided by the Mexican Competition regulations. Recall the stipulation (by the CFC) that firms in Mexico were limited to one concession per coast. This may have had a purpose initially, in order to prevent fragmentation of container operations (see Section 4.5). But by the turn of the twenty-first century, the policy was preventing efficient allocations. Manzanillo had an HPH concession, though its container capacity was naturally limited. The port of Lázaro Cárdenas, though far more strategically located (in terms of access to the key US markets) had no container operations. CFC responded by removing the concession restriction.

Compare this to the Canada Marine Act. The government did commission several reviews of the Canada Marine Act. The reviews were based on the input of port

authorities and other stakeholders across the country. However, a Bill to implement some of the review recommendations fell painfully short of the level of reform that had been demanded. Furthermore, the Bill⁴⁴ died before being tabled. There has been no amendment to the ports reform process since 1998.

4.8.4 Leader and Cluster firms

The Lázaro Cárdenas business development team has itself functioned as a leader firm. The cluster which has formed over the last few years has been based on the strong relationships built between the port administration and big firms which can then use their market power to market the port and leverage its options. Most notable is the strong relationship between the port administration and the rail company, KCS. In Halifax, the interests of the Port Authority (and shippers and shipping lines) are not as closely aligned with the rail carrier.

4.8.5 Preventing Business Fragmentation.

Competition as a path to efficient ports (and, by extension, maximum social benefit) is a powerful idea. But competition should not be used to nip the potential of nascent operations.

The CFC restrictions in Mexico initially allowed container traffic to concentrate on a few ports, and encouraged specialisation of the ports. In Halifax, there are frequently discussions of ‘a third terminal’ as a growth solution⁴⁵. The lessons of Lázaro are valuable here. Public efforts should first go towards utilising capacity at the existing terminals.

⁴⁴ The Bill is known as Bill C-61, an act to amend the Canada Marina Act.

⁴⁵ Most recently, this has taken the form of an independent container terminal, to be developed in the Strait of Canso. Roger Taylor, “Strait can hardly contain itself,” *The Chronicle Herald*, July 5 2006, Business Column.

4.8.6 Marketing

Ultimately, the success of Lázaro Cárdenas was based on aggressive marketing, a natural outcome of its entrepreneurial culture. Halifax has also enjoyed some marketing success, but the scale of growth has been nothing like Lázaro Cárdenas. For Halifax to truly be a successful gateway port, management must first believe in a gateway vision. It must then carry this vision to shipping lines, terminal operators, and the railway.

4.9 CONCLUSIONS AND RECOMMENDATIONS

Lázaro Cárdenas was chosen as a comparison to Halifax because it faced similar problems as a port. Lázaro Cárdenas was unknown as a container port until three years ago. Rail and road connections were inadequate to non-existent. Yet through the efforts of interested stakeholders, it has become a successful container port.

Undoubtedly, Lázaro has benefited from some exogenous trends. Traffic from Asia was exceeding capacity at west coast US ports. Changes in the Mexican rail industry created new possibilities for transport into the United States. And the strike at US west coast ports in 2002 made shipping lines realize the importance of a contingency plan.

While these trends increased the potential for the Lázaro Cárdenas port, they cannot explain the development and rapid success of the container terminal. Part of the explanation lies in the dynamic approach to capturing market share employed by the development team. An aggressive marketing campaign alerted shipping lines and terminal operators to the potential of the port, long before the necessary transport infrastructure became available. During the 2002 strike, this interest was regenerated, as shippers looked for alternate ports from which to forward their cargo into the American heartland. When KCS acquired a rail stake in TFM and expanded operations into Mexico, it was again the Lázaro Cárdenas business development team that convinced them to invest in the port.

Lázaro Cárdenas was able to develop a burgeoning business despite its own problems of governance and administration (see section 4.5.5). The Business recommendations below

would help Halifax to maximise opportunities with the current policy and governance framework.

Successful business initiatives can only take the port so far. Ultimately, even the most dedicated and successful management is limited by the vision set by the Board. In addition the performance of the Port Authority will be related to the strength of firms in the port cluster, and the governance of the cluster itself. Sections 4.9.2 and 4.9.3 make recommendations for improving governance in the port and cluster respectively.

Finally, improvements in the governance and performance of the port can come about by improving the fit between the policy framework and the port environment. Section 4.9.4 makes recommendations to the Canada Marine Act which, by changing the structure of the port environment, could enable the port of Halifax to grow to its maximum potential.

4.9.1 Business Recommendations:

- 1) **Lower tariff rates.** This paper has argued that Halifax's infrastructure limitations are best overcome by increasing port business. A low, integrated tariff rate will be very attractive to shippers. (See previous section). With increasing demand, markets will respond with increased traffic, which in turn would make further investments worthwhile for CN.
- 2) **Terminal options.** The current terminal operators are not the only options available. Capital investments in the NYK-owned Ceres port currently exceed the amounts invested in Halterm, the independently owned terminal. The potential gains from selling Halterm's concession to a larger operator should be investigated. If the buyer were a dedicated terminal operator, it could also guarantee business from its major client shipping line. This is not a straightforward issue. Any gains in potential investment have to be balanced against the losses of a leader firm with 'first-mover' status. For instance, Halterm was the first Halifax terminal to utilize port-Panamax cranes; it was also the first container terminal in Canada. But the choice of the terminal operator cannot be

based on past glories. The efficient use of ports demands a re-evaluation of all the options available.

- 3) **Rail options.** The St. John – Maine- Montreal route could be a complement to CN operations. CN’s current Intermodal Excellence strategy allows rail forwarding from Halifax to be economically profitable. Yet the rigidity of this system sometimes creates problems for shippers. CN cannot guarantee it will meet delivery times. This is especially true for small producers. Regulation may not be an effective tool here. Regulations that force CN to carry traffic when shippers demand it would make the Halifax route a loss-maker for CN. An alternative to this could be the St. John to Maine rail route. This route is currently operated by the Montreal, Maine and Atlantic Railway (MMA). The route is currently unfeasible for most Halifax traffic⁴⁶. But with sufficient upgrades, it could be a viable alternative, particularly for small traffic coming out of Halifax. This would be a slow, single stack route which would not divert significant market share from CN. However, it would be a valuable contingency for shippers using Halifax.

4.9.2 Governance Recommendations:

- 1) **Educating Board members.** Ongoing education sessions must be provided to make the Board aware of all the relevant issues. This is essential as not all Board members have an extensive background in port issues.
- 2) **Emphasize the gateway role.** Halifax has historically been a hub port for local traffic and a drop off point for European shuttles, among other things. These functions continue to be important for the port. But large increases in traffic will come from its gateway role. Lázaro Cárdenas is using the boom in Asian exports to drive its own growth. In Halifax, Board members must be educated on the importance of exports from Asian countries, and the possibilities they pose for Halifax (see Section 4.5 and 4.8).
- 3) **A new Gateway strategy.** Based on this information, the board can work together with senior management to create a new gateway strategy. The strategy must set

⁴⁶ Along sections of this rail line, trains can only move at speeds of 10 miles/hour.

ambitious goals. New shipping routes calling at Halifax should be attracted by 2013. At that time, the Panama Canal expansion will be complete, and many other options will exist for Asian traffic.

- 4) **Monitoring management.** The Board must hold senior management accountable for adhering to the strategy and ensuring its goals are met. The Board must offer constructive criticism on management's accomplishments. If the Board feels that the CEO or any other senior executives are consistently underperforming, they must exercise their power to fire the person in question and hire a replacement.

4.9.3 Cluster Governance Recommendations:

- 1) **Strengthen the voice of Shippers.** Some limitations on the voice of shippers in Halifax were pointed out in section 4.7.2. Recall that the interest of shippers has limited expression in the Halifax Shipping Association (HSA). In turn, the HSA cannot act as a voice for the problems of its members⁴⁷. A stronger voice for shippers would benefit both shippers and the cluster as a whole.

- 2) **Strengthen connection between non-government actors.** There is scope for the non-government actors in the firm to increase coordination between them. In the Lázaro Cárdenas cluster, the close relation between the terminal operator (Hutchison) and the rail carrier (KCS) is striking. In Halifax, the rail carrier (CN) does not have the same relation with terminal operators or shippers. Yet all of these actors have a stake in the success of the port. Relations between these agents could be strengthened in a number of ways. This could occur through the port authority or an independent association. A new leader firm (such as a new terminal operator) could also change relations within the cluster.

- 3) **Streamline government agencies** (or otherwise rationalise). The Halifax cluster diagrams show that a number of government agencies are involved with the cluster. Some

⁴⁷ Consider the HSA recommendations to the CMA Review Board, posted on the HSA website. There are only two issues highlighted here. One is a request for representation in the Pilotage Authority Board. The other is a request for the commercial borrowing limit of the Halifax Port to be raised. These are both important issues and the requests are valid. But it is unlikely that they represent all the changes that shippers would like to see in the Canada Marine Act. See <http://www.hfxshippingassn.com/documents.html>.

government involvement is necessary to ensure the public good. In order to maximise social benefits, there may also be a case for government funding. But the myriad government agencies involved in the cluster may not be the best organizational structure for maximum social benefit. At the provincial level, the cluster would be better served if the port related functions of the Nova Scotia Business Initiative, the Office of Economic Development, and the department of transportation and public works could be combined into a single agency. This agency would have greater information about the various interests in the cluster. It would also ensure that the provincial government has a coherent policy on the port. Under the current system, each government agency may have its own agenda or differing vision of port issues. A single agency would also be a more straightforward option for private sector firms to turn to when coordination with the government is required.

4.9.4 Recommendations for CMA Reform:

1) **Allow greater revenue generation.** Amend the legislation to provide supplementary Letters Patent to the Port Authorities to allow other sources of revenue generation. Specifically, port authorities should be allowed to issue corporate bonds. They should also be allowed to offer for-profit subsidiary services, such as consulting. The additional revenue from the sources can help Halifax and other Canada Port Authorities incur capital expenditures and remain competitive with American ports.

2) **The caps on government borrowing should be maintained.** Recall that one of the goals of port divestment was to reduce the burden on taxpayers. The recently killed Bill C-61 (an act to amend the Canada Marine Act) amended the rules of government borrowing for ports, replacing government grants with contributions. Ostensibly, ‘contributions’ would only be available for structured projects with valid business cases. The switch to contributions is desirable, but the regulations must have strict requirements to be eligible for contributions. The bulk of capital will come from non-governmental sources as provided for in Recommendation (1). There are several public gains from this approach. Governments can divert resources to other sources where they are better needed. For the ports point of view, investments will occur in proportion to the market

demand for them (which causes private investment) rather than through the decisions of a government bureaucracy. Given the rapid economic and technological changes in the port business, private forces are more likely to result in the optimal level of investment.

3) **Change the appointment of Directors** (as set out in section 14 of the Act). The Board must become an independent Board. A good model for this might be the current arrangement in airports, where a process similar to the port reform process led to more real devolution of power. The Minister of Transport may appoint only a maximum of two directors, one on the recommendation of the provincial government and one on the recommendation of the municipal government. All other newly elected Board members must be nominated by the existing board.

4) **Reduce payments to various levels of government.** Canada Port Authorities currently operate on government land, and are required to make various payments to the government (payments in lieu of taxes to municipalities, revenue tariffs to federal government). Reducing this outflow to government will allow the port to charge more competitive tariff rates to shipping lines.

4.9.5 Summary

Government policy cannot guarantee the success of a port. If this were the case, the public service port would be the most effective model. Even with a fully devolved port system, community stakeholders could still elect an incompetent Board. Or a highly motivated and effective board could still pick an unsuitable CEO or management team. But the correct policy mix can minimize these possibilities.

The example of Lázaro Cárdenas demonstrated that an effective business team can have dramatic results, even with a less than optimal governance model. Reforms to the governance of ports could produce positive results both in Lázaro Cárdenas and Halifax. Halifax has the potential to become one of the largest East Coast ports serving the North American market. The recommendations above could go a long way to making this a reality.

References

- American Association of Port Authorities. "North American Container Traffic." <http://www.aapa-ports.org/pdf/2005_NORTH_AMERICAN_CONTAINER_TRAFFIC.pdf>
- Baird, Alfred J. (1999). Privatization Defined: Is It the Universal Panacea? 27 June. <www.worldbank.org/transport/ports/con_docs/baird.pdf>
- Baird, Alfred J. (2000). Port Privatization: Objectives, Extent, Process and the U.K. Experience, *International Journal of Maritime Economics*, 2, 3, 177-194.
- Baltazar, Ramon and Mary R. Brooks. 2001. The Governance of Port Devolution: A Tale of Two Countries. School of Business Administration, Halifax, NS, Canada: Dalhousie University.
- Brooks, Mary R., Barry Prentice & Tonya Flood (2000), Governance and Commercialization: Delivering the Vision, *Proceedings*, Canadian Transportation Research Forum, June, 1, 129-143.
- Brooks, Mary R. (2004), "The Governance Structure of Ports," *Review of Network Economics: Special Issue on the Industrial Organization of Shipping and Ports*, 2, 2, 169-184. www.rnejournal.com
- Brooks, Mary R. (2001). Good Governance and Ports as Tools of Economic Development: Are They Compatible? *Proceedings of the International Association of Maritime Economists Annual Conference*, Hong Kong, July, 1-19
- Cirtwill, Charles, Brian Lee Crowley, and James Frost. 2001. Port-Ability: A Private Sector Strategy for the Port of Halifax. Halifax, NS: Atlantic Institute of Market Studies.
- de Langen, Peter (2004). Governance in Seaport Clusters. *Maritime Economics & Logistics*, 6, 141-156.
- de Matons, Jean Grosdidier. (1996). "Port Privatization: A Public Administration Perspective," in Hakim, Simon, Paul Seidenstat and Gary W. Bowman (Eds.). (1996). *Privatizing Transportation Systems*. Westport, CT: Praeger Publishers
- de Matons, Jean Grosdidier. (1997). Is Public Authority Still Necessary Following Privatization? *Proceedings of the Cargo Systems Port Financing Conference*, London, 26-27 June. <www.worldbank.org/transport/ports/con_docs/dematons.pdf>

- Estache, Antonio, Marianela González, and Lourdes Trujillo (2001). The Efficiency Gains from Port Reform. The Potential for Yardstick Competition in Mexico.
- Hakim, Simon, Paul Seidenstat and Gary W. Bowman (Eds.). (1996). Privatizing Transportation Systems. Westport, CT: Praeger
- Hayek, Friedrich von. 1994. The Road to Serfdom. Chicago: University of Chicago Press
- Helling, A. and T.H. Poister (2000) "U.S. Maritime Ports: Trends, Policy Implications, and Research Needs," Economic Development Quarterly, 14: 300-317.
- Hirschman, Albert O. (1970). Exit, Voice, and Loyalty. Responses to Decline in Firms, Organizations, and States. Cambridge, MA: Harvard University Press.
- Ho, David K. H. (1996). The Seaport Economy. A Study of the Singapore Experience. Kent Ridge Crescent, Singapore: Singapore University Press
- Hochstein, Anatoly (1996). "Strategies for Improving Port System Performance: Worldwide Experience," in Hakim, Simon, Paul Seidenstat and Gary W. Bowman (eds.) (1996). Privatizing Transportation Systems. Westport, CT: Praeger
- Ircha, M.C. (1995) "US Port Policy: Evolution and Structure," Maritime Policy and Management, 22: 281-294.
- Martin, Alan S. 1934. A Short History of the Port of Halifax. *Unpublished Manuscript from the Files of Halifax Harbour Commissioner Alan S. Martin*. Halifax Port Authority Archives, Halifax, NS.
- Norcliffe, G.B. 1980. Industrial Development and Port Activity in Halifax-Dartmouth. *Canadian Public Policy*, 6 (3), 533-541
- Port Authority of New York and New Jersey, "Governance," <<http://www.panynj.gov/AboutthePortAuthority/Governance/>>
- Port Authority of New York and New Jersey, "Port Authority, Army Corps Sign Historic Agreement to Begin Major Channel Deepening Project in Port Of NY/NJ," <<http://www.panynj.gov/AboutthePortAuthority/PressCenter/PressReleases/PressRelease/index.php?id=531>>
- Prentice, Barry. Gateways, Corridors, and Strategic City Pairs, in *Competition as a Driver of Change*. Proceedings of the 41st Annual Conference of the Canadian Transportation Research Forum [Quebec City, Quebec, May28-31, 2006]. Saskatoon: University of Saskatchewan Printing Services
- Ramirez, Carlos D., and Ling Hui Tan. 2004. Singapore Inc. versus the Private Sector: Are Government-Linked Companies Different? IMF Staff Papers, 51 (3): 510-528

Shashikumar, N. (1998). The Indian Port Privatization Model: A Critique, *Transportation Journal*, 37, 3, 35-48.

Transport Canada. "What are the objectives of the new National Marine Policy?"
Available at <http://www.tc.gc.ca/pacific/marine/nationalmarinepolicy.htm#61>

United Nations Commission on Trade and Development (UNCTAD). 1995. *Comparative Analyses of Commercialization, Deregulation and Privatization of Ports*. Geneva

United Nations Commission on Trade and Development (UNCTAD). 1998. *Guidelines for Port Authorities and Governments on the Privatization of Port Facilities*. Geneva.

World Bank (undated), *World Bank Port Reform Toolkit*,
<www.worldbank.org/transport/ports/toolkit/>

CHAPTER 5 CHINESE INVESTMENT IN CANADA: AN ANALYSIS BY SECTOR

This chapter is the manuscript of a report prepared for the Economic Section of the Canadian Embassy in Beijing. It was circulated by the Section in December 2009. Drawing on interviews with various experts, news accounts, and data sources, the report investigated the nature of Chinese OFDI (or Outward Foreign Investment) into Canada. A lengthy investigation led to what was at that time the first comprehensive compilation of these investment deals. My analysis of these investments indicated that, with few exceptions, Chinese corporations, including State Owned Enterprises, behaved in a commercial fashion similar to any other investor.

The report was the culmination of four months of work at the embassy and is included here as an independent contribution to the thesis. At the same time it also supplies data for the analysis of my portfolio in Chapter 7

Foreign investments into Canada constitute an important part of the ability of the Canadian economy to grow, and to have access to capital. Chinese foreign investments in Canada currently account for only about 2% of the total FDI stock in Canada. However, Chinese FDI into Canada has been increasing dramatically in the last decade. Furthermore, Chinese investments are sufficient to significantly affect the abilities of particular sectors.

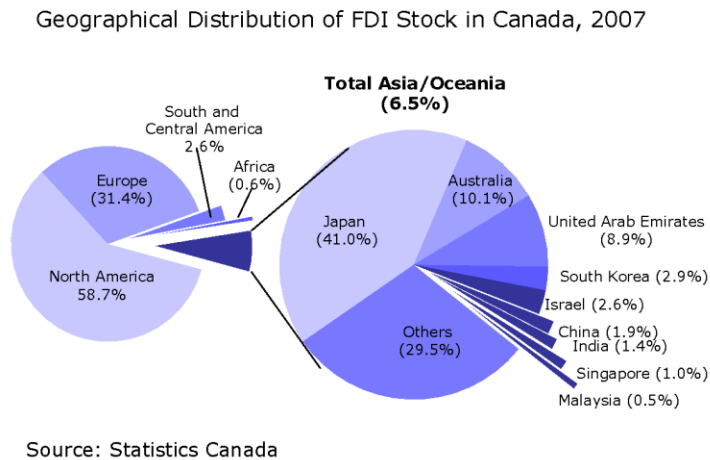


Figure 3. China still owns less than 2% of the FDI stock in Canada

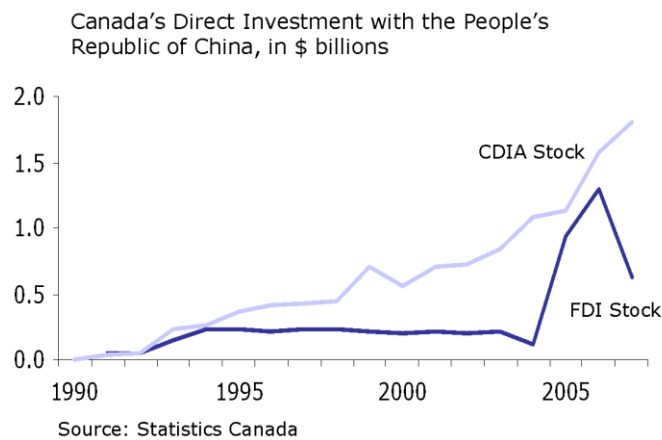


Figure 4. China's FDI stock in Canada has been growing over the last few years

In dollar terms, the largest direct investment into Canada from China come from the state owned enterprises (SOEs). The SOE's Canadian investments are characterized by their interest in energy, (despite a partial pull out of Alberta 2007) and increasing interest in the mining sector. Meanwhile smaller companies are demonstrating increasing interest in a number of other sectors ranging from life sciences and agriculture to ICT's.

5.1 NATURAL RESOURCES – ENERGY AND MINERALS

The bulk of Chinese investments into Canada have been in natural resources. Large Chinese firms have been searching the globe to meet the rising demand for resources in the Chinese economy. Given the rapid changes in the geopolitical landscape, Chinese SOE's have an agenda of diversifying supply sources in order to ensure stability. This has two implications for Canada. First is the acquisition of assets within Canada – this is particularly prominent in the energy sector. The other is the acquisition of Canadian assets abroad – this is typically the case in the mining sector, with major acquisitions in energy as well. In most cases the Chinese firms are state-owned or state linked, with access to capital facilitated by the Chinese government. As such, Chinese investments into Canadian resources can be politically contentious.

In their search for secure sources, Chinese firms are attracted to Canada by its transparent processes and political stability. However, these same processes can create difficulties for Chinese companies which are not used to the stringent labour and environmental conditions that Canada imposes. Past experiences have made the SOE's realize they lack familiarity with such a business environment, in Canada and other developed countries. The companies are also aware of potential opposition to their investments. For this reason, they may prefer working with a local partner, who has expertise in the domestic environment.

In both energy and minerals, Chinese SOE's are ill-equipped to deal with the rapid negotiations involved in acquisitions. They employ a complex bureaucratic approval process, which disadvantages them relative to their competitors who are prepared to

move quickly as conditions change. This has led to some conspicuous failures in the attempts to buy Canadian companies – notably the failed bids to acquire Husky Energy and Noranda Inc.

In China, the failure of these acquisitions is viewed in political terms, as a rejection of Chinese investment advances. By contrast, the Canadian business press has viewed this mainly in commercial terms. For example, the lengthy and inconclusive nature of ‘exclusivity talks’ with a Chinese firm caused Noranda to look elsewhere for its investment/acquisition.

This perceived political environment contributes to the Chinese SOE’s tendency to seek more discreet investment opportunities, such as minority partnerships, or investment in remote areas such as the Canadian north. Another strategy is acquiring Canadian assets abroad, in locations ranging from South America and Africa to China itself. Here, Canadian expertise has already developed the Greenfield site. Chinese firms therefore acquire productive sites, which are usually expanded further with additional investments.

5.1.2 Energy – China’s investment into Canadian domestic assets

Three Chinese SOE’s dominate the Chinese energy sector and are responsible for foreign acquisitions. These are the Chinese National Petroleum Corporation (CNPC), Sinopec Energy Inc., and the China National Offshore Oil Corporation (CNOOC). All three have demonstrated a strong interest in Alberta energy.

Sinopec owns a 40% stake in the Northern Lights Oil Sands Project (a project of Synenco energy), where production is expected to begin after 2010 (Synenco was purchased by Total E&P Canada in August 2008). CNOOC through its wholly owned subsidiary CNOOC Belgium BVBA, signed an agreement with MEG Energy Corp., another Alberta-based company, to buy 16.67% of MEG for \$135 million. MEG has the rights to an oil sands lease in a 52-section (32,900 acres) oil sands block that is believed to contain 2 billion barrels of recoverable oil. In 2007, China National Petroleum Corporation (CNPC) won exploration rights for a 260-acre tract in Alberta.

The CNPC Alberta Petroleum Centre (CAPC) is a training centre jointly funded by CNPC and the Government of Alberta. The centre has been active since the 1980's, demonstrating that Chinese interest in Albertan energy resources is not recent.

Yet Chinese companies have so far been unable to make major inroads into several large companies of interest, such as Husky, EnCana, and Canadian Natural Resources Ltd. CNPC International, CNPC's international arm, was unsuccessful in its bid for Husky in 2006 (although the Chinese government may have a say in Husky via its majority ownership by Li Ka-Shing and his holding company Hutchison Whampoa, both linked to the Chinese government).

CNPC (via PetroChina International) also attempted to acquire a stake in Enbridge's Gateway Pipeline. Enbridge planned to construct a pipeline connecting Alberta oil from Edmonton to Kitimat, BC, and signed a memorandum of understanding with CNPC for cooperation on this. However, CNPC allowed the memorandum to expire in 2006. This deal was revived by other parties in 2008, with funding from several companies including Chinese firms.

The failure of a Chinese SOE to acquire more major stakes in Husky, EnCana, etc. may be due to a lack of market sophistication. For instance, recall the difficulties with the slow Chinese approval process mentioned above. When CNPC was considering purchasing Husky, the information spread to the public, driving up the price of Husky stock and making it unaffordable to the Chinese bidder.

Another problem is the perception in the Canadian energy sector that the Chinese companies drive hard bargains which leave little room for Canadian interests. For example there was a perception that unprocessed bitumen would be sent to China or elsewhere for refining, despite statements by Yiwu Song, the CNCP vice-chairman, that this may not be necessary.

However, the sophistication of Chinese acquisitions is changing and their ability to propose more appealing deals is increasing. Chinese firms are now advised by investment

bankers and are now less likely to make risky and unviable investments. Also, after the failure of early attempts at acquisitions, Chinese SOE's are now more interested in partnerships. For instance, in its current collaborations with Husky, the interest seems to be on using the sophistication and infrastructure of the Canadian company to develop new sources. Husky now owns 40% of CNOOC's Wenchang project in the Shenzhen Valley. Earlier this year (2008), CNOOC bought a 50% stake in Husky Oil (Madura) Limited, which holds a 100 percent interest in the Madura Strait PSC in Indonesia. Husky will develop liquid and natural gas there. The partnerships draw on the strength of both firms, with Canadian skills at greenfield development complementing CNOOC's expertise in China and in other Asian markets.

5.1.3 Energy – China's acquisition of Canadian foreign assets

The majority of China's interests in Canadian energy are centred on the Alberta oil fields, with some interests in Saskatchewan and other potential oil areas. However, in dollar terms, Chinese firms have invested far more in Canadian foreign assets than domestic ones. In 2005 CNPC acquired PetroKazakhstan, a Canadian company then based in Calgary. With a purchase price of 4.18 billion USD, this was the largest overseas acquisition by a Chinese SOE at the time. Many analysts considered the PetroKazakhstan stock to be overvalued, suggesting that strategic rather than commercial considerations motivated the Chinese acquisition. Recent events lend credence to this assumption. In September 2008, Guo Yi, vice-president of PetroKazakhstan Inc. announced that crude oil supplies from Kazakhstan to China via the Atasu-Alashankou pipeline may rise 30% this year. This is an alternative to the majority of oil imports, which must be shipped in to China via the straits of Malacca with the attendant risks of piracy and possible economic blockade by a hostile power. Here, there seems to be a bifurcation of China's oil strategy. On the one hand, overland oil routes are used to ensure stability and minimize risk. On the other, overseas oil acquisitions are based on diversifying suppliers as well as commercial considerations.

Chinese firms continue to express an interest in China's foreign energy assets. In 2005, EnCana sold its Ecuador oil and pipeline holdings to Andes Petroleum Company Limited, a Joint Venture between CNPC (55%) and Sinopec (45%), for US\$ 1.43 billion.

In October 2008, Sinopec entered into talks with Tanganyika Oil Company (TOC), a Canada-based independent oil firm with headquarters in Calgary, for a potential takeover. Sinopec has offered US\$ 1.8 billion for TOC, which has assets and investments exclusively in oil fields in northeast Syria.

5.2 MINING

5.2.1 Mining – China's acquisition of Canadian domestic assets

Besides Energy, Mining is the major focus of Chinese Investments into Canada by SOE's. While China's interest in Canadian mining is mostly directed at foreign assets, there are a few interesting Chinese investments on Canadian soil.

Just as in the energy sector, Chinese SOE's have faced difficulties with major investments into Canadian mining companies. In 2004, China Minmetals held exclusive talks to acquire Noranda Inc. At that time, the Toronto-based Noranda was the third largest zinc and ninth largest copper producer in the world. This deal fell through in 2005, when Noranda's purchase of its 41% stake in its own subsidiary, Falconbridge, made it unaffordable to Minmetals. The Noranda-Falconbridge consortium was eventually bought out by Xstrata, a Swiss company.

More recently, Chinese mining companies have been more successful in acquiring equity stakes, joint ventures and small companies in Canada. North American Tungsten Corporation Ltd. is a Vancouver-based company which owns the Cantung and Mactung deposits in the Yukon and North West Territories. The Mactung interest is considered the largest high-grade tungsten deposit in the world. In March 2008, North American Tungsten announced a private placement to sell 13.4 million units at \$1.45 to Hunan Nonferrous Metals Corporation. The \$19.4 million agreement gave the Chinese company a 9.9 percent equity stake in North American Tungsten, together with the right to

nominate a member to North American Tungsten's company board, and the right to match on Mactung should a third party make an offer for the property. Note: Lower Tungsten and Zinc prices caused Morgan Stanley to downgrade Hunan's stock from "equal-weight" to "underweight" in July 2008, and no public updates on the Hunan-North American deal have been posted since.

Yukon Zinc is a relatively small company with its main asset, the Wolverine project, located in the southeast Yukon. In July 2008, Jinduicheng Molybdenum Group Ltd. and Northwest Nonferrous International Investment Company Ltd jointly acquired 100% of Yukon Zinc for \$100 million. This offer beat a bid from the London-based Griffin Mining Ltd.

In 2005, the Zijin Mining Group invested \$1.95 million in Vancouver-based Pinnacle Mines Ltd., to jointly explore and develop Pinnacle's Silver Coin gold-silver property in the North-West of British Columbia. However, there have been no further collaborations in this project between the two firms. Silver Coin is now a joint venture between Pinnacle and the Canadian-listed Mountain Boy Minerals.

Goldbrook Ventures is a Canadian mining company with extensive holdings in the Raglan district of northern Quebec – the same district in which the former Falconbridge has investments. In 2008, Jilin Jien Industry Co. Ltd., one of China's largest producers of Nickel and Copper Sulphates, entered into a Joint Venture with Goldbrook to explore their Nickel, Copper, and Platinum deposits in the Raglan belt. Jilin Jien will earn a 50% stake in the Raglan over three years, with an investment of \$45 million.

5.2.2 Mining – China's acquisition of Canadian assets abroad

In many cases, Chinese companies select Canadian companies as an indirect way to invest in projects in other countries. For example, Minmetals and Jiangxi Copper acquired 100% of Northern Peru Copper, a Canadian mining company, in 2007. In March 2008, Minmetals invested another 1.4 billion in the Peru mine. Jinchuan Group Ltd. is China's largest nickel producer and smelter operator. Jinchuan began acquiring stock in the Canadian Titanium company Tiomin in April 2006; as of 2008 Tiomin is 20%

owned by Jinchuan Group Ltd. The acquisition of a further 10.1% by Jinchuan in 2007 was crucial to the reopening of a titanium mine in Kwale, Kenya, operated by Tiomin. Jinchuan invested US\$ 25 million in the titanium mining project in Kenya in exchange for a 70% stake in Tiomin Kenya Ltd., the 100% owned subsidiary of Tiomin. Jinchuan also acquired 90% of Tyler Resources (for CAD\$ 214m) in 2005. Tyler's main project is the Bahuerachi Property in Mexico, where it has discovered a poly-metallic Copper-Zinc Moly porphyry system. Jinchuan has been active in other Canadian acquisitions as well. In 2005, Jinchuan invested CAD \$3.06 million in GobiMin Inc. by acquiring 5.1 million common shares of the Company or 9.996% of the total shares issued and outstanding. GobiMin is a Canadian junior mining company with nickel sulphide operations and development properties in north-western China. Jinchuan planned to buy all the nickel output from Gobimin's mines in the Hami region of Xinjiang SAR in China. GobiMin has since expanded with additional JV's in Xinjiang and elsewhere

In 2005 Zijin bought a 21% stake in the BC-based company Pinnacle Mines Ltd. Originally a Chinese SOE (which is still minority owned by the state), the Zijin Gold Mine has morphed into the Hong Kong listed Zijin Mining Group. Zijin also illustrates the difficulty of Canada-China agreements on investments. Despite the agreements in 2005, no joint projects have been implemented to date. In December 2006, Pinnacle divested itself of its 25-per-cent interest in the Yang Wen Chong property, ending its interests in Yunnan/China (though according to the Pinnacle website, interest in China remains strong). In April 2008, China National Gold Corporation bought out Ivanhoe's 42% stake in Jinshan gold mines, a Canadian mining company. China National Gold is already the largest gold company in China. The acquisition is expected to help China National gold acquire assets, both within China and abroad.

Despite the increasing sophistication of acquisitions, problems remain. In April 2008, Spur Ventures Inc. signed a binding MOU with ZhongChuan International Mining Company Ltd. The MOU provided for \$13.4 million in funding and facilitation with Spur's joint venture in Yichang, Hubei province. However, ZhongChuan was not able to provide funding by the deadline. At the time of this writing, an extension granted by the

Spur to ZhongChuan and approved by the Toronto Stock Exchange has expired while ZhongChuan is still waiting for government approval to provide funding. Spur's latest news release indicates that they are still hoping for collaboration with ZhongChuan but also seeking other partners for their fertilizer project in Hubei. ZhongChuan is also planning to go forward with other investments.

5.3 NEW SECTORS – SMALL AND MEDIUM ENTERPRISES

Chinese investors are increasingly interested in several new sectors as well. The scale of investment here is much smaller than in natural resources. Typically the investing firms are themselves small to medium enterprises. There are several reasons for these firms to invest abroad – and particularly into Canada. Many of them have innovative products which need markets and further venture capital – both of which can be found in Canada. Wuhan General, a Chinese manufacturer of industrial blowers and turbines, has brought its unique electricity generation technology to Canada. Its environmentally friendly wood chip technology is ideally suited to generating electricity for small remote communities in Canada.

In other cases, the opposite holds true – China has manufacturing capability but lacks the research skills or innovation to create new products. In such cases, investing in Canadian technology can be the ideal solution for Chinese companies. TCM Inc., a Toronto based company, presents an example of both of these. Utilizing its Canadian technology, it has a joint venture with China Dickson Holdings to build wood-framed housing in the city of Yan Qing. At the same time TCM also provides access to the Canadian market for Chinese firms, through its joint ventures with 3 other Chinese companies (WuhuShijie Hardware Co. Ltd., TaizhouBaile Pumps Ltd. and Zhejiang Huarong Exhaust Purification Co. Ltd.), all of which have opened subsidiaries in Toronto.

In many cases, smaller investments into Canada may be a result of risk minimization by Chinese investors. Wealthy Chinese see Canada as a stable country and may choose to

shift a significant portion of their wealth there. These are typically investments in the service industry consisting of a few million dollars. Investments are usually made in regions and cities to which the investor has some type of social connection, i.e. friends or relatives acquainted with or living in the area. Not surprisingly, the majority of such investments flow to areas with large Chinese diaspora communities, such as the greater Vancouver and Toronto areas. Other areas, including energy hot spots like Alberta, are relatively disadvantaged in this regard. The following is a sectoral analysis of relatively smaller enterprises.

5.4 SCIENCES: RESEARCH AND DEVELOPMENT

Canada's research institutions and extensive University Research and Development make it an attractive target for researchers. In the **Life Sciences**, Chinese firms seek collaborations, particularly in establishing Joint Research Centres.

In the **ICT sector**, collaboration or investment by Chinese firms has been relatively low in Canada. For instance, Huawei, a Chinese firm, is a recognized global leader in telecommunications. Huawei has many international collaborations, such as a joint venture with Symantec formed in 2007 and a global network of R& D centres. Despite this large international presence, Huawei has no R&D centres in Canada (although they do have a 30 person Sales office in Markham, ON). This may be a reaction to Canada's industrial structure: relative to the United States, Canada has lower employment shares in ICT-intensive information services, including telecommunications, finance, insurance and real estate. However, Huawei has plans to open an R&D facility in Ontario soon, and has long term plans for an Alberta facility as well.

Canada's developed food science industry offers other opportunities for Chinese firms. The high quality of **agricultural and food products** in Canada is attractive to Chinese firms. For example, Manitoba Starch Products has entered the Chinese market with Red Leaf starch. Tonghua Grape Wine Co. Ltd. bought 75% of King's Court Estate Winery in St. Catharines, Ont. The stake in a high end Canadian winery allows Tonghua to raise the image of their own brand in China, and also draw on Canadian expertise to improve their

products. Yantai Meat processing has begun processing meat products in a facility in Edmonton, AB. **Aquaculture** is a related field in which (small to medium) Chinese investments are increasing. Chinese fish and seafood farmers have expertise which can be transferred easily into aqua-farms in Canada. Canada is a prized destination for its extensive coastline.

5.5 MANUFACTURING – HIGH TECH

Despite the limited R&D in the **ICT sector**, Canada does have a large, skilled group of professionals in the wireless communications industry, making it attractive for hi-tech manufacturing.

Holley Communications Group is China's largest utility meter manufacturer with assets of over \$350 million. It claims to be the largest power meter manufacturer in the world, in terms of sale units. In 2001, Holley Communications acquired Philips Semiconductors CDMA design operation, a division of Philips Electronics with facilities in Vancouver and Dallas (USA). The Holly Communications group then acquired all equipment, assets, intellectual property rights and wireless reference designs, which enabled the creation of a new Canadian subsidiary, Holley Communications Canada Inc., and allowed Holley to enter the cell phone market. Currently, Holley Communications Canada Inc. is headquartered in Vancouver and manufactures a variety of wireless products

5.6 MANUFACTURING – LOW TECH

China's foray in to Canadian low tech manufacturing indicates that Chinese companies have no particular ability to succeed in unviable areas, i.e., they too fail in sectors which are not profitable for other firms. In 2001, while the **textile sector** was in a slump (particularly in North America), the government of Canada and the government of Quebec subsidized a textile plant in Drummondville, Qu. with \$3.5m from Investissement Québec, and additional repayable loans from Canada Economic Development. The plant was acquired by Worldbest Canada Industries Inc., a subsidiary of China Worldbest. The plant produced fine knitted cotton supplies by cotton yarn from

Worldbest's Mexican factory. The Drummondville plant was considered financially unviable through its lifetime and eventually closed after 3 years of operations. Shanghai Haixin opened a similar textile plant in Elmira, ON and conducted massive layoffs two years later.

5.7 SERVICES

5.7.1 Services – ICT

In the ICT sector, as in manufacturing, Chinese firms have displayed some interest in Canadian markets. China Telecom USA, the American subsidiary of China Telecom Corporation Ltd., has been active in the Canadian market since 2005. Internationally, the largest Chinese telecom companies are Huawei and China Telecom.

China Telecom is one of the largest telecommunications companies in China, and the largest fixed service provider. China Telecom is also active internationally - major areas of expansion are the Middle East, Africa, and Europe. In 2002, a North American subsidiary, China Telecom USA was incorporated in Washington DC. China Telecom proceeded to establish several North American offices, including a Canadian office in Markham, Ontario. In 2007, China Telecom USA changed its name to China Telecom Americas, to reflect its stronger push in to Latin America and has subsequently (April 2008) expanded its network based out of Miami. With this change, Canada seems to have become a secondary goal.

However, both Huawei and China Telecom are gradually making inroads into the Canadian market. In October 2008, Huawei was selected by Bell Technologies to apply its HSPA (High Speed Packet Access) technology to Bell's national wireless network. This is a multi-year project, so Huawei will be supplying Bell with radio access technology for its next generation network in the near future. Also in October, Huawei has signed similar contracts with Telus, Canada's second largest telecom operator.

China Telecom meanwhile, has expanded its data capabilities in collaboration with Nortel, which supplied its CDMA encoding technology. This allowed China Telecom to expand

operations in 7 provinces in Southern and Eastern China. In November 2008, Nortel received additional wireless equipment contracts from China Telecom (financial amounts were undisclosed).

China Education Resources is a Vancouver-based company which has designed an education portal for the use of administrators, teachers, parents, and students in China. Their Chinese subsidiary, Today's Teachers Technology and Culture Ltd. (TTTC), produces books, software, audio and video materials, and educational training tools. In January 2008, Today's Teachers Technology and Culture Ltd. (TTTC) signed an agreement with China Telecom Information Development Co. LTD (CTID - a Beijing subsidiary of China Telecom) to develop and market education content for CTID's online video-on-demand program. TTTC provides approved education content in Chinese and English versions, advertising customers, a technical support team, web administration and legal support.

Thus, despite the limited presence in Canada so far, both Huawei and China Telecom have Canadian partners to help them build Canadian market share in the future.

5.7.2 Services – Logistics

Cosco (China Shipping Group Co) is one of the largest liner shipping companies in the world. Its Canadian subsidiary, Cosco Canada Inc., is a major presence in Canadian port cities (Vancouver, Toronto, Montréal, and Halifax) and Cosco plays a major role in Canadian logistics and port operations.

This has become particularly important during the financial crisis of 2008. Canadian wood pulp is being backed up in Vancouver and Prince Rupert, as Chinese and Korean buyers are unable to get the letters of credit crucial to ensure smooth shipping.

In this crisis, the port of Prince Rupert has reported an expansion based on COSCO traffic. The port reported that in the period end September 2008, 50 container vessels from the Cosco-led CKYH Alliance called at the terminal. Import box traffic from Asia for North American destinations amounted to 62,365 teu, while export volume was

40,423 teu CKYH Alliance is comprised of Cosco, Yang Ming, Hanjin Shipping and K Line.

5.7.3 Services – Retail, Hotels, and Banks

Outside of ICT, several firms within the Chinese service sector are seeking new markets and distribution channels, with expansion into Canada as part of this strategy. Hualian Supermarket Company Ltd. had made the first major Chinese investment into Canadian **retail**, opening a store in Richmond, BC.

In the retail sector, Prima electronics has attempted to carve a niche for itself, by selling relatively inexpensive flat panel displays in the high-end LCD television market. In 2006, the Richmond, BC based subsidiary attempted to enter the market with its flagship Cineplus LCD TV series, a 47” television panel. In March 2008, Prima electronics faced a lawsuit from VITRAN EXPRESS CANADA INC in the amount of CDN\$11,695.00 for unpaid claims (Court File Number PC63198).

Shangri-La Asia Ltd., a luxury **hotel** group, has selected Vancouver for its first hotel in North America. Several **banks** from the greater China region (including Hong Kong and Taiwan) have set up branches in Canada as well. From the mainland, the Bank of China has established two branches in Toronto and one branch in Vancouver

5.8 INFRASTRUCTURE

Several major Chinese acquisitions have taken place in infrastructure. Cheung Kong Holdings is a holdings company owned by Hong Kong industrial magnate Li Ka-Shing. In December 2007, Chueng Kong Holdings (via its wholly owned subsidiary, Stanley Power Inc.) acquired Trans Alta Power, a Canadian company listed on the TSX. TransAlta is a power generation and wholesale marketing company. In addition to traditional fuels (coal, natural gas water), TransAlta generates electricity from several novel renewable resources including wind and geothermal energy. This has allowed it to be one of only two North American companies listed on the Dow Jones Sustainability World Indexes. Prior to the acquisition, CK Infrastructure had major infrastructure assets

in the UK, Australia, and China but no significant investments in North America. The acquisition of this company may indicate an interest by Cheung Kong in renewable energy and sustainable development, in addition to the goal of accruing market share in power generation.

5.9 SUMMARY

As the Chinese economy grows and Chinese companies expand outwards, there is increasing interest in purchasing Canadian assets, both within Canada and across the world. Several points have emerged from the deals analysed here. First, Chinese companies, including the State Owned Enterprises, appear to be motivated by commercial considerations – although their concern for secure supplies may cause them to buy ‘overvalued’ assets, they then market their products in a profit maximising manner. Hence, in the majority of cases, Canadians have little to fear from the ‘hidden agenda’ of State Owned firms.

Second, there is a difference in the perception of failed Chinese bids by the Canadian and Chinese sides. While the Canadian press views this chiefly as a standard business decisions, Chinese investors may feel that they have been especially targeted for discrimination.

Third, Chinese companies are becoming increasingly sophisticated in their investment decisions, and also beginning to prefer minority partnerships and equity stakes over outright acquisitions in a number of cases. However, they occasionally still have trouble generating capital, and the state-owned firms are still encumbered with a slow bureaucratic approval process – both of these may slow down the success of potential Chinese investments.

TABLE 2. CHINESE INVESTMENTS INTO CANADA

Company/Project name	Location	Acquiring Chinese Firm	Date	Amount ⁴⁸	Status	Updates
ENERGY						
Synenco - Northern Lights Oil Sands Project	Project is north of Fort McMurray, AB	Sinopec	2010	n/a	Acquired 40% stake	Production originally scheduled for 2010, some delays expected.
MEG Energy Corp.	Calgary HQ, operations in AB	CNOOC Belgium BVBA	2005	135 million	Acquired 16.67% of MEG	
Husky Energy	Calgary HQ, Canadian and international operations	CNPC International	2006	n/a	Failed	
∞ Enbridge Gateway Pipeline	Pipeline runs from Edmonton, AB to Kitimat, BC	PetroChina International (CNPC)	2006	n/a	MOU expired - no agreement	Enbridge's Gateway pipeline was revived with support from several firms in 2008
Husky Oil (Madura) Ltd.	Madura Strait, Indonesia	CNOOC	2008	125 million USD	Acquired 50% stake	
PetroKazakhstan	HQ in Calgary, operations in Kazakhstan	CNPC	2005	4.18 billion USD	Acquired 100%	In 2008, Petro-Kazakhstan planned to increase crude oil supplies to China by 30%.

⁴⁸ CDN\$ unless otherwise indicated

Company/Project name	Location	Acquiring Chinese Firm	Date	Amount ⁴⁸	Status	Updates
EnCana-Ecuador	Operations in Ecuador	Andes Petroleum Co. Ltd. (JV of CNPC and Sinopec)	2005	1.43 billion USD		
Tanganyika Oil Company (TOC)	Calgary HQ, operations in Syria	Sinopec	2008	1.8 billion USD	Ongoing negotiations	Sinopec offer extended to allow for PRC government approval
MINING						
Noranda	Raglan District, Quebec	China Minmetals	2004	n/a	Failed	Noranda-Falconbridge was bought by Xstrata in 2005
North American Tungsten Corp. Ltd	Yukon/NWT	Hunan Nonferrous Metals Corp	2008	19.4 million	9.9 percent equity stake in North American Tungsten	
Yukon Zinc Corp.	Wolverine, Yukon	Jinduicheng Molybdenum Group Ltd. and Northwest Nonferrous International Investment Co. Ltd	2008	100 million	JV acquired 100% of Yukon Zinc	
Pinnacle Mines Ltd.	Vancouver HQ.,	Zijin Mining Group	2005	1.95 million	21% stake	
Goldbrook Ventures Inc.	Raglan District, Quebec	Jilin Jien Industry Co. Ltd.	2008	45 million	Acquiring 50% stake over 3 years	
Northern Peru Copper Corp.	Vancouver HQ, operations in northern Peru	China Minmetals and Jiangxi Copper	2007	455 million	Acquired 100%	In 2008, Minmetals invested additional 1.4 billion in the Peru

Company/Project name	Location	Acquiring Chinese Firm	Date	Amount ⁴⁸	Status	Updates
Peru Copper Inc.	Vancouver HQ, operations in Toromocho, Peru	Chinalco (Aluminum corporation of China)	2007	840 million	Acquired 100%	mine Chinalco invested an additional 2.6 billion in 2008
Tiomin Resources Inc.	Toronto HQ, operations in Kenya and Peru	Jinchuan Group Ltd.	2008	10.9 million USD	Several investments; total 20% stake as of 2008	
Tiomin Kenya Ltd.	Operations in Kwale, Kenya	Jinchuan Group Ltd.	2007	25 million USD	Acquired 70%	Allowed development of the Kwale Titanium Project, Kenya
Tyler Resources Inc.	operations in Mexico	Jinchuan Group Ltd.	2005	213.4 million	Acquired 90%	
GobiMin Inc.	operations in NW China	Jinchuan Group Ltd.	2005	3.06 million	Acquired 10%	
Jinshan Gold Mines Inc.	Vancouver HQ, operations in China	China National Gold Corporation	2008	218 million	Acquired 42%	
Spur Ventures Inc.	Vancouver HQ, joint ventures in Hubei Province, China	ZhongChuan International Mining Co. Ltd.	2008	13.4 million	Failed	ZhongChuan has not been able to raise the required funds
SME'S						
TCM Inc.	Toronto, ON	China Dickson Holdings	2005			

Company/Project name	Location	Acquiring Chinese Firm	Date	Amount ⁴⁸	Status	Updates
TCM Inc.	Toronto, ON	Wuhu Shijie Hardware Co. Ltd.				
TCM Inc.	Toronto, ON	TaizhouBaile Pumps Ltd.				
TCM Inc.	Toronto, ON	Zhejiang Huarong Exhaust Purification Co. Ltd.				
TCM Inc.	Toronto, ON					
SCIENCES: R&D						
Huawei Canada	Markham, Ontario	Huawei Technologies	2008			Sales and Marketing facility currently in existence.
Huawei Canada	ON	Huawei Technologies	2008-2009			R&D facility planned
AGRICULTURE AND AGRIFOODS						
King's Court Estate Winery	St. Catherine's, ON	Tonghua Grape Wine Co. Ltd.	2007	7 million	Acquired 75%	
Yantai Meat Processing	Edmonton, AB	YantaiXiwang Food Co. Ltd.	2008			New meat processing plant in Edmonton
MANUFACTURING – HIGH TECH						
Philips Semiconductors CDMA, now Holley Communications	Vancouver, BC	Holley Communications Group	2001		Acquired 100%	

Company/Project name	Location	Acquiring Chinese Firm	Date	Amount ⁴⁸	Status	Updates
Canada Inc.						
MANUFACTURING – LOWTECH						
Worldbest Canada Industries Inc.	Drummondville, QC	China Worldbest	2001	45 million		closed after 3 years of operations
Glenoit Corporation of Canada	Elmira, ON	Shanghai Haixin	2002	25 million USD		50 people laid off in 2004
SERVICES - ICT						
China Education Resources	Vancouver, BC	China Telecom Information Development Co. LTD (CTID)	2008		Agreement	China Education Services will develop and market education content for CTID's online video-on-demand program
SERVICES - RETAIL, HOTELS, BANKS						
Shangri-La Hotel Vancouver	Vancouver, BC	Shangri-La Asia Ltd.,	2008-2009			
Bank of China (Canada)	Toronto, ON	Bank of China				
Bank of China (Canada)	Vancouver, BC	Bank of China				
Trans Alta Power	Calgary, AB	Cheung Kong Holdings	2007	629 million	Acquired 100%	

CHAPTER 6 SOCIAL UNREST IN EUROPE – A PRECEDENT FOR CHINA?

This paper was written in 2009, towards the end of my internship in Beijing. It was originally intended as a report for the Embassy, but as I was heavily engaged in providing research support to my supervisors at that point I did not have time to develop this into a full report. However, it is still an interesting discussion paper.

The paper is included here for two reasons. First as an analysis of macroeconomic indicators and political economy it is an independent contribution to the thesis. Second, the writing of this paper changed my research methods and outlook as detailed in Chapters 7 and 8.

Disclaimer: As this paper was never circulated as a report, it is solely based on my opinions and does not represent the views of the Economic Section of the Canadian Embassy in Beijing, the Government of Canada, or any other body or persons.

The global economic crisis has led to social unrest in several countries around the world. In Latvia, on January 13, 10,000 protestors gathered to accuse the government of economic mismanagement and demand snap elections. While the protests were largely non-violent, several hundred reportedly hurled objects, causing property damage and provoking confrontation with police guarding parliament. The unrest spread to neighbouring Lithuania, where 7000 gathered to protest their government's response to the global financial crisis. Major protests have also been reported in Greece, Bulgaria, and Estonia. Paris saw a huge last week, with more than a million taking to the streets.

In the face of a deteriorating economic situation, protests could lead to the overthrow of the government. In Iceland, a country of 300,000 people, 10,000 protestors in Reykjavik contributed to the fall of the government. However, the so-called "Saucepan revolution" involved a change of political parties, rather than a more extreme regime change. Yet as economic conditions worsen, or fail to improve sufficiently, people may agitate for more radical change, threatening the status of existing regimes.

6.1 IS CHINA NEXT?

The ongoing global financial crisis has affected many countries, but public frustration may be particularly strong where –as in the Baltic countries – rapidly rising GDP and new economic opportunities led to higher expectations from the public. But high GDP growth rates and an overheated property market (the pre-crisis situation in the Baltic countries) describe another country as well – China.

Just as the current global crisis is based on economic phenomena, we believe economic factors contribute to dissatisfaction with the government and subsequent social unrest. Here we compare economic and social indicators in China with the restive European countries to see whether major social unrest in China is next.

6.2 ECONOMIC CONDITIONS

6.2.1 Incomes are lower than expected

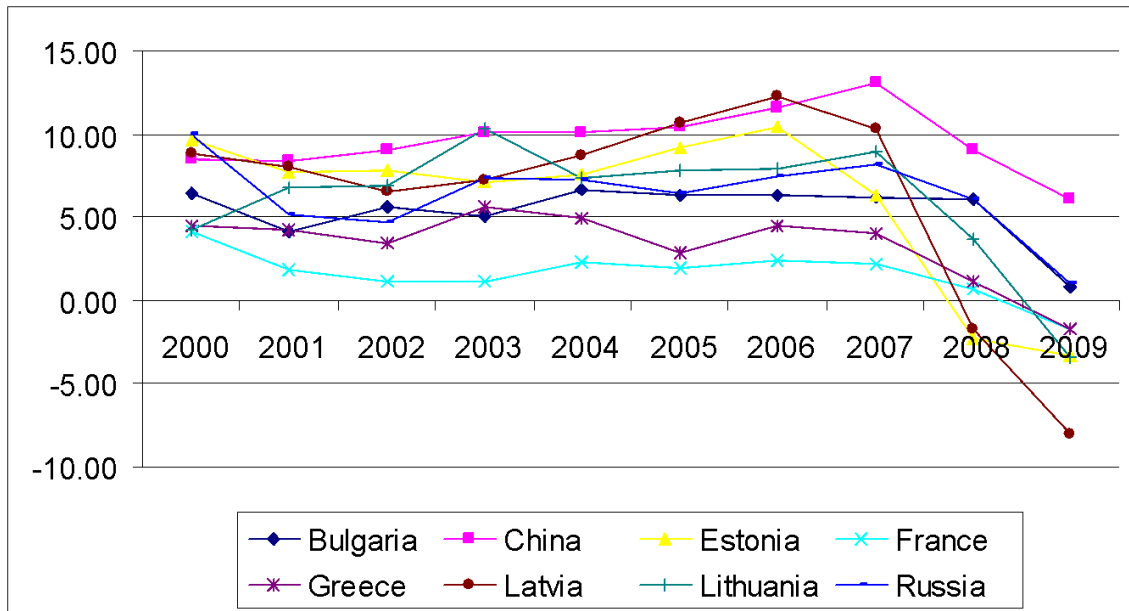


Figure 5. Falling GDP growth (annual % change) in Europe and China. Source: data obtained from Economist Intelligence Unit

The above chart shows the dramatic decline in GDP growth since 2006-2007, particularly in the Baltic countries. Latvia and Estonia have had contracting economies, while GDP growth in Lithuania has slowed to nearly zero. The stagnant economies While China's GDP growth has also fallen since 2007, it is still relatively well off with 9% growth in 2008.

6.2.2 Inflation is lower, but so is the rise in Purchasing Power

Inflation increases were lower in 2008 than 2007, in every country. Yet the rate at which real wages rise fell as well. So despite lower inflation, wages may be lower than people expected. The plummeting GDP growth rate in Latvia contributes to its dramatic decline in real wage increases in 2008, and the projected decrease in real wages in 2009. All the other sample countries will see modest real wage increases in 2009. For the first time this decade, China's real wages are expected to rise less than 5% over the previous year.

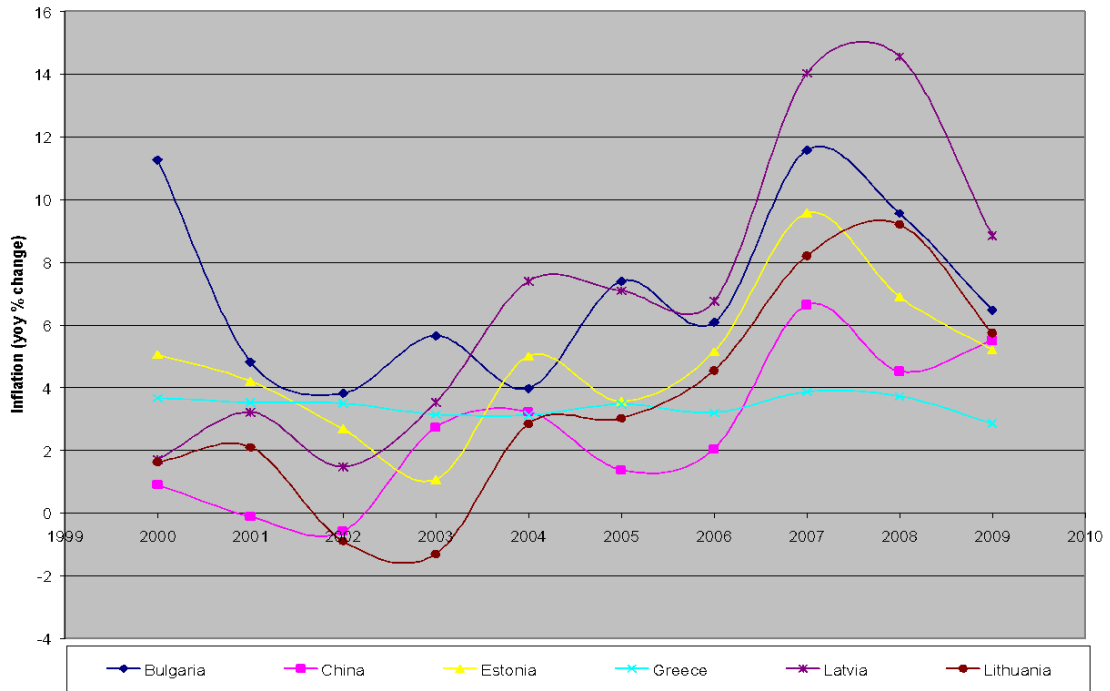


Figure 6. Inflation in Europe and China

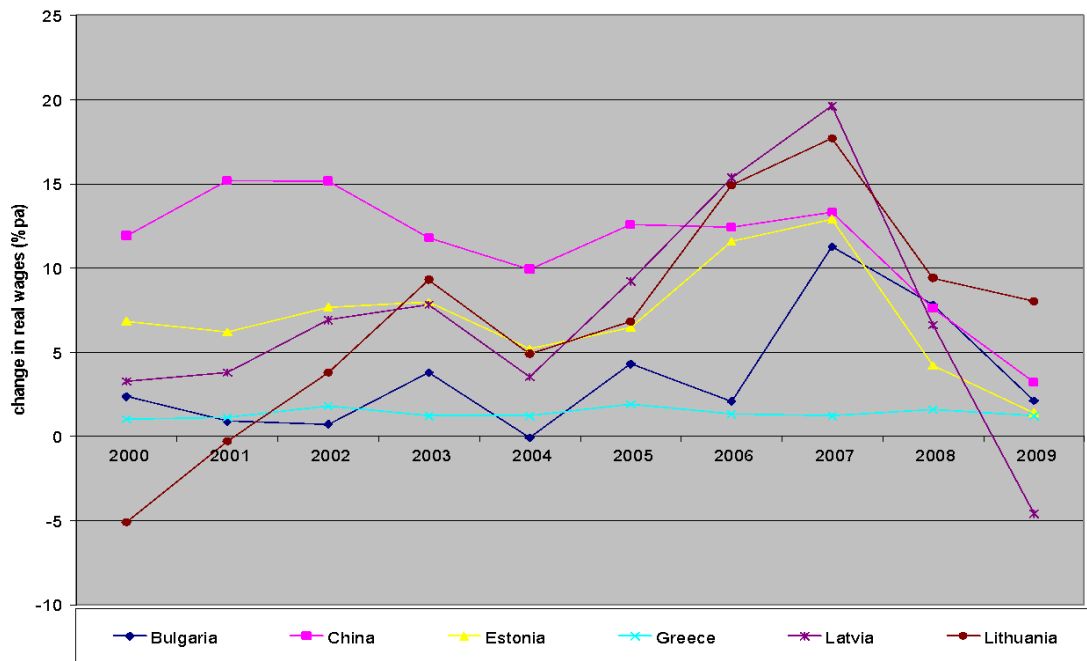


Figure 7. Declining real wages in Europe and China

While inflation is slowing down, this does not diminish the impact of the rampant inflation of the last few years.

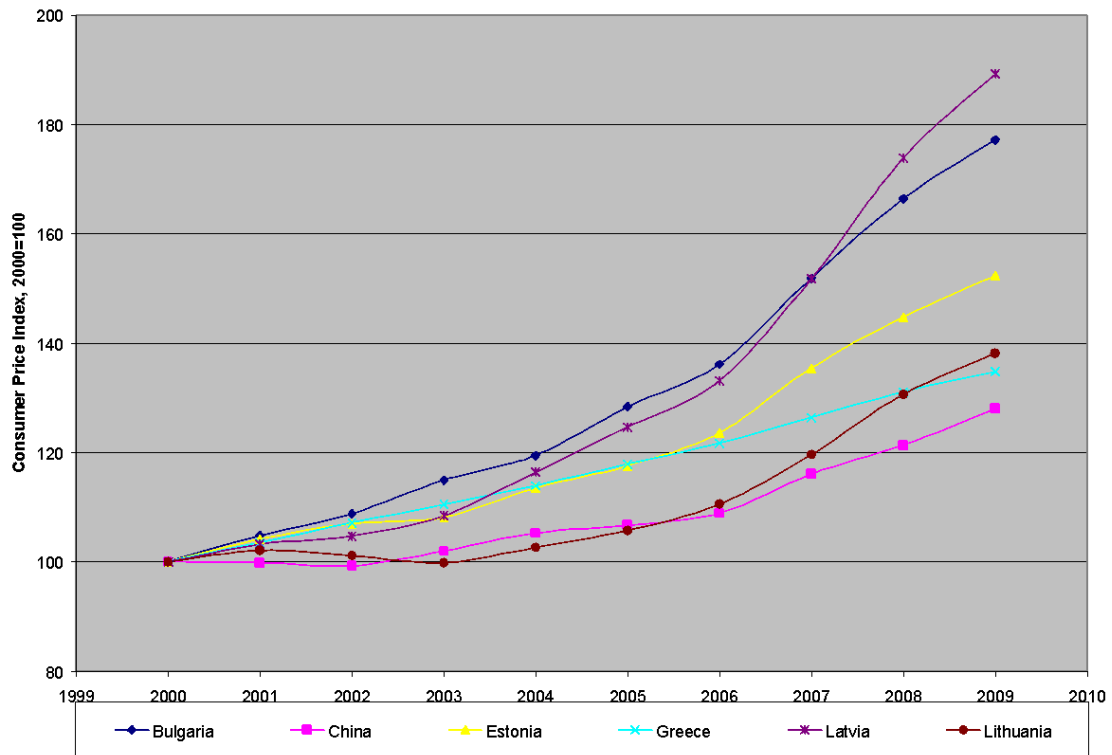


Figure 8. Increasing price levels in Europe

As the chart above show, price levels have increased dramatically in the last decade, with prices in Latvia almost twice what they were in 2000. Here China fares relatively well, with inflation ‘only’ 25% over year 2000 prices. These high price levels will take on new significance in 2009, when there is no high growth in GDP to offset their effect.

The agitation by farmers in Greece (with growing support from farmers in Bulgaria and Romania) is a salient demonstration of this double squeeze. Farmers faced high input costs during last year’s inflation, and are now receiving lower prices due to the financial slump.

6.2.3 Real Exchange rates are rising

The rise in real exchange rates is not necessarily a negative phenomenon. It may in fact reflect the productivity gains made in the sample countries over the last decade. However, for economies such as China which are heavily export based, there is a potential problem with the decreasing competitiveness of exports. Coupled with the decrease in global demand, this could cause a severe decline in the export sector, exacerbating problems of unemployment (see section V). For China, to date, productivity gains have been greater than the rise in exchange rates, so exports have been increasing.

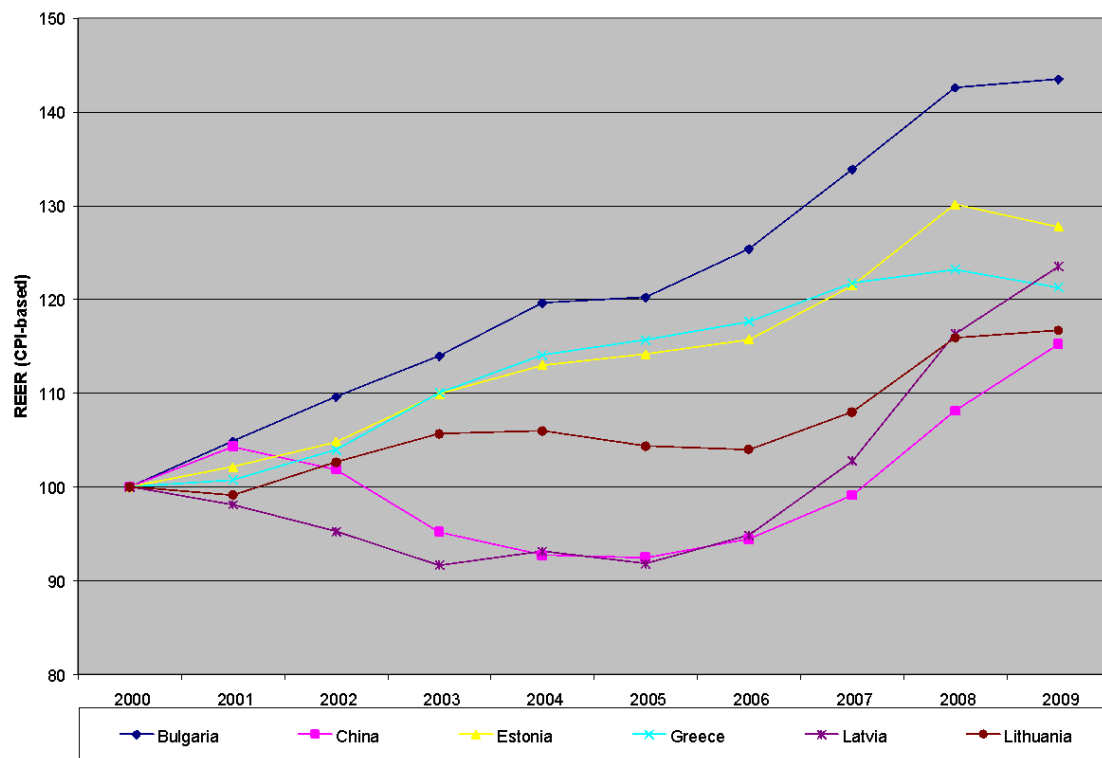


Figure 9. Rising real exchange rates in Europe

6.2.4 Current Account deficits are rising

Several countries are experiencing problems with large current account deficits. Except for Russia and China, all the other sample countries are experiencing current account

deficits in excess of 10 percent of GDP. A large fiscal deficit can limit the scope of a country to create fiscal stimulus programs, or (as in Latvia and Lithuania) even to maintain existing spending. In this regard, China and Russia are well placed to weather the storm, with their large trade surpluses.

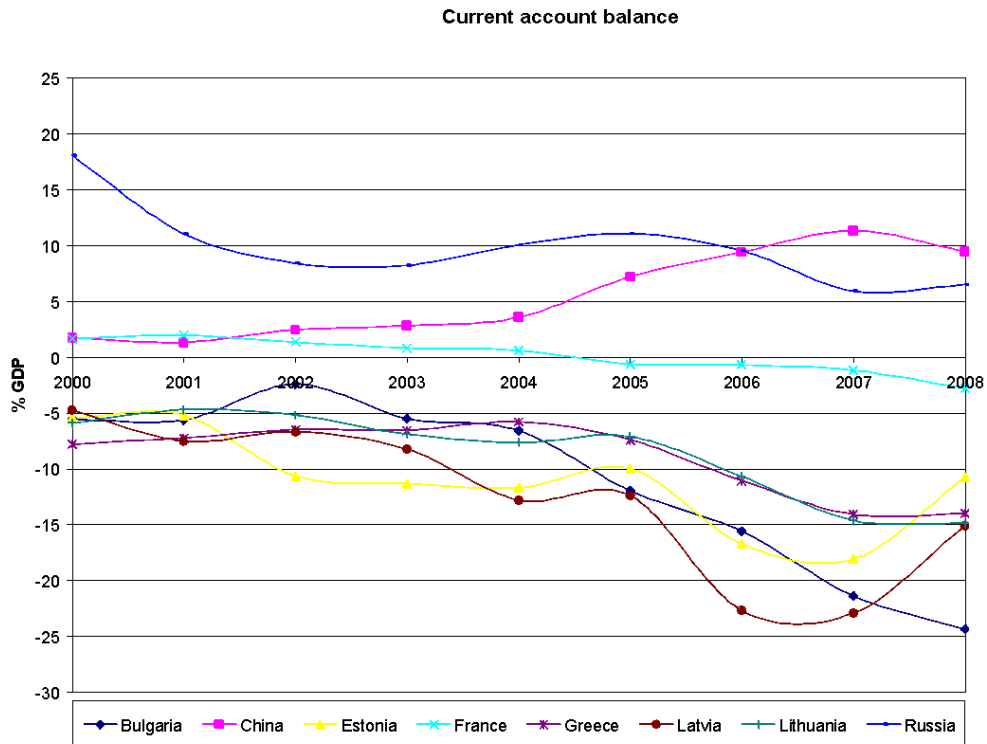


Figure 10. Current account balance as a percentage of GDP

6.3 CORRUPTION, STATE CAPTURE, AND PUBLIC PERCEPTION

The current or expected economic distress is not the only reasons for public dissatisfaction. Public perception of the government, and confidence in its ability to deal with the crisis, is crucial as well.

In Bulgaria, protesters explicitly cited corruption as a motivating factor for their protests⁴⁹. Bulgaria was stripped of 220 million Euros in funding by the EU last year, citing concerns over fraud and misappropriation. In 2008, In Lithuania, the perception of corruption fuelled hostility to fiscal austerity measures. A local editorial criticized salary increases for MP's and ministers while major spending cuts were being made elsewhere. The chart below shows the corruption perception index (CPI) score, a metric used by Transparency International. The CPI score indicates the degree of public sector corruption as perceived by survey recipients, and ranges from 10 (highly clean) to 0 (highly corrupt). In 2008 Canada's score was 8.7.

It is significant that Bulgaria and Lithuania are the only countries in which corruption is perceived to be increasing steadily bringing Bulgaria's transparency score down to the same level as China in 2008.

On the other hand, modest improvements in the perception of corruption may not save a government either. Latvia's corruption score improved from 4.7 to 5.0 from 2006-2008; yet allegations of corruption and nepotism against the ruling coalition helped fuel the January 13th riots in Riga, Latvia⁵⁰. Similarly, China's corruption score has been steadily improving from 2006. Yet the possibility of widespread disaffection with Chinese corruption is still very real, particularly since the level of perceived corruption is so high in the country.

⁴⁹“We are fed up with living in the poorest and most corrupt country,” the protest organisers said. “This a unique protest which unites the people in their wish for change and their wish to live in a normal European country.” “Recession sparks riots in Sofia and Riga,” Daniel McLaughlin, Irish times, January 15, 2009

⁵⁰“Latvia PM ready to broaden coalition government,” Reuters News, January 26, 2009

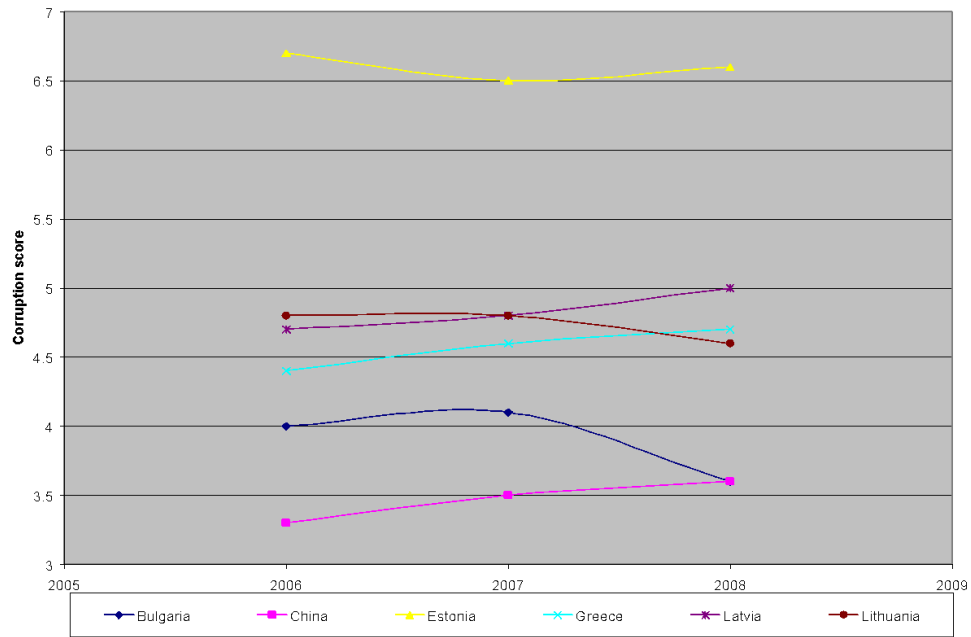


Figure 11. Corruption scores by county. Source: Transparency International

In several countries affected by the economic crisis, governments are using fiscal stimulus to restore the public's confidence. However, if the perception of corruption inside the country is high, these efforts could backfire against the government. In Bulgaria, a local think tank has warned that money intended for economic stimulus could be captured by "captured by a few oligarchic elites with political connections."⁵¹ More broadly, a government response which is seen as 'bailing out the rich' could alienate the populace and cause widespread resentment. In Greece, a \$36 billion bank bailout fueled resentment, particularly since the government attempted to cut pensions and farmer subsidies at the same time. Similar sentiments have been expressed in France, Latvia and Iceland.

⁵¹"Crime without Punishment: Countering Corruption and Organized Crime in Bulgaria," Center for the Study of Democracy, Sofia, Bulgaria.

6.4 UNEMPLOYMENT

Many of the macroeconomic indicators here show that China will remain relatively stable compared to the restive European countries. However, China's unemployment situation is major cause for concern, projected to be over 10% in 2009, higher than all the other sample countries. The effects of unemployment could be particularly harsh in China, where former migrant workers returning home to their villages would not be covered under any social safety net. An analogous situation is the high unemployment rate among youth in Greece, which has been a contributing factor to civil disturbances there.

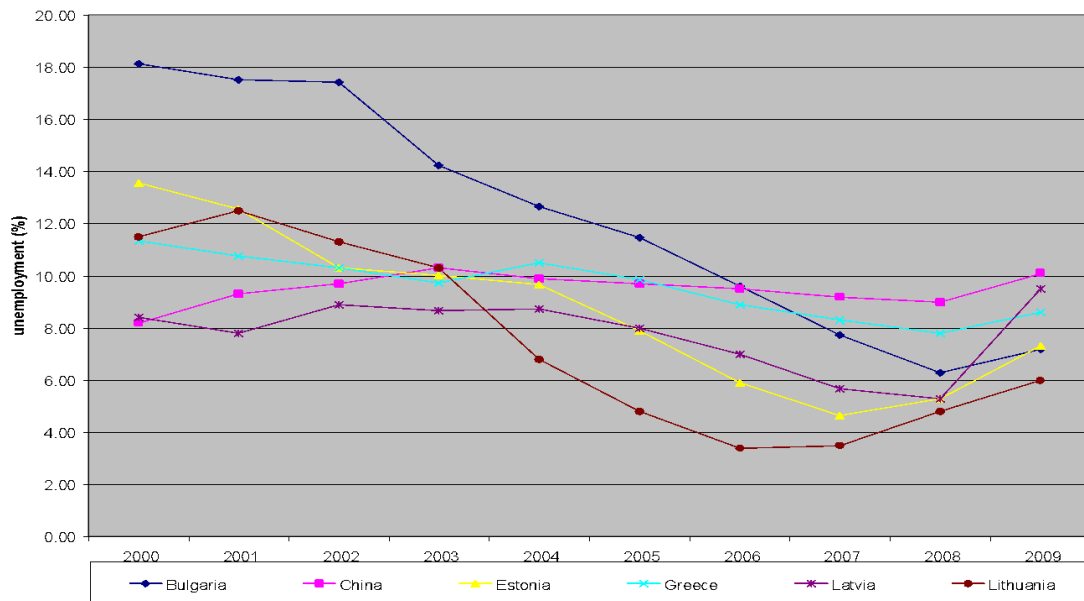


Figure 12. Unemployment in Europe and China

PART 3 EVALUATION

CHAPTER 7 PORTFOLIO ASSESSMENT

This chapter will serve as the assessment of the portfolio of papers presented in Part II. These were the comparative port study produced at the Atlantic Institute for Market Studies (see chapter 4), and two papers produced while at the Canadian embassy in Beijing.

I shall briefly introduce my motivation for taking on these internships, and then critically review the writing process and papers reproduced in the portfolio. The procedure followed below is described in chapter 3.

7.1 AN ATLANTIC SUMMER: INTERNING AT AIMS, 2006

On my daily drive past the Halifax harbour, I used to wonder about the containers that were piled up by the railway tracks. It seemed like a system with large potential: a deep water port with seamlessly integrated rail, and the large ever expanding hinterland of inner Canadian and American cities that required imports. But was this port being maximally utilised? Had the expansion of the port proceeded apace with increasing trade due to globalization? These were questions I considered with a fellow graduate student in 2005, which led to our joint paper that year presented at the Atlantic Canada Economic Association⁵². When I began investigating the literature on ports, and talking to Halifax port executives, I also prepared a directed readings course under Ian McAllister in Dalhousie economics with this research. I had reviewed a few AIMS papers repeatedly during these investigations.

After being unable to obtain the detailed data needed for my original thesis project, (on the green revolution in India) I was looking for ways to extend my port research. At this time I saw an advertisement for a summer internship to be offered by AIMS. The ads specified that AIMS was looking for researchers in health or education. In a cover letter I wrote for the position, I argued that my interest in the port, as well as in devolution and privatisation were issues dear to AIMS, and that they should instead fund my port

⁵² This paper is reproduce in Appendix B of this thesis.

research. With subsequent follow-ups, I changed my research proposal with guidance from a senior AIMS policy analyst, and secured the internship for the summer of 2006.

With this background established, I can outline the form that the meta-analysis of my AIMS paper will take. The methodological approach had already been outlined in Chapter 3. In addition to a critical review, the meta-analysis of the AIMS work will benefit from comparison of the various documents I have produced relating to ports over the time period 2005-2007. I can begin here by considering the ‘landmarks,’ i.e. the various documents that show the evolution of my thinking on the research theme during the progress of the internship.

The first comparison here will be between Tharamangalam and Mortaza (2005) and the first research proposal which accompanied my application to the AIMS internship. There is an obvious similarity between the two documents. In fact, I drew heavily on my previous paper to formulate the research proposal. However, I made sure to cite AIMS papers, to demonstrate that I was familiar with the previous work in this regard. There are two other notable points here. First, at this point there is a continuation of one particular theme from the ACEA paper: namely that there are losses or costs associated with a reduction of public subsidies that need to be taken into account. The other point is that some ambitious goals persist at this stage, such as redesigning a logistics model for the port. After further investigation, and given my knowledge of such processes at the time, it would simply have been impossible to recommend a detailed and new logistics model.

Another salient comparison is the evolution of my research proposal to AIMS. There was one initial research proposal supplied with my job application. After consulting with Steven Kymlicka, then the senior policy advisor at AIMS, I wrote a significantly revised proposal. The new proposal had an altered methodology: it would now be a comparison between the Halifax port and the port of Lazaro Cardenas in Mexico. There was also a thematic shift: whereas the previous proposal had talked of the “devolution process” the new proposal explicitly used the term governance and made that one of the research themes. This is a subtle but significant shift. Devolution has to do with the transfer of responsibilities; in this case from the federal government level to the regional,

stakeholder level. Governance, on the other hand, has to do with the exercises of those responsibilities. The implications of this distinction were not always obvious to me at the time of my internship, with consequences which will be discussed below.

My research at AIMS was conducted independently. In this sense, there is some overlap with the research process in graduate school. Both constitute experiential learning processes. It is also normal and natural for research interests, themes and ideas to evolve with the progress of the research work itself. In this sense, the adoption of the term “governance” did provide an advantage. It allowed me to branch out into the related issue of cluster governance. This was a theme which I had not heard of before; nor did anybody at AIMS use this term, that I am aware of. However, cluster governance became one of the overriding themes of my final AIMS paper. I also have reason to believe that my consideration of cluster governance had a policy impact. When the then AIMS president, Charles Cirtwill testified before the Standing Committee on Transport of the Canadian Senate, the first question he was asked was by the committee chair was about my paper and cluster governance as described therein.

On the other hand, the use of the term ‘governance’ carries with it an additional research burden. As seen in Chapter 4, my AIMS paper identified many issues related to devolution and governance: including inter alia business and marketing strategies, attracting leader firms, and ensuring that all board members are well versed in issues. I now believe that what is lacking here, however, is a theory of change i.e. beginning with a definition of governance, I should have gone on to explicitly delineate the effect of this governance on other outcomes. With critical hindsight, this is the aspect of the AIMS paper that I would address differently.

7.2 SEVEN MONTHS IN BEIJING: MY ECONOMIC SECTION INTERNSHIP, 2008-2009

For several reasons, my AIMS work did not easily turn into thesis. The year 2007 was a low point for me. I was not able to turn my peer reviewed, published paper into a thesis. I had several interviews from various provincial and federal government departments; but

these did not turn into job offers. I list these rather personal reflections here because they tie into the idea of self-efficacy. I did not feel effective at accomplishing these tasks I had set for myself, with subsequent ramifications for my self-esteem and self-confidence.

It was at this time that I submitted my first application for an internship at the embassy of Canada in Beijing. I had both a personal and academic interest in China. An equally motivating factor was my rather desperate circumstances at the time. While I was a shortlisted candidate for the internship I did not succeed in securing on that occasion.

I submitted a second application to the embassy in 2008. By then I had somewhat improved financial circumstances due to two Teaching Assistantships. These provided a good deal of intellectual stimulation; particularly as one of these was in effect a research assistantship where I was able to analyse IMF interventions in East Asian economies. I was also able to attend a World Bank conference for “promising young people.” All of these had a positive impact on my self confidence and self-esteem. But I still unemployed and living with my parents, without the efficacy to change those circumstance. I therefore needed some distance from the situation. So I was very happy when, after being initially turned down in the second round of applications, I was finally offered the internship.

While waiting for the internship to start, I had prepared a research proposal on China’s “reform and opening up” policy, which concerned economic expansion in China’s underdeveloped western regions.

When I presented this suggestion, the Economic Section was not very interested in my Tibet/Xinjiang regional inequality story, or another somewhat altered proposal I had prepared. They suggested I may want to write about Chinese investments into Canada. While I was free to pursue this or another topic if I wanted, this line of inquiry had had two benefits:

- 1) A range of different experts at the embassy who could potentially be available for interviews, a unique data source.

- 2) A target audience already interested in the topic, guaranteeing at least readership if not policy implications.

The topic therefore became attractive to me for both these reasons. In addition, I had had less than stellar results from my last 2 self-directed topics (thesis attempts 1 and 2) over the previous three years: I thought perhaps a change of direction could increase the efficacy of my writing. The result of this decision was that choice of topic was entirely determined by the Economic Section. This topic was of relevance because:

- 1) PetroKazakhstan, a Canadian company, had been bought out by CNPC (one of China's state owned oil companies) 3 years before the start of the internship. This was the largest acquisition by a Chinese State Owned Enterprise (SOE) to date.
- 2) PetroKazakhstan was considered overvalued and therefore a 'strategic' rather than 'commercial' acquisition.
- 3) Sections of the Canadian public and government were alarmed at the prospect of Chinese state owned enterprises (SOE's) buying up companies strategically. At the same time, there was a peak of Chinese acquisitions in 2007 (Jiang 2011), just prior to the internship.
- 4) There was scant information and no analysis of how these SOE's or other Chinese companies were acting and an urgent need was felt across the Canadian government for a comprehensive analysis.

In this case, the motivation or choice research question was not merely influenced by the environment, but entirely determined by it. In absolute amounts, the amount of investments by Chinese companies into Canada was still quite small, relative to say, American investments into Canada. It is doubtful that outside of the Embassy atmosphere I would ever have found this a question I needed to address. However, within the embassy the policy relevance of such a question became clear. Sections of the Canadian public and government were equally concerned by Chinese investments into Canada, and there was an urgent need to find out more about the nature of these investments.

Broadly speaking, this motivation was reminiscent of a similar question being asked in the 1980s, the question of whether Japan should be allowed to buy American companies. Similar to the Chinese situation, this was partly a result of the emergence of a new economic power which had upset the previous global order. However, the effect of framing the problem in this manner was to single out one particular economy (probably not coincidentally, associated with one particular culture) as different while other foreign investors were still allowed and encouraged.

The reason for such a question was because of a suspicion that the new investors operated according to a different logic from their predecessors. In the case of China, state owned enterprises were a cause for concern. Furthermore, the framework within which all Chinese enterprises operated, with varying degrees of guidance by the state, was poorly understood. The question then becomes whether the “State Owned Enterprises” or even private enterprises from a state directed economy should be allowed to participate in the buying.

Because a critique of the research question and a critique of the conclusions are closely linked, it is helpful to consider the conclusions reached here. In the investments paper I concluded:

Chinese companies, including the State Owned Enterprises, appear to be motivated by commercial considerations – although their concern for secure supplies may cause them to buy ‘overvalued’ assets, they then market their products in a profit maximising manner. Hence, in the majority of cases, Canadians have little to fear from the ‘hidden agenda’ of State Owned firms.

This conclusion is based on similarity to “commercial considerations” and performing in a “profit maximising manner.” I found that, broadly, there were no significant differences between the way these SOE’s performed and any normal commercial venture would perform to acquire assets and commodities.

Whether a foreign profit maximising firm overtaking Canadian companies is in the public interest does not arise as a question here. Granted, the question as framed is in itself of academic and public interest: do Chinese investors behave as other investors do? It is

possible than in an independent study in some other venue, I might have raised the same question.

However, the expediency of public policy makes the deeper question – does unrestricted foreign investment benefit the Canadian public – irrelevant at the level I was working at. Perhaps it is for groups outside the government, or the political level to consider this question. At the civil service level, the duty is to implement the policy of the elected government, or to investigate questions in the way they are framed by higher levels of government. Presumably this reflects the Canadian public.

An evaluation of open markets generally would have been far less widely read. The specificity of the question and the interest it generated made the paper highly actionable. The time when this paper was being written - in late 2008 - was a low-point in diplomatic relations between the governments of Canada and the People's Republic of China. The Canadian government urgently needed information on Chinese investors and how these affected Canada's interests. Based on the reception this paper received, I believe that the form of this research question did, indeed, shed light on this important issue.

7.3 DEVELOPING A METHODOLOGY

The development of a suitable methodology was one of the major research tasks of both internships. Beginning with the AIMS paper, there was need to build comparative case studies which was quite different from the academic research I had undertaken. Building the cases (i.e. case studies of the ports of Halifax and Lazaro Cardenas) was the foundational task of this work. The primary sources for this were journalistic accounts and interviews with experts. More traditional sources from, for example, literature reviews, were also used in understanding theoretical models (especially in the AIMS paper), but these had a limited role by comparison.

Because the necessary information was obtained from sources I had never encountered in research methods, extracting this data and constructing a narrative was based on a new self-taught methods of investigation. As the sources were largely internet-based, the

methods utilised were necessarily new. It is only in the twenty-first century that smaller newspaper have had their articles available on the web, and RSS feeds have become ubiquitous. While this may have had some similarities to the way case studies were previously designed, I had never built cases before so this aspect of the methodology was new to me as well.

This methodology proved useful in building the cases and acquiring knowledge. So I employed several similar methods a few years later, while investigating Chinese investments into Canada at the Canadian embassy. By this point, I no longer needed to rely on lengthy and inefficient internet searches for data or news articles. At the embassy, there were powerful databases available which could search through news archives comprehensively and efficiently, suggesting a ‘scale-up’ of my previous methodology.

My embassy report was a more extreme deviation from academic papers. There is no elaboration of a theoretical framework. Nor do the works of previous authors have much to contribute - at the time the report was written the phenomenon of Chinese OFDI into Canada was too new to generate a literature (hence the urgency of the task, as detailed above). Lacking previous literature or a theoretical framework to draw upon, the paper does not need nor include a list of references. In the embassy report format, internal interviews are also not cited. While being effective this was also a labour intensive methodology. It took several months to conduct interviews and gather the necessary information on Chinese investments. Parallel to this process was an analysis of the deals that I documented, together with the geo-strategic motivations behind these and special cultural factors where relevant.

By setting up the investigation in this way, I was able to provide answers to the research question being asked, to wit, whether commercial considerations or political, strategic considerations were driving the agenda of China’s foreign acquisitions in Canada. I was also able to make inferences about added vulnerabilities due to Chinese acquisitions; for instance, whether there was a danger that the value added activities in Canada could be reduced by Chinese firms acquiring Canadian commodities.

At both the AIMS and embassy internships, I produced papers with standards different from academia. In such cases, it is worth asking if these novel methodologies were sufficiently rigorous. One answer to that is provided by peer review. At the AIMS internship, this was a fairly straightforward process. Prior to publication at the think tank, the paper was vetted first informally by internal review, and then formally by two anonymous external reviewers. On the basis of their feedback, it would seem that the paper, and my implication its methodology, are sound.

At the Canadian embassy in Beijing, my report was only for internal circulation within government departments and so did not go through an external review process. However, it did require approval by the head of the Economic Section. Once approved, he also sent this to various Canadian federal and provincial government departments. Since I received positive feedback from a diverse and wide range of sources, I have reason to believe this paper was sufficient for its purposes as well.

7.4 REVISITING THE PORTFOLIO: A SELF-ASSESSMENT

The research questions, methodology, and conclusions used in my internship portfolio have all been considered separately above. All have been found to be adequate for their purposes. At the same time, lacunae in these papers have been identified. In keeping with the spirit of “lessons learned” it is worth asking what could have been done differently.

In hindsight, the AIMS paper could have used a much more comprehensive set of interviews. This is particularly relevant for the section of cluster governance, which was probably my most original contribution to the debate on the Halifax port. Such an approach seems to demand a series of interviews with cluster stakeholders.

Interviews would have broadened the perspectives on other port governance issues as well. Discussions with the board and chairman, unions, and managers other than the two I spoke with would have established this broadened perspective.

An important aspect of this discussion would be to have comments on the record. One of the problems I suffered while writing this is that a primary source who provided extensive information was not comfortable with being named in the paper.

Intuitively, I suspect this would not have changed the conclusions reached in the ports paper, but rather make them stronger. However I cannot ascertain this since the data is unavailable. I did not become aware of these potential problems until the end of 2006. By that time additional funding was not available and I had a mentality of finishing the program. It is worth noting that this problem did not tarnish my experience at the internship or with respect to peer reviewed publication. The only problem (not apparent at the time) was in extending this research further.

Moving on to the Beijing internship, it is worth reviewing how I considered this politically charged issue. Despite the political ramifications and the urgency of the research, in reviewing this research question I feel that the burden of proof was pretty low; i.e. comprehensive research showed that Chinese firms (including SOEs) were not very different from other firms. This certainly required skills, chief among them conflating interviews, journalistic accounts, and other sources. But overall, I now feel that this required more intellectual stamina than talent. However, the point was crucial to establish given the skittishness of Canadian public at the time and the revisal of foreign investment review in 2009/2010 (cited in Jiang 2011), with suspicion of Chinese investments by sections of the Canadian government. Again in hindsight, the methodology was adequate for establishing how Chinese firms really behave in their thinking on strategy and acquisitions, which was important information for Canada at that point.

A final point relates to the “Social Unrest in Europe” paper. This is a partial analysis and to the best of my knowledge, this report was never circulated by the Economic Section. It is certainly problematic to make political predictions solely on the basis of economic indicators. However, the economic health of a society is definitely relevant to the state of the polity and also provides an entry point to discuss political stability. I adapted this methodology several years later in a piece comparing the rise in inflation in Malaysia and Thailand, with the rise in protests and potential political instability in those two societies.

7.5 SUMMARISING THE META-ANALYSIS

On the basis of critiquing the motivation, methodology, and conclusions of the research paper, as well as the broader reflection on the portfolio, the following lessons were learned:

- 1) Motivation in research is changed by the institutional setting. This is usually a positive change. For instance, the student is forced to consider or frame the question in such a way that policy implications are evident. While this is a different emphasis from academia, broadly speaking this is (or ought to be) the goal of all social science: namely changing some aspect of society for the better.
- 2) A valuable lesson is the need to balance personal against institutional perspectives in research questions. At the very least, students and interns should be aware of how subtle changes affect the research agenda, and explicitly consider these during the research process.
- 3) Broadening methodologies beyond narrow disciplinary approaches can yield valuable results. In fact, incorporation of even seemingly superficial information (such as journalistic accounts) when used critically can uncover genuine and analytical insights.
- 4) Analysis techniques derived from internships can be transferable. More than just a new technique, this can cause a new appraisal of situations and perspectives. Examples of this include carrying a methodology from one of my internships to the next, as well as learning a new method of considering macroeconomic indicators in political economy, an outlook which I carried beyond my internships.
- 5) Within the framework of chosen research questions, the institutional setting does not seem to bias the conclusions that are reached. This holds true even with the use of novel methodologies.
- 6) Skills/approaches/perspectives are transferable to dissimilar work environments to a surprising degree. In this chapter, some of this has been demonstrated on the basis of the portfolio papers. Beyond the portfolio, a broader consideration of this point will be fully elucidated in the next chapter.

CHAPTER 8 EXPERIENCE ASSESSMENT

The research environment of my internships, and my attempt to negotiate its demands, formed one of my major experiences which typified the internship. This experience was interrogated in the previous chapter, on the basis of the portfolio of my research papers. Yet, this analysis does not capture fully the richness of my experience, nor the skills developed there. This chapter seeks to address that problem. The first section below concerns skills development. There are also broader personal and social goals beyond skills development that an internship should address - this is considered in the last section.

8.1 SKILLS DEVELOPMENT

The previous chapter dealt the development of analytical skills and how they were influenced by the environment and experience of internships. But analytical skills are only a small subset of the skills that can potentially be developed in internships. Gault et al. (2000) identified thirteen separate skills which could be developed by an internship. These were divided into four categories: communication skills, academic skills, leadership skills, and job acquisition skills. This provides a useful framework to evaluate my own internship experiences against, in terms of skill development.

8.1.1 Communication skills

The communication skills identified by Gault et al. (2000) are oral skills, proposal writing and written communication. All three of these were seriously improved by my internships.

In chapter 7 I discussed the process by which I obtained my AIMS internship. I first prepared a cover letter to convince the institute to fund my interests (at the time, transportation economics and the Halifax port) over the stated topics that AIMS was willing to fund. By following up with a senior policy analyst at AIMS, I was able to get guidance on writing a research proposal, as well as an audience with the president of AIMS to present my proposal. In Chapter 7 I stated that the research proposal was

significantly different from the rough sketch outlined in the cover letter. Preparing a proposal in a way more suitable for a public policy institute is a form of anticipatory socialization (Callanan and Benzing 2004) towards the new social setting. Bandura (1986) mentions that when encountering difficult settings, a guided or sheltered introduction can produce a maximal effect in terms of efficacy. The guidance I received in terms of reorienting my research topic helped me to produce a proposal in the appropriate language, incorporating new content (about the port of Lazaro Cardenas) and a new methodological framework (a comparative study) while still allowing me to pursue my primary research interest – the port of Halifax. The gains in efficacy and “proposal writing skills” formed a virtuous circle. Years later the gains in efficacy allowed me the confidence to draft a proposal to CIDA for a Canadian company, to set up and evaluate corporate social responsibility projects. At the time, I had no experience in bidding on projects. As this was a new type of project for CIDA, there was neither literature to draw on nor specifications from CIDA itself. The company I worked for was itself a start-up with no expertise in these areas. I believe it was my prior initiation to proposal writing at my internships which gave me the skills and confidence to propose and carry out this task independently.

My AIMS internship was the first time I had full time work in a professional office environment. As part of the anticipatory socialization that takes place in such settings (see above) I picked up the normal codes of oral communication in a policy oriented office settings. This included a daily routine of informal conversations with my immediate mentor at AIMS, as well as contributions to meetings, seeking the advice of other senior staff at AIMS, or executives in Canada and Mexico and academics at Dalhousie (outside the economics department) and at other institutions whom I had no had access to before. After I requested and was granted funding to attend a conference of the Canadian Transportation Research Forum in Quebec City, I used this opportunity to network with academics, bureaucrats and other policy professionals, some of whom I later interviewed in preparing my paper.

I was pushed to improve my oral communication skills further during my internship at the Canadian embassy in Beijing. Twice during my internship, I briefed the staff of the Political Economic Relations and Public Affairs on my ongoing research, into Chinese investments in Canada and other issues. I also conducted training sessions for the trade section of the embassy, on the use of databases. These databases constituted a significant investment by the government of Canada, and contained large amounts of organised data, in fields as diverse as “market intelligence,” archived news compilations, international trade data, and macroeconomic variables. However, at the time they were underutilised by the trade section, who were unfamiliar with the use of these databases, while I relied on these sources for data regularly in the Economic Section.

Holding these training sessions was a very new experience for me. It is true that in university, I had made many presentations to professors and fellow students. But in these situations it was understood that the professor is the authority on the subject; even when (as occasionally happens in graduate school) the student may be the resident expert on a sub-topic, the purpose of the presentation is to get general feedback on research, methodology, or useful reflections to incorporate into student research (at least this has been my experience). In contrast, conducting a training session for senior staff, while being an intern at the Canadian embassy, presented a daunting challenge. Fortunately, I was well prepared and the most senior staff, including the head of the trade section, were extremely receptive to the session⁵³. This reception once again increased my increase in my own efficacy, and I have gone on to make presentations to senior staff in other organizations without being quite so daunted by the task. These various presentations were all suggested by my supervisor at the time, once more tying in to the framework of guided introductions to difficult settings (Bandura 2004).

On written communications, the coverage in chapter 7 here is quite extensive. I would only wish to add two minor points here. The first concerns an incident during my AIMS

⁵³At the time they even proposed that I extend my stay at the embassy, with a new internship in the trade section.

internship, where I prepared briefing notes for the then president, Brian Lee Crowley. These notes were incorporated into a keynote address he gave to the Halifax shipping association. At the Embassy internship, the two reports that I circulated were widely read in DFAIT and other government departments, and received positive feedback. These incidents increased my self-efficacy with respect to written work.

8.1.2 Academic skills

The major component of academic skills may be analytic skills – these are examined in Chapter 7. Computer skills are another major component. In my case, the use of databases, already alluded to above, constituted a major skill developed at the Canadian embassy in Beijing. The use of news articles from databases facilitated the development of a methodology I had developed previously during my AIMS internship – namely, the ability to use newspapers and other journalistic accounts to form a narrative of the topic in question. When this narrative was combined with data from other sources – trade databases, personal interviews with Chinese and Canadian government officials, etc. – I was able to use this narrative to conduct what Coll and Kalnins (2009) call an interpretative study⁵⁴. The use of trade databases has already been discussed in the above paragraph. Once again, the guided structure of the internship provided an ideal setting to pick up these skills. Initially it took me several days to extract information from the databases. Over the course of the internship, I was able to increase my speed and facility with these databases, until eventually I was able to extract and compile the relevant data within hours, or even less for smaller assignments. Of course this has endogenous effects on other skill building: as explained above, my facility with the embassy’s databases led to opportunities to conduct a training session on these.

Creative thinking, information search and problem solving are the next academic skills listed in the Gault et al. framework. In my case, all of these were manifested in the methodology I used to produce my research papers. Common to both internships was the

⁵⁴Described in the literature review, see Chapter 2.

methodology I devised to access and compile information for these “interpretive studies.” As mentioned in chapter 7, this methodology differs markedly from university research papers, particularly standard papers in economics. Another creative aspect is the “cluster governance” concept. Cluster governance is a widely studied issue in fields from development economics to public policy; it had also been discussed in the ports literature by some scholars⁵⁵. However, to my knowledge no cluster analysis in relation to the Halifax port had ever been conducted prior to my work on this. This was quite a departure from my experience of writing university papers. In addition to the fact that my data was obtained from diverse sources, I had to apply this using a framework which had not been considered before in this context.

As discussed in Chapter 7, the methodology employed in these papers itself employed a somewhat creative process. Data was extracted from sources which I was not familiar with – such as interviews – and non-traditional sources like the internet, news articles, popular journals, and parliamentary proceedings. This methodology is considered in detail in chapter 7 – here I would only like to add that these gains in “creativity” have translated into areas beyond research for me. For instance, for several years I taught math courses using non-traditional approaches, which led to a dramatic improvement in the outcomes of school students who had been classified as underachievers.

8.1.3 Leadership skills

Leadership is one of the more ambivalent terms used by Gault et al. (2000) and others to describe a subset of skills developed at internships. In most institutions a hierarchy places internships in the lowest organizational position. Diplomatic service, for instance, has pre-established protocols based on seniority, as well as a gradation of security clearance levels. As a result of these strictures, I only had access to my workspace for several hours per day while at the Canadian embassy in Beijing.

⁵⁵The issue of port governance, together with the relevant literature, is discussed in Chapter

However, under the category of leadership, Gault et al. list teamwork and relationship building. In this sense, my internships have helped me expand my leadership skills. There is a great deal more structured collaboration with colleagues in the intern role than in, say, graduate school. I may also have picked up some leadership skills via the anticipatory socialization process. At both the AIMS and Canadian embassy internships, I worked under leaders who had excellent management skills. At the Economic Section meetings in Beijing, for instance, my supervisor's weekly meetings were a model of efficiency, which clarified the work agendas of the entire section. It is possible (and hoped for) that I have imbibed some of this leadership ability.

8.1.4 Job acquisition skills

Gault et al. (2000) list as their last category job acquisition skills. Some of the skills tested here, such as resume writing, clearly are more applicable to undergraduate or others at the very beginning of professional life. I cannot say that my internships improved my resume writing; with the exception of course of the improvement to the resume by being able to list these prestigious internships.

The other job acquisition skills are interviewing and networking. In both my internships I conducted extensive interviews with senior scholars and government officials; I feel that "being on the other side" has improved my own skills while being interviewed as well. The general efficacy gains of internships plays into this response as well – my body language, eye contact, etc. indicate, I believe, a level of confidence I would not have had without the internships.

Meanwhile, the number of contacts I have made from here has generally played a factor in my "job networking." Gains in this area, however, have to take into account the role of the 'serial intern' – i.e. contacts who have heard about me as a former intern are more interested in offering me new internships rather than regular employment. In the 21st century, the reputation of intern is precarious: on the one hand implying a certain skill level and professionalism, on the other hand suggesting someone who will work for cheap.

8.2 OTHER GAINS: BEYOND SKILLS

Broadly, four themes that are beyond skills development, beyond gains to the employer are considered below. This framework is adapted from Coll and Kalnins (2009).

8.2.1 Theme 1: personal growth of student interns

In the skills development above, one recurring theme is the development of efficacy. The above treatment shows that efficacy has been instrumental in creating the skill set development associated with internships. And yet, the full effects of the self-efficacy and related concepts are not captured by merely analysing “skills acquisition.” Coll and Kalnins (2009) report that beyond skills acquisition, former interns perceive “a more holistic view of what is learnt.” For instance, in addition to self-efficacy, students have gains in self-esteem and self-confidence as well. They also report an improvement in intellectual development, capacity for reflection, and other soft skills. Students in international internships also note the importance of acquiring new languages and new cultural “codes of practice.”

In considering my experience, this theme deserves some expanded treatment. A transition from student environment to workplace is supposed to constitute “reality shock,” an effect which can be mitigated through internships (Taylor 1988). In my case, transition from graduate school, to professional atmospheres which were largely research based, was no in of itself particularly traumatic. It is true that this transition for me required the acquisition of new “code of practice,” for instance when working within the protocols of the Canadian embassy. But beyond this and adapting to the dress code and a few professional mannerisms, the office environments themselves were not challenging. However the truly daunting environment was not the reality shock of the work place but in 2008 the culture shock of China outside the workplace. In his study of acclimatization problems of expatriates, Dewar (1997) mentions the inadequacy of acclimatization programs for professionals, with a somewhat better assessment of programs for international interns. This has to do with problems with language, expected behaviours, etc. are common in most such postings. Most overseas postings – internship and

otherwise- make some attempt to mitigate some of this shock through training/orientation sessions (pre and post departure), language instruction, and structured support for acclimatization including supplied accommodation, bank accounts etc. In contrast to this, the Canadian embassy provided no acclimatization whatsoever for its interns. In this sense my china internship constitutes a kind of “extreme culture shock” – there were no orientations sessions, no pickup on arrival, no language training, no formal structure to help with renting accommodation, etc.⁵⁶

At the same time informal assistance provided by several people at the embassy - locally based colleagues, supervisors and others - mitigated some of the tension arising from this new situation. Another mitigation, not available to most sufferers of culture shock, was the ability to ‘turn off’ or minimise the foreign environment by entering the Canadian embassy, where I spent the majority of my workday.

This combination: a kind of sheltered culture shock – seems to match the discomfort or growth zone promoted by ABEL or the outward bound movement (see Chapter 2). Given this similarity it may not be surprising that following Dewar (1997) this sheltered “discomfort zone” led to improved intercultural effectiveness on my part. Overcoming my initial culture shock, I was able to adapt to the local Chinese environment in a variety of situations, and eventually ended up living in the country for many years following my internship.

The ability to function in this alien culture, together with all the other gains of the internship, contributed significantly to my self-efficacy, self-esteem, and self-confidence.

⁵⁶ I mention formal structures because informally, I had a great deal of support. Mike Chou, the outgoing intern, personally fulfilled most of the functions described here including providing airport pick up, followed by dinner and free stay in his accommodation, help with rentals and banking etc. As much of this took place during several normal workdays, his absence must have been noticed by our immediate supervisors – I assume this had their informal approval as well.

8.2.2 Theme 2: contribution to broader social and economic goals

Beyond these personal goals, internships contribute to broader social goals as well. This includes talent growth and higher order learning growth, openness to new situations, etc. I feel that the intervening years since these internships have in fact shown that I have these socially useful abilities to various degrees.

8.2.3 Theme 3: the theory practice disconnect

Coll and Kalnins (2009) refer to this theme as “issues in co-op practice and management.” I have referred to this as the theory practice disconnect since it deals with the gap between the reality of internships and the theory concerning how these should function. In my case, my internships were unstructured from the university point of view i.e. they were entirely outside of university supervision. This did not have many negative effects, with one exception which I will call the “exit strategy.” By the exit strategy I mean a linkage to something following the internship. In the AIMS case, this took the form of problems extending the internship paper in terms of further research (see Chapter 7). In the case of the embassy internship, there was no linkage to the next job or career step - this resulted in several months of uncertainty following the internship. There is a role for all stakeholders to structure linkages out of the internship: the student intern together with the intern host and university.

8.2.4 Theme 4: employer views

The last theme that Coll and Kalnins (2009) consider is employer views. Since employer views do not feature in my internship reflections, this theme is not of much relevance here. However it does suggestion directions for extending further research on the basis of this thesis.

CHAPTER 9 CONCLUSION

This thesis has served many purposes. It has been a record of my internship papers, compiled into a portfolio of Chapters 3 through 6. It has reflected on these papers in Chapter 7. It has reflected on other parts of the internships in Chapter 8.

These reflections have a purpose in of themselves. The literature on internships (Hodges and Ayling 2007, Coll and Kalnins 2009) shows that reflection and writing about the experience increases the efficacy of the internship itself. These reflections should also be of interest to educators, internship hosts, and potential interns who could use this discussion as a starting point for finding a method to frame an internship.

However, this thesis has also attempted to go beyond reflection to analysis. The portfolio papers have been critically evaluated; the reflections of chapter 8 have been gauged by the literature on internships and experiential learning described in Chapter 2. The purpose here has been to evaluate my internship against standards determined by the “integrated learning” literature, and also by treating my internship as an exercise in experiential learning.

These exercises have shown largely positive results from my internships. There is a self-efficacy of work and an increase in competencies, especially regarding research methods and production. More broadly, the experiences of these internships have contributed to an overall increase in self-confidence, self-esteem, and self-efficacy. In terms of the “social goal” aspect of internships, I have certainly increased my awareness of how public policy is discussed and crafted, with contributions by think tanks and the government departments.

In broad terms, the self-efficacy gains from my internship have contributed to later career success. Over the last few years I have enjoyed a professional career overseas in ways that would have been inconceivable prior to my internships. However, it is worth noting that in the immediate aftermath of both my internships, I was left with a period of uncertainty. My AIMS work could not be extended into thesis research, and both

internships did not immediately open career doors to paid professional employment. I have called this problem the lack of an “exit strategy.”

The literature, and this thesis in general, have highlighted a tension between the need for pursuing the boundaries and entering the “discomfort zone,” on the one hand, and the need for sheltered or guided challenges on the other. This is the basis, for example, of the theories of adventure training as explained in chapter 2. Particularly regarding the Beijing embassy internship, I have noted that in my case, the “sheltering” aspect of the internships was provided informally, in the form of substantial but informal support by my colleagues and supervisors. In discussing internship evaluations, I have mentioned that Hodges and Ayling (2007) propose a more holistic model of portfolio assessment than used here, one which determines certain skills and competencies by mutual agreement of the three stakeholders (student-interns, educators, and intern hosts) prior to the start of the internship, and then demands that these skills competencies be demonstrated by the portfolio of work. Hodges and Ayling make a powerful case for this model of evaluating internships - I feel I could have benefitted from such a scheme as well and would not have had the same “exit” problems that I did at the termination of my internships.

I have benefitted from having internships which, in addition to being coveted and well reputed, also offered at least a moderate remuneration. In the case of the Beijing internship, the compensation was adequate for only a local lifestyle - but this had the benefit of forcing me into the “discomfort zone” of local accommodations, food habits, and, by extension, culture - while providing the means of sustenance within this local matrix. Today’s student interns increasingly have to deal with uncompensated internships, or even internships which require the students to pay a fee. The evaluation of such an internship would change substantially - both because of the increased cost to the student, and because the broader social goal of such an internship is called into question. I note that the internship at the Canadian Embassy in Beijing, from which I benefited greatly, is now entirely uncompensated. Such a structure may push the student intern beyond the discomfort zone into a kind of permanent distress - or more likely, restrict these

internships to students of elite school (which offer awards for acquiring prestigious internships) and wealthy students.

In summary, this thesis has explored experiential learning through my internships and found that both the environments where my internships were held have been highly positive and efficacious, that they greatly improved the life of the intern in myriad ways, and that both tangible and intangible benefits have been observed. At the same time, I have not shied away from criticizing some institutional flaws, nor my own shortcomings when these have been demonstrated. It is hoped that this work will of use to my former host institutions, the Atlantic Institute for Market Studies and the Economic Section of the Canadian Embassy in Beijing. It is also hoped that the department of economics at Dalhousie can benefit from this - its new linkages with Chinese universities could an excellent basis to set up internships for Dalhousie students in that country. Lastly, it is hope that this frank evaluation of my successes and failures in internships could be a guide and encouragement to students contemplating the same.

BIBLIOGRAPHY

- American Association of Port Authorities. "North American Container Traffic."
<http://www.aapa-ports.org/pdf/2005_NORTH_AMERICAN_CONTAINER_TRAFFIC.pdf>
- Aristotle. (1948). *The Basic Works of Aristotle*, Richard McKeon, Ed., New York, Random House Press.
- Baird, Alfred J. (1999). Privatization Defined: Is It the Universal Panacea? 27 June. <www.worldbank.org/transport/ports/con_docs/baird.pdf>
- Baird, Alfred J. (2000). Port Privatization: Objectives, Extent, Process and the U.K. Experience, *International Journal of Maritime Economics*, 2, 3, 177-194.
- Baltazar, Ramon and Mary R. Brooks. 2001. *The Governance of Port Devolution: A Tale of Two Countries*. School of Business Administration, Halifax, NS, Canada: Dalhousie University.
- Bandura, A. (1982). Self-efficacy mechanisms in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behaviour*. New York, NY: Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bates, Merrelyn, Lyndel Bates, and Carleen Thompson. (2013) Not All Dimensions of Work Self-Efficacy Are Equal: Understanding the Role of Tertiary Work Placements in the Development of the Elements of Work Self-Efficacy. *Journal of Co-operative Education and Internships*, 47 (1)
- Bates, A., Bates, M., & Bates, L. (2004, December). Weaving the threads of knowledge: A focus on students. Paper presented at the 5th Asia Pacific Cooperative Education Conference, Auckland, New Zealand.
- Beinstein, Judith. 1976. Urban field education: An opportunity structure for enhancing students' personal and social efficacy. *Human Relations* 29 (July): 677-85.
- Brooks, Mary R., Barry Prentice & Tonya Flood (2000), Governance and Commercialization: Delivering the Vision, *Proceedings, Canadian Transportation Research Forum*, June, 1, 129-143.

- Brooks, Mary R. (2004), "The Governance Structure of Ports," *Review of Network Economics: Special Issue on the Industrial Organization of Shipping and Ports*, 2, 2, 169-184. www.rnejournal.com
- Brooks, Mary R. (2001). Good Governance and Ports as Tools of Economic Development: Are They Compatible? *Proceedings of the International Association of Maritime Economists Annual Conference*, Hong Kong, July, 1-19
- Calanan, Gerard and Benzing, Cynthia (2004). Assessing the role of internships in the career-oriented employment of graduating college students. *Education + Training*, 46 (2)
- Chapman, Steve (1992). What is the Question? *Journal of Experiential Education*, 5 (2)
- Chomsky, N. (1970). Language and Freedom. In: N. Chomsky. *For Reasons of State*. Pp. 387-408. New York, NY: Vintage Books.
- Cirtwill, Charles, Brian Lee Crowley, and James Frost. 2001. *Port-Ability: A Private Sector Strategy for the Port of Halifax*. Halifax, NS: Atlantic Institute of Market Studies.
- Coll, Richard K and Kalnins, Tatiana. (2009). A critical analysis of interpretive research studies on cooperative education and internships. *Journal of Co-operative Education and Internships*, 43 (1)
- de Langen, Peter (2004). Governance in Seaport Clusters. *Maritime Economics & Logistics*, 6, 141-156.
- de Matons, Jean Grosdidier. (1996). "Port Privatization: A Public Administration Perspective," in Hakim, Simon, Paul Seidenstat and Gary W. Bowman (Eds.). (1996). *Privatizing Transportation Systems*. Westport, CT: Praeger Publishers
- de Matons, Jean Grosdidier. (1997). Is Public Authority Still Necessary Following Privatization? *Proceedings of the Cargo Systems Port Financing Conference*, London, 26-27 June. <www.worldbank.org/transport/ports/con_docs/dematons.pdf>
- Dewar, Charles Ian. (1997). Including experiential education in development training to better prepare participants for international effectiveness. MDE Thesis, Department of Economics, Dalhousie University.
- Dewey. John (1938) *Experience and education*, New York, Collier Books
- Duke, C.R. (2002), "Learning outcomes: comparing student perceptions of skill level and importance", *Journal of Marketing Education*, 24 (3)
- Ehiyazarayan, E. and Barraclough, N. (2009), "Enhancing employability: integrating real world experience in the curriculum", *Education + Training*, 51 (4)

- Estache, Antonio, Marianela González, and Lourdes Trujillo (2001). *The Efficiency Gains from Port Reform. The Potential for Yardstick Competition in Mexico.*
- Freire, Paulo. (1970). *Pedagogy of the Oppressed.* New York: Continuum
- Grady, Don A. (2013). "Indirect Measures: Internships, Careers, and Competitions," in Christ, William G. (2013). *Assessing Media Education: A Resource Handbook for Educators and Administrators.* Mahwah, NJ: Lawrence Erlbaum
- Gault, J., Redington, J. and Schlager, T. (2000), "The benefits of undergraduate business internships: implications for the student, university, and business community", *Journal of Marketing Education*, Vol. 22 No. 1, pp. 45-53.
- Gault, J, E. Leach and M. Duey (2010), *Effects of business internships on job marketability: the employers' perspective.* Vol. 52 No. 1, pp. 76-88
- Groves, D.L., Howland, B., Headly, F. and Jamison, D. (1977), "Relevance in the classroom and curriculum", *College Student Journal*, Vol. 11, Fall, pp. 259-61.
- Guba, E.G., & Lincoln, Y.S. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage.
- Hakim, Simon, Paul Seidenstat and Gary W. Bowman (Eds.). (1996). *Privatizing Transportation Systems.* Westport, CT: Praeger
- Hall, D., & Raffo, C. (2004). Re-engaging 14-16-year-olds with their schooling through work-related learning. *Journal of Vocational Education and Training*, 56(1), 69-78.
- Hayek, Friedrich von. 1994. *The Road to Serfdom.* Chicago: University of Chicago Press
- Helling, A. and T.H. Poister (2000) "U.S. Maritime Ports: Trends, Policy Implications, and Research Needs," *Economic Development Quarterly*, 14: 300-317.
- Hirschman, Albert O. (1970). *Exit, Voice, and Loyalty. Responses to Decline in Firms, Organizations, and States.* Cambridge, MA: Harvard University Press.
- Ho, David K. H. (1996). *The Seaport Economy. A Study of the Singapore Experience.* Kent Ridge Crescent, Singapore: Singapore University Press
- Hochstein, Anatoly (1996). "Strategies for Improving Port System Performance: Worldwide Experience," in Hakim, Simon, Paul Seidenstat and Gary W. Bowman (eds.). (1996). *Privatizing Transportation Systems.* Westport, CT: Praeger
- Hohendorf, Gerd. (2000). *Wilhelm von Humboldt.* Paris: UNESCO: International Bureau of Education.

Ircha, M.C. (1995) "US Port Policy: Evolution and Structure," *Maritime Policy and Management*, 22: 281-294.

Jiang, Wenran. (2011). "The Dragon Returns: Canada in China's Energy Policy" in Pittman Potter and Thomas Adams (eds.), 2011. *Issues in Canada China Relations*. Canadian International Council.

Karns, G.L. (2005), "An update of marketing student perceptions of learning activities: structure, preferences, and effectiveness", *Journal of Marketing Education*, Vol. 27 No. 2, pp. 163-71.

Knouse et al. (2011). The Relation of College Internships, College Performance, and Subsequent Job Opportunity. *Journal of Employment Counselling*. Volume 36, Issue 1, pages 35–43, March 1999

Koka, Robert M., Robert A. Finka & Jennifer Adams Aldricha. (2000). Outside the box: creating your own internship opportunities. *Journal of Hospitality and Tourism*. 12 (3)

Koretz, D. (1998). Large-scale portfolio assessments in the US: Evidence pertaining to the quality of measurement. *Assessment in Education*, 5(3), 309-334.

Linn, P. L., Howard, A., and Miller, E. (Eds.) (2004). *Handbook for research in cooperative education and internships*. Mahwah, NJ: Lawrence Erlbaum

Martin, Alan S. 1934. A Short History of the Port of Halifax. *Unpublished Manuscript from the Files of Halifax Harbour Commissioner Alan S. Martin*. Halifax Port Authority Archives, Halifax, NS.

McAllister, Ian. (2004) *Through A Glass Darkly*. Cornwallis: The Canadian Peacekeeping Press, 2nd Ed.

Norcliffe, G.B. 1980. Industrial Development and Port Activity in Halifax-Dartmouth. *Canadian Public Policy*, 6 (3), 533-541

Port Authority of New York and New Jersey, "Governance,"
<<http://www.panynj.gov/AboutthePortAuthority/Governance/>>

Port Authority of New York and New Jersey, "Port Authority, Army Corps Sign Historic Agreement to Begin Major Channel Deepening Project in Port Of NY/NJ,"
<<http://www.panynj.gov/AboutthePortAuthority/PressCenter/PressReleases/PressRelease/index.php?id=531>>

Prentice, Barry. Gateways, Corridors, and Strategic City Pairs, in *Competition as a Driver of Change*. Proceedings of the 41st Annual Conference of the Canadian

Raelin, J. A. (2008). *Work-based learning: Bridging knowledge and action in the workplace*. San Francisco, CA: Jossey-Bass

Transportation Research Forum [Quebec City, Quebec, May28-31, 2006]. Saskatoon: University of Saskatchewan Printing Services

Ramirez, Carlos D., and Ling Hui Tan. 2004. Singapore Inc. versus the Private Sector: Are Government-Linked Companies Different? *IMF Staff Papers*, 51 (3): 510-528

Sator and Amundsen (2011). An Exploration of Transfer of Learning Opportunities in an Online Co-operative Education Preparatory Curriculum. *Journal of Cooperative Education and Internships*. 45 (2)

Shashikumar, N. (1998). The Indian Port Privatization Model: A Critique, *Transportation Journal*, 37, 3, 35-48.

Sovilla, E. S., & Varty, J. W. (2011). Cooperative and work-integrated education in the US, past and present: Some lessons learnt. In R. K. Coll & K. E. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education: International perspectives of theory, research and practice* (2nd ed., pp. 3-15). Lowell, MA: Work Association for Cooperative Education.

Transport Canada. "What are the objectives of the new National Marine Policy?" Available at <http://www.tc.gc.ca/pacific/marine/nationalmarinepolicy.htm#61>

Thiel, Glenn R., and Nell T. Hartley. 1997. Cooperative education: A natural synergy between business and academia. *SAM Advanced Management Journal* 62 (summer): 19-24.

United Nations Commission on Trade and Development (UNCTAD). 1995. *Comparative Analyses of Commercialization, Deregulation and Privatization of Ports*. Geneva

United Nations Commission on Trade and Development (UNCTAD). 1998. *Guidelines for Port Authorities and Governments on the Privatization of Port Facilities*. Geneva.

Wilson, Dori. (2013) Internship Report. Mimeo, Sewanee: The University of the South.

World Bank (undated), *World Bank Port Reform Toolkit*, [<www.worldbank.org/transport/ports/toolkit/>](http://www.worldbank.org/transport/ports/toolkit/)

Zegwaard and Coll (2011) Exploring some current issues for Cooperative Education. *Journal of Cooperative Education and Internships*. 45 (2)

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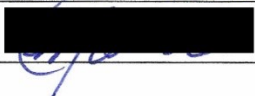
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APPENDIX B ACEA HALIFAX PORT PAPER

This paper, co-authored with a colleague, was presented at the ACEA conference in 2005 and motivated my subsequent interest in the port of Halifax, and later maritime and transportation policies more generally. It is included here for comparative purposes, as this paper is alluded to frequently in Chapter 7.

**THE HALIFAX PORT: ITS ROLE AND PROSPECTS IN THE NOVA SCOTIA
ECONOMY.** *With special emphasis on the issue of devolution.*

Michael Tharamangalam

&

Md. Golam Mortaza

Department of Economics, Dalhousie University.

Paper for presentation at the 34th Annual Conference of the Atlantic Canada Economics
Association,

October 23, 2005

The Halifax harbour has many advantages which would make it seem ideally situated for a port. In times past it was considered “an ideal entrepot for transshipment business and water-borne cargoes.”⁵⁷ However, today the volume of traffic through the Halifax Harbour is significantly less than through large eastern seaboard ports like Montreal or New York.⁵⁸

This paper will investigate the reasons for constraints to the volume of traffic through Halifax. We place this investigation in the context of benefits to the Nova Scotia economy. Section I will briefly describe the characteristics of the Port. Section II will discuss the advantages and disadvantages of the port. Section III will evaluate logistical and administrative issues. We evaluate the evolution of these issues as a result of the creation of an independent port authority. Section IV will contain our conclusions. Lastly, Section V will contain our recommendations as well as directions for future research.

B.1 CHARACTERISTICS OF THE PORT.

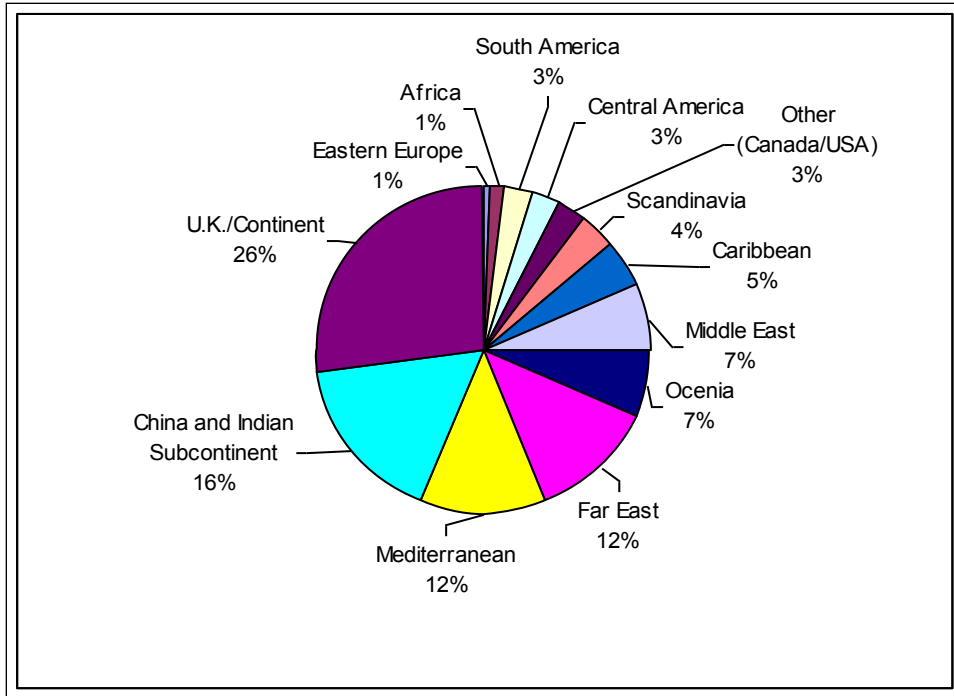
The Halifax harbour is one of the deepest and largest natural harbours in the worlds (AIMS, 2005). It is the first port inbound to North America from Europe and the Mediterranean, and the last port outbound in the opposite direction. The port is ice-free year round. It is strategically located, approximately 100 km north of the Great Circle Route. After a recent dredging operation, the maximum depth of the port has been increased to 55 feet.

In terms of tonnage “Halifax was the 6th placed North American port on the Europe trade route and 11th on the Asia & Oceania trade route” in 2001 (O’Keefe 2003). The origin of container cargo passing through the port is shown below.

Figure 1: Container Cargo of Halifax Port by Geographic Area, 2003

⁵⁷ Martin, Allan S. (1934)

⁵⁸ In 2001, the container exchange through Halifax was 413,501 TEU as opposed to 2,352,453 TEU for New York or 848,762 TEU for Montreal (O’Keefe, 2003).



Source: Halifax Port Authority

B.1.1 Regional importance and mandate

The economic impact of the port on the province of Nova Scotia has been estimated at almost \$700 million (AIMS, 2005). The port authority has 55 employees, but there are 3000 additional jobs directly related to port activity. In addition it is estimated that 9000 additional jobs are indirectly related to port activity. These include jobs in the rail and trucking industries, as well as distribution centres, waterfront labour, ship fuel and provisions, technical services relating to refrigeration (Bohan, 2005).

B.2 ADVANTAGES AND DISADVANTAGES OF THE HALIFAX PORT.

The harbour gives Halifax a natural advantage as a port. With a maximum depth of 55 ft., it is the deepest harbour on the east coast of North America (AIMS 2005.). While ships currently coming through the harbour are of the order of 5000 TEU, the port is already

equipped to handle the 10,000 TEU ships expected in the future⁵⁹. Because of its proximity to the Great Circle route, it can be used as a First In Last Out port, or FILO (Cirtwill *et al.*, 2001). Thus ships heading for the east coast of North America can dock first in Halifax to lighten their loads and avoid channel draft problems; similarly they can top up loads on the outbound route (*ibid.*, Bohan 2005).

Halifax enjoys an advantage over Montreal in that it is ice-free year round. Historically, this made Halifax a high traffic port in the winter months (Allen 1934). However, with the introduction of ice-breaking technology in 1966, the St. Lawrence River became passable in winter (Norcliffe 1980). Thus the Halifax advantage was reduced, as traversing frozen water is now less expensive than land transport.

In recent years, increased trade has caused congestion at large ports, leading to increased utilization of surplus capacity at smaller ports. This is proving advantageous for Halifax; in recent months there has been an increase in cargo carrying in Halifax due to congestion at other ports (Bohan, 2005).

The major natural disadvantage is the distance from target markets. Due to the high cost of land transport, discretionary cargos will naturally be directed to ports closer to target markets.

Halifax is served by only one Class One Railway,⁶⁰ CN Rail. This is in contrast to several other North American ports. New York has three class one rail services, Montreal has two, and Vancouver has two to three, depending on the method of evaluation (Bohan 2005). Thus In Halifax, CN can use its “market leverage” to charge higher prices, and in fact can test to see what the highest price is the market will tolerate. The rail monopoly also has little incentive to minimise dwell times (See section III a). The high price and dwell times disadvantage Halifax as a port for freight forwarding.

⁵⁹ These ships have already been introduced on Asian and Pacific routes.

⁶⁰ The six largest rail carriers in North America are referred to as Class One railways.

B.3 LOGISTICAL AND ADMINISTRATIVE ISSUES.

B.3.1 Logistical problems

The railway business model utilized by CN is based on “balanced trains.” I.e., trains are run only on a schedule which can ensure full cargos in both directions. In Halifax, exports are usually greater than imports. The result is that when ships deliver a bundle of cargo for delivery, they tend to accumulate in the port until the regularly scheduled trains come. This problem is accentuated by the cyclical nature of ship docking – ships tend to arrive on Thursdays, Fridays, Saturdays and Sundays while Monday to Thursday is a period of low traffic. Thus minimizing ‘dwell time’ is a major concern for clients. As a virtual rail monopoly with excess demand, CN has little incentive to reduce dwell times from Halifax. Thus discretionary cargos arriving in Halifax may be disadvantaged relative to, for example, Montreal. While cargo arriving in Montreal may face some of the same problems vis-à-vis dwell time, this is mitigated by the options of trucking, and choice of rail lines.

Shipping lines and freight forwarders may also choose to transload the goods in Halifax and truck them, or truck the containers directly. This is rare due to high cost; however this year it is becoming more common as capacity is filling up (Bohan, 2005).

B.3.2 Administrative issues and transition to Port Authority.

Over the past decade, many ports around the world were privatised through various forms of concession or lease agreements. In most cases, public policy was to encourage private participation in ports for efficiency gains through the introduction of competition, attracting increased foreign investment and ensuring cost-effective port services. In developing countries, the result of such policies was to create private natural monopolies, because of the high cost of investment in structure of ports (Van Niekerk 2005). However, this is not the case in developed countries because of the size of the markets, and competition with adjacent foreign and domestic ports. Hence operations of ports in developed countries can be competitive under private authority.

In Canada, as part of the devolution in transport support industries, governments deliberately devolved responsibility from the public to the private sector through the implementation of the 1995 *National Marine Policy* (NMP) under the *Canada Marine Act*, 1998. The intention of such devolution was to secure the benefits of commercially driven business decision-making in organizations previously run by government, and at the same time, to secure compensation for prior investments by taxpayers (Baltazar and Brooks 2001, O’Keefe 2005). Thus although Halifax port is self-sufficient in terms of funding and investment, it is situated on land which continues to be owned by the Department of Transport.

The devolution process was chosen over full privatization in Canada “to invoke community responsiveness through the creation of not-for-profit stakeholder-focused entities” (Baltazar and Brooks, 2001). As part of the process, the new port authorities were to be run by a community selected board of governors. However, while community input is now actively sought in Board selection, the (federal) Minister of Transport retains the right to approve candidates. Baltazar and Brooks (2001) find that “the Minister decided on his choice of candidates and was able to reject candidates put forward by local interests.” They thus conclude that “true devolution did not happen for Canadian ports.” Sources within the Port Authority agree that the devolution is “an incomplete process,” but counter that the five directors employed by the Minister in consultation with port users are all credible business people. Because they are required to have no conflict of interest, they tend to be drawn from a wide variety of business backgrounds, and their independent views form a real contribution to port governance (Bohan 2005).

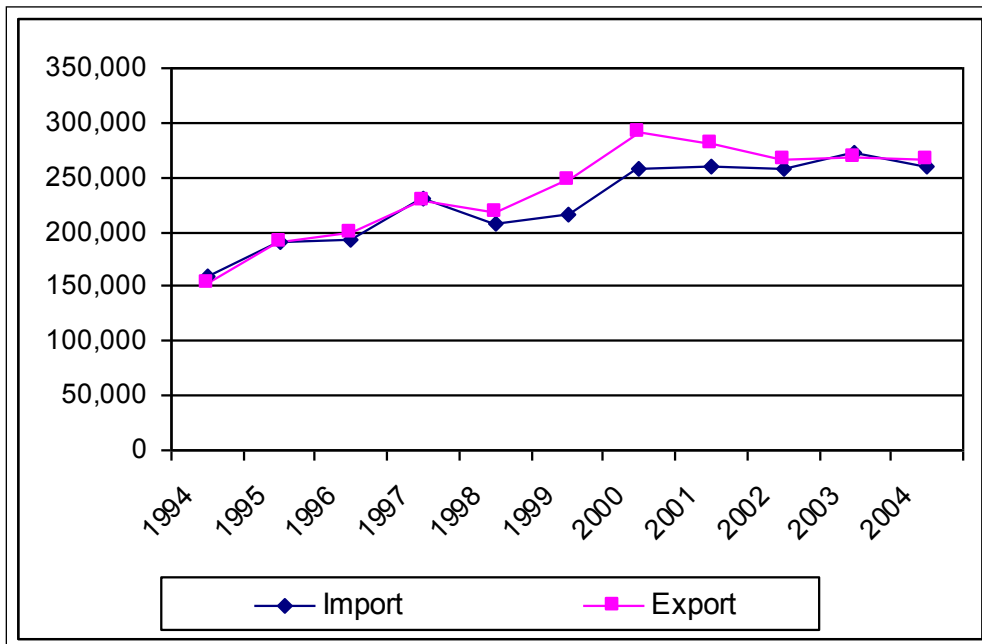
B.4 CONCLUSIONS

While critics have charged that the reforms in the nascent port authorities were incomplete or non-existent, there have been significant changes in the management and perceptions of the Halifax Port Authority (see above). The reforms are akin to those

recommended by Baird (2000), in that competition within the port has been created and the port authority has been revitalized.⁶¹

One effect of the devolution is a significant increase in profit margins. Profits have approximately doubled since 1998, the last year before devolution. While container traffic has shown a marked increase as well (see Figure 2 below), this increase is not sufficient to explain increased profits. This suggests the profit increases have been largely due to cost cutting and the generation of non-cargo based revenue.

Figure 2: Container Traffic in Halifax Port (in TEUs)



Source: Halifax Port Authority

Profits have enabled the port to be self-sufficient, and still have the financial resources for major investments, such as the current ongoing dredging operations. However, the capital available from profits pales in comparison to the ability of American ports such as

⁶¹ The reforms are also along the lines of the recommendations of the “Task Force on the Future of the Port of Halifax.” This is salient as the Task Force recommendations were delivered several years before the National Marine Policy (1995) and the Canada Marine Act (1998).

New York/New Jersey, whose operations are funded by state and federal governments (O’Keefe, 2003). It remains to be seen whether capital constraints will impede Canadian competitiveness in the future, or whether revenue flows will be sufficient to make the necessary investments. While devolution or privatisation has not been found to be negative per se, we find ample scope for further collaborative efforts between various port stakeholders. In some ways, a lack of co-ordination between various branches is exacerbated by privatisation. For instance, the Task Force commissioned by the Province included recommendations for CN to operate routes at less than full compensation (Regan 1993). Such a scenario would be difficult if not impossible with the current private CN Rail.

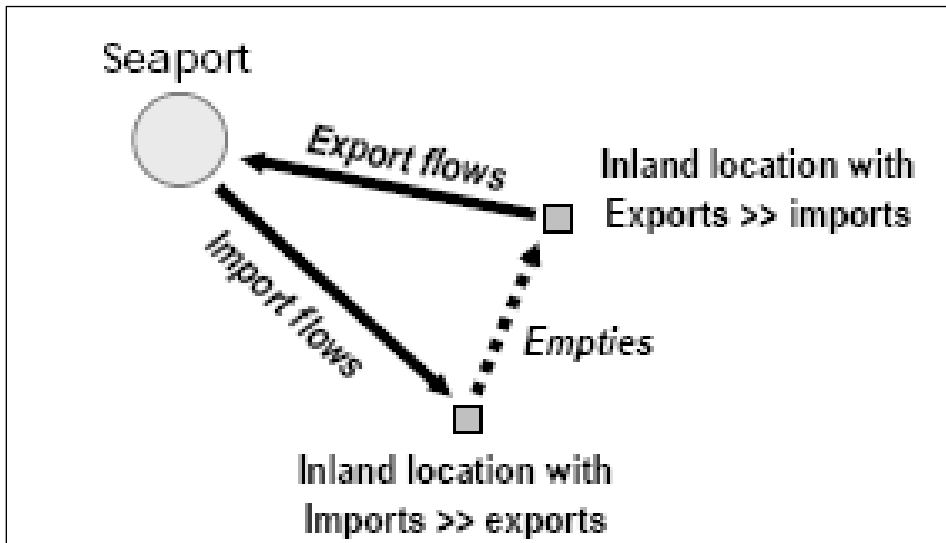
B.5 RECOMMENDATIONS AND FUTURE RESEARCH.

B.5.1 Recommendations

The near-monopoly in land transport inbound from Halifax is having an adverse impact on the ports traffic potential. Following Notteboom and Rodrigue (2005), we believe the port authority should be more actively involved in proposing distribution alternatives.

They argue that the port authority would act as ‘facilitators’ in transport chains by constantly rethinking to improve the efficiency of port. In this regard, proactive port governance is a key issue when all the interest groups of port such as carriers, shippers, transport operators, labour and government bodies will work together to identify problems and address issues affecting logistic performance of port (Notteboom and Rodrigue, 2005). Port authorities should promote an intermodal transport system in order to use the cargo efficiently within a limited time framework. In this regard, the port authorities might develop strategic relationships with other transport nodes. Networking strategy between port authority and other transport nodes and strategic cooperation among them could help port authorities to develop new resources and capabilities and help them for efficient use of existing resources.

Figure 3: An example of streamlining inland box logistics



Source: Notteboom and Rodrigue, 2005

Figure 3 depicts a recommended co-ordination among import-dominated locations and export dominated locations for efficient use of containers. Port authorities and other interest groups such as market parties can jointly work to better streamline container flows and reduce empty hauls. Notteboom and Rodrigue suggest regional authorities and ‘market parties’ could co-ordinate efforts such that “one solution could be to develop intermodal services between import-dominated locations in the hinterland and export-dominated locations as to create a loop system resulting in shorter distances and considerable savings in costs due to the reduction of empty hauls” (*ibid.*). Such a system could also alleviate dwell times without the need for the current “balanced trains model.”

Alternative solutions would be the promotion of small vessel traffic, or increased feeder rail lines. A limited time subsidy for certain CN rail routes is another option. If the volume of traffic increased as a result of reduced dwell times, the routes would eventually become profit making and the subsidy could be removed.

B.5.2 Future Research

While the effects of devolution on port profits and traffic have been considered heuristically, there have been no rigorous tests for these. One reason for this is the unavailability of detailed monthly or quarterly data that would enable econometric analyses. If such data were obtainable, it would be interesting to test for a structural break in profit, cargo tonnage, or other variables as a result of the transition to Port Authority.

We have considered the employment generated by the port. However, the impact of further port expansion on job creation remains unclear. Future development could include estimating job creation as a function of port expansion.

We have not included analyses of non-cargo port activities. Such analyses could be included in our future research. (Cruise Ships, waterfront development etc.).

Another project would be to set up a game theoretic model to analyse the interaction of CN rail with the Port Authority. This may deliver insights into ways to arrive at Pareto superior alternatives without significant changes to existing infrastructure.

References

Atlantic Institute of Market Studies (AIMS). 2005. Port of Halifax Days.

Baird, Alfred J. 2000. Port Privatization: Objectives, Extent, Process and the UK Experience. *International Journal of Maritime Economics*. 2 (3): 177-194.

Baltazar, Ramon and Mary R. Brooks. 2001. The Governance of Port Devolution: A Tale of Two Countries. School of Business Administration, Halifax, NS, Canada: Dalhousie University.

Bohan, Patrick. Personal Interview. 12 October 2005.

Boardman, Anthony E. and Aidan R. Vining. 1989. Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed and State Owned Enterprises, *Journal of Law and Economics*, 32, 1, 3-33.

Cirtwill, Charles, Brian Lee Crowley, and James Frost. 2001. Port-Ability: A Private Sector Strategy for the Port of Halifax. Atlantic Institute of Market Studies.

Gillen, David and Douglas Cooper. 1995. Public versus Private Ownership and Operation of Airports and Seaports in Canada (Chapter 1), in Filip Palda, ed., *Essays in Canadian Surface Transport*, Vancouver: The Fraser Institute. (www.fraserinstitute.ca/publications).

Martin, Alan S. 1934. *A Short History of the Port of Halifax*. Halifax Port Authority Archives.

Norcliffe, G.B. 1980. Industrial Development and Port Activity in Halifax-Dartmouth. *Canadian Public Policy*, Vol. 6, No 3.

Notteboom, Theo E. and Jean-Paul Rodrigue. 2005. "Port Regionalization: Towards a New Phase in Port Development." *Revised Version (January)*, Submitted for publication to *Maritime Policy & Management*.

O'Keefe, Doug. 2003. The future for Canada-US port rivalries. Research Paper, Transportation Division, Statistics Canada.

Van Niekerk, Henriette C. 2005. "Port Reform and Concessioning in Developing Countries." *Maritime Economics & Logistics*, Vol. 7, No. 2, pp.141-155: Palgrave Macmillan.

Vickers, J. and G. Yarrow. 1989. *Privatization: An Economic Analysis*, Cambridge, MA: MIT Press.