

# ***GLOBALIZATION OF THE ENGINEERING AND CONSTRUCTION INDUSTRY***

## **Session 8: Risk Management Opportunities and Parochialism and Other Barriers to Overseas Involvement**

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## 1. **Class Discussion – Carry-over from Session 4**

In our enthusiastic and animated discussion during Session 4, we, unfortunately, did not have sufficient time to discuss “Underestimating Costs in Public Works Projects – Error or Lie” by Flyvberg, Holm and Buhl; as well as the “Foes of Globalization.”

“Underestimating Costs in Public Works Projects – Error or Lie”

- Do you agree or disagree with the findings of the three authors?
- How widespread do you think the tendencies to underestimate project costs are? What are the risks for different stake holders, an architect/engineer, a financier, the owner (public or private) and a construction firm?
- Why the difference in accuracy between fixed link projects and roads?
- What are risks for the internal operations of a construction company? How would you protect your firm?
- Why do rail projects seem to be the highest overruns of the three areas studied and tunnels more difficult to estimate than bridges?
- Do you agree with the first paragraph on page 285?
- Besides the authors’ view that costs were purposely understated, what other facts may have contributed to the significant underestimation of cost and what actions can we take to correct these tendencies?
- Do you agree with paragraph two of page 288 that underestimating costs may save public funds?
- What if any is the “obligation to truth in the democratic process,” page 288?
- How does the “regulatory engineer” issue that we discussed in Session 1 have any bearing on this article?
- What are your comments on the four causes: technical, economic, psychological and political, identified by the authors?
- Do you think the writers’ recommendations on:

- increased transparency,
- the use of performance specifications,

...would alleviate or reduce the problem.

“The Foes of Globalization”

During the U.S.-Canadian NAFTA negotiations, George Schultz said he could understand why the Canadian AFL-CIO might oppose the agreement. He also could understand why the U.S. AFL opposed it. But, he couldn't fathom how they both could at the same time!

How is the *Olive Tree* striking back, e.g., the “anti-globalization backlash we have seen in Seattle;” Genoa, the rise of religious fundamentalism; and the attacks on the World Trade Center and Pentagon, etc. What caused it? As noted, Ellen Frost, Senior search Fellow at the Institute of International Economics, claims that “globalization has clearly been both oversold and demonized and globalization becomes a scapegoat for things that would have happened anyway. Those who believe in the value of globalization must be cautious not to claim for it more benefits than it provides.”

Who are the foes? Why do these foes include such varied groups as Joseph Stiglitz, Paul Samuelson and others who are questioning the benefits of globalization, religious fundamentalists, the disenfranchised, greens, rich, supporters of the slow food movement (Italy), opponents of GMO? Why are they protesting? Are the opponents reasonable?

Today's session will deal with risk assessment and management.

## 2. **Risk Management Tactics**

As your career progress, in addition to hard work, commitment, skills and knowledge, critical keys to success will most likely include, as we noted:

- a clear vision and understanding of the direction the AEC field will be taking;
- an ability to recognize, assess and measure risk; and
- the ability to separate fads, e.g., real estate can be liquid, Telcom will grow 40% a year, multiyear computer leases are viable, etc., from long-term shifts in a field, e.g., a preference for program management, outsourcing, while exploiting, and timely-exiting short-term fads.

Few areas will be as critical to your long-term success in the international field as your ability to properly identify, understand, define and manage risk.

All too often, even the most promising, creative and successful international AEC managers and their enterprises stumble because of failure to properly understand, manage and accommodate risk.

Risk management is basically procedures or approaches to identify risks, properly define and evaluate them and try to manage their impacts on your business practice or project. But, the key is to be able to recognize risk. All too often, risk management focuses on the less critical elements or minutiae, e.g., “fatal flaw” technical analysis of the \$3.2 billion at JFK Airport Redevelopment Program, when in fact, the real concern was the impending bankruptcy of TWA and PanAm, the two largest international carriers then serving JFK. The international AEC fields, unfortunately, meld the normal risks inherent in most sectors with those unique to international business, global investments and large-scale project delivery into a veritable “witch’s brew” that often seriously damages or destroys many firms.

In recent years, there have been significant advances in the application of modern statistically-based risk management to the business world. And, while at times, abused or misunderstood (LTCM, derivatives, options, hedges, etc.), few fields require the degree of sound risk management the international AEC field calls for.

As with so much of successful management, the development of an appropriate risk assessment/risk management strategy for a firm, starts with the firm knowing its strengths and weaknesses, and deciding what degree of risk it is able and willing to accept. Firms are typically able to handle, and remain comfortable with, differing degrees of risk. It is important to first understand what is tolerable. This is especially true for medium-to-large enterprises where senior management must convey their risk tolerance and appetite to mid-level managers and marketers to avoid overly ambitious or overly risky initiatives. Secondly, they have to assess whether the return on investment they will, or are likely to, obtain from their entire project portfolio, or certainly the higher risk element of the portfolio, is commensurate with the degree of risk they are assuming.

Once you have established your parameters, it is important that the firm then review lessons learned so it doesn’t continually repeat the same mistakes (e.g., Morrison and Knudsen, Ebasco, Kaiser).

These comments seem rather obvious, simplistic and straightforward, but many firms have short memories and even shorter risk management oversights

and controls. Opportunities and approaches that may well have benefited competing firms, or are currently popular (the flavor of the month), can often be dropped if the firm has had poor prior experience in this area. Glib conclusions, e.g., real estate is liquid; currency risks can be managed without hedging; corporate guarantees can be provided to weaker partners or unconsolidated subsidiaries; are among the areas that must be reviewed and once guidelines are established, can often provide the basis for rapid go/no go decisions before sophisticated and often complex and cumbersome risk analysis needs to be applied. Many issues and decisions that are frequently addressed under risk analysis can, in fact, be eliminated in such go/no go analyses.

In addition, a number of the issues that are raised and addressed in risk analysis may not truly be critical to the success or lack of success of a project, enterprise or undertaking. It is important to separate the “chaff from the wheat.” Otherwise, a great deal of effort is spent on spurious or marginal analysis of what are essentially less critical issues.

The economic principle governing risk management and transfer is that the risk should be allocated to whoever is best able to manage that risk. However, risks should not be simply transferred for their own sake – the goal is the optimal allocation of risk to produce the best value for a project or program. Furthermore, risks are often perceived differently by different parties and the perception of the risk by the particular stakeholder is often as important as the actual risk.

Once you have properly identified and evaluated risks, you have four basic choices:

- Assume the risk (if you think you can control it)
- Share the risk (or reduce your exposure)
- Shed the risk (transfer it to another party)
- Sell the risk (e.g., insurance, hedging, etc.)

*a. Assume the Risk*

This means that you either intentionally or unintentionally self-insure. Either risk sharing, shedding or some form of insurance is unaffordable or unobtainable, or you have made an informed decision to accept the risk for a particular aspect of a project, your work or your enterprise. In certain countries, local laws may protect you, while the same issues in your own country may be highly risky or vice versa. Here, proper definition, delineation

and a sound understanding of local legal systems are critical. In too many cases, the cost of risks is included in “contingencies” incorporated in bid prices, and all too often, such contingencies, like a poor family’s soup, are stretched to cover a multitude of risks.

*b. Share the Risk*

You find a third party (an investor, partner or subcontractor) to accept a portion of the risk. Tax shelters for rich investors were long employed to share risks in real estate and energy investments in the U.S., and joint ventures are common in the AEC field, while Lloyd’s “names”<sup>1</sup> and some ENRON partnerships became synonymous with unanticipated shared risk.

*c. Shed the Risk*

In contract negotiations, provide that a third party take all or part of the risk. This could be the owner/client, another member of the team (a vendor/supplier), off-balance sheet (project-related or structured) finance, outsourcing and/ or subcontracting, etc.

*d. Sell the Risk*

In addition to insurance, risk sharing can include hedging, borrowing in host country currencies, bonding of subcontractors and a surprising range of other opportunities, including export and credit guarantees, vendor guarantees (warranty, operating and maintenance, etc.), and a variety of other derivatives and instruments.

### 3. **International Project and Investment Risk**

Here it might be useful to review the likely risks and risk sharing opportunities faced in the international AEC field, while recognizing that domestic markets share many of these risks though the degree of severity is typically lower (e.g., force majeure, political upheavals, unfamiliar legal systems).

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<sup>1</sup> Individual investor/ partners at Lloyd’s who assumed full liability for insurance coverage provided by their underwriting syndicate.

International project risks include:

Opportunities to share, shed or avoid these risks include:

Project Completion:

- Failure to acquire land/ site
- Lack of adequate permitting
- Contractor termination or default
- Client default
- Lawsuits
- Labor shortage or strife
- Arbitrary and capricious government actions
- Natural calamities
- Cancellation
- Political upheaval
- Force majeure

- Joint ventures
- Performance bonds
- Specialty subcontractor bonds
- Bank guarantees
- Liquidated damages clauses
- Host country guarantees for indemnification
- OPIC-, COFACE- or multilateral-risk insurance
- Enforceable international disputes provisions

Project Costs:

- Faulty scheduling/ cost estimating
- Changed scope or scope creep
- Schedule slippage
- Differing site conditions
- Currency devaluation
- Wage and material escalation
- Material shortages
- Tax rate increases, clear and precise definitions of allowable taxes
- Lack of adequate contractors and subcontractors
- Higher subcontractor/ supplier bids
- Increased financing cost

- Currency hedges, local borrowing, swaps and accelerated local procurement
- Continuous monitoring, assessments and reporting
- Errors/ Omissions insurance
- Contract provisions including flow-through subcontracting, hedging, etc.
- The right to recruit, import and use foreign materials, staff and/ or subcontractors
- Subcontractor bonding

Institutional:

- Political and electoral shifts
- Legal and regulatory changes
- Blocked currency (IMF interventions, etc.)
- Legal/ jurisdictional disputes

- Formal regulatory and arbitration procedures incorporated in the contract
- Prefunded escrow accounts or letters of credit
- Long-term currency hedges
- Enforceable international disputes provisions

#### 4. Differing Views of Risk

Most successful AEC managers are more or less familiar with risks and risk management mechanisms in their domestic markets (the others fail). All of those risks also exist abroad, along with a myriad of risks, unique to foreign operations.

We began by addressing the differing project and, to a lesser extent, enterprise risks inherent in both domestic and international AEC fields in general, and in entering a foreign market, investing in a foreign concession or office, specifically.

Since risks will vary depending on which hat you are wearing, we will, in this session, try to explore risks from a number of different perspectives, including a banker/ financier; sponsor/ investor; government or private owner/ operator; contractor and architect/ engineer; to gain a better understanding.

How do you properly evaluate these assorted risks? Curtis Spillers of Duff & Phelps, a leading credit rating company, lists six basic categories:

- Client/ Sponsor Risks
- Completion Risks
- Operation Risks
- Off-take Risks
- Country Risks
- Structural Lending Risks

and I have added a seventh –

- AEC Risks

To properly evaluate those risks, here is a partial checklist:

*a. Client/ Sponsor Risks:*

- Who is the client or, if a private or public private initiative, who are the sponsors/ investors?



- What are the client/ sponsors reputation for integrity, reasonableness, administrative efficiency, speed of payments, etc.?
- If a government, what is the government's record for honoring commitments, and what, if any, is the guarantee vehicle (full faith and credit, parastatal guarantees, or only project- or revenue-funded)?
- If the sponsor is not a government agency, what is the sponsor's prior record in marketing and completing comparable projects? Do they have the full faith and credit of a government? Are they a parastatal or a stage pension fund or bank?
- If the sponsor is not a government agency, is the sponsor(s) an owner/ operator, investor, developer or a contractor/ financier? Does the sponsoring team include powerful local institutions, government agencies, banks, insurance companies, a military or public pension fund, operators, international financial institutions (IFC, ADB, IDB, etc.)?
- What is the investor/ sponsor's domestic/ international experience and track record?
- Have the sponsors collaborated in the past? How successful were they?
- How long is the sponsor(s) horizon (will they operate the facility or built system or sell it)?
- If a private or public/ private partnership, what is the sponsor or eventual owner/ operator's commitment to this project (are they stretched too thin)? Management depth?
- What is the owner/ investor's financial capacity? Is the owner/ investor relying on the often-abused "sweat equity"?\* Can the owner take a hit? Is the owner taking on other risks at the same time?
- If a public/ private partnership, will the sponsor(s) provide cover, e.g., International Finance Corporation (IFC) or ADB participation is more likely to ensure fairer or more sympathetic treatment from a government or courts; a lead local bank or military pension fund is more likely to be bailed out if the project fails to meet its target, etc.

*b. Completion Risks*

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\* Leaving all or a portion of professional fees, payments or profits in the project as equity.

- Is the proposed technology appropriate? Is it proven? Is it economically competitive with other proven technologies? Is it limited to a single source? Are the designs adequate and will vendor and supplier guarantees be available?
- Are the funds or investment assured? Is construction finance available? Is financing dependant on project profitability? Will the contractor be required to invest in the project (sweat equity)? Are the preliminary plans, or design/ build estimates reasonable; what are the provisions to protect against unanticipated or excessive inflation during construction and, if relevant, operating revenue short-falls, exchange rate risks, especially when financing relies on a hard foreign currency and revenues are generated in soft local currency; changes in macro-economic and tax policies and labor laws; variation in interest rates, differential inflation rates (e.g., oil, labor, steel or cement cost spikes); competition from competing services (e.g., Chunnel vs. North Sea Ferry operators) if the AEC provider is also assuming an equity position?
- Is the project relying on project or structured finance or will other business assets be collateralized or combined?
- Are the legal, political and environmental concerns properly addressed? In the enthusiasm of the chase, too often, insufficient attention is paid to ensuring proper contract clauses. In this regard, a recent survey showed that the three most important issues to have in a contract are:
  - Proper Indemnification
  - Limitation of Liability, and
  - An Unambiguous Scope
- Are the contractor's subcontracting plans reasonable?
- Are the contractor and other supplier prices reasonable? If a private initiative, will it be bid or built on a negotiated basis by one or more of the team members and, if so, are proper controls in place to avoid conflict of interest and abuse?
- Have the necessary site acquisition, environmental and other approvals been obtained?

- Is other essential financing in place (bilateral aid, export/supplier, credits, equity, subordinated debt, etc.)?
- Are there adequate contingencies for unanticipated events?
- Are the construction schedules and procedures realistic and achievable?
- Will vendor and supply guarantees be available and are the designs adequate?
- Are the costs of potential delays included in the estimates and/or are they manageable?
- Is there proper insurance, bonding and surety coverage?
- Are political risks properly addressed, including outbreak of hostilities (difficulties in defining force majeure and to whom where you may not have a client or host government)? Can the host government unilaterally revise the terms and conditions, interfere in operations, off-take agreements or tolling policy and/or support new competitive services and facilities, e.g., new ports, parallel roads? What are the risks of modification to legislation that will or could affect construction technical standards (Chunnel Fire Protection), maintenance and operations, safety and security?
- Will permits necessary for construction, maintenance and/or operation be provided in a timely fashion?
- Are there risks of subsequent charges of cronyism, favoritism, corruption (moral hazards) in obtaining the contract, and/or concession, overzealous government regulators and, finally, nationalization?

*c. Operation Risks*

- Who will be the owner/operator?
- Will it be the government or a governmental agency?
- If private, how committed is the operator? Is the operator also a major investor?
- How reliable are the operating costs and revenue forecasts? (Here benchmarking with comparable facilities is quite useful.)

- Ease of Operation – how simple or complex?
- Dependability of the anticipated supply pipeline (fuel, supplies, feed stocks, etc.)
- Are the payments, tariffs, fares, off-take agreements, regulatory procedures, etc., reasonable and subject to modification and/or revision (inflation, etc.)?
- What are the worst case revenue forecasts and the implications?
- If a concession keeps or transfers (BOOT) the facility at the end of the concession period, how will residual values be established?
- Are revenues and loans/investments in the same currency? If not, is currency convertibility guaranteed and at what rate? Is currency hedging necessary?
- What are the tax laws and how stable and transparent is the tax code, and how effective is the rule of law?
- Are laws, tax codes, etc., subject to future changes?
- Is the project/ concession subject to criticism for cronyism (Indonesian Toll Roads), favoritism (Toronto Airport) and corruption?
- If we are dealing with a concession, is there a reasonable exit strategy?

#### *d. Off-Take Risks*

Off-take risk such as a guarantee to purchase power or water outputs, pay for sewage or solid waste deliveries, etc., are often critical to the success of a self-funded project or concession.

Off-take risks include:

- Whether the off-take agreement terms are clear, reasonable and enforceable
- Whether the terms are subject to government regulation
- Whether there are any escrow provisions

- Whether the off-take terms are adequately protected by other guarantees (e.g., MGIC, OPIC, LOCs, etc.)
- The integrity of the purchase contract (the Northwest U.S. power agreements were not honored)
- The enforceability of user charges (Washington State, Bangkok expressways)
- The credit worthiness of the "Off-Taker" or provider of "Shadow Tolls"
- The pricing mechanisms including flexibility, regulatory framework and ease of adjustment
- Whether the off-take agreement, along with the project or concession, could be subject to accusations of favoritism, cronyism and corruption (ENRON, India)
- Whether there are adequate dispute resolution procedures
- The effectiveness of the rule of law, and legally, how secure are the off-take agreements

#### *e. Country Risks*

They were the world's richest and shrewdest investors, "The Electronic Herd," to use Tom Friedman's term, and they rode a wave of globalization, buying bonds and investing in attractive emerging markets and, when the emerging countries defaulted, they were livid. "There should be lunatic asylums for nations as well as individuals," one investor wrote in the London Morning Post, denouncing a defaulting country as "a nation with whom no contracts can be made."

It all sounds a bit familiar, but the year was 1842 and the emerging market was the United States. After defaults by Maryland, Pennsylvania, Mississippi and Louisiana, the entire United States was blacklisted and scorned in global markets, with Americans barred from the best London clubs and the Rothschild's warning bitterly that America would be unable to "borrow a dollar, not a dollar." Thus, globalization may not be quite as new and innovative as it sometimes seems. Since at least the 13<sup>th</sup> century, when Florentine merchants lent money to the English to pay for King Edward I's wars, international capital has roamed the world in search of high returns.<sup>2</sup>

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<sup>2</sup> The start was inauspicious: England defaulted, causing the collapse of two Florentine banks.

What has changed, as we have noted, is the scale of the capital flows and their ability to destabilize small, or even large, nations. Today, country risks include:

- Currency
- Economic environment (politicization of contracts and concessions, e.g., ENRON-India, BAA-New York and Pearson Terminal-Toronto)
- Labor and material availability (import controls, protective tariffs and industries, boycotts, etc.)
- Duties and taxes
- Regulatory framework – legal, degree of transparency, prior traditions, susceptibility to politicization and populism, etc.
- Legal structure (e.g., limited bankruptcy procedures in East Asia often restrict legal options for ensuring collection)
- Political – type of government, frequency of change, stability of coalitions, honesty, degree and depth of commitment to the project (Messina Crossing)

*f. Structural Lending Risks*

If a project is self-supporting with little or no limited government or private guarantees, it must rely on equity and structural lending and the risks increase. The analyst must, in such cases, carefully review:

- The capital structure of project (percent equity)
- The quality and stability of project team
- The quality of the project (arms length and transparent procurement procedures, efficiency of design, life cycle costs, ease of operations, experience of the operator, etc.)
- The risk of technology obsolescence (e.g., the short life of many U.S. sport facilities)
- Existing or planned competitive facilities
- Cash flow priorities and degree of dedication (securitization)

- Matching of investments and revenues (e.g., the same or different currencies, etc.)
- Disputes resolution mechanisms
- Are the methods of procurement tailored to the selected technology, the type of financing, the competitive environment, and specific operational issues and concerns. Here, reliance on vendor credits, especially bilateral export credits, e.g., Yen rises, vendor bankruptcy or merger, vendor drops a line (GM dropped their line of construction equipment), difficulties in interpreting and enforcing “guaranteed” supply contracts, disputes over responsibilities for warranties and guarantees, especially multiyear turnkey or maintenance warranties, etc., are all important concerns.
- Are delays likely to be caused by opponents and/or competition and can costs increase due to environmental concerns or changes in environmental permitting laws or interpretations during construction, commissioning and operation?

#### g. Summary

Such risk discussions, negotiations and conflicts consume hundreds of millions of dollars annually and often bedevil plans for privatized infrastructure projects in many countries. The failure to agree on risk assignments prevents many projects from ever reaching fruition. But, reliable risk analysis is expensive and adds to already high development costs, noted Cordell W. Hull, a former senior executive at the Bechtel Group. “You should be prepared for sticker shock in the development of these projects.”

Finally, in addition to the above concerns, you must, as managers in planning concessions and privatization initiatives, be especially wary of establishing a presence, entering a field, making an investment or taking a contract because all your competitors are (e.g., the telecommunications and e-commerce fields, humbling such giants as Lucent, Motorola, Ericsson, Phillips, Nortel, Cisco). Do not let your sales force be your eyes and guide. They are too optimistic and likely to play “follow-the-leader.” Separate the investment and design/construction elements of a project. When a sponsor tells me Berger can do the design if we secure the finance, I frequently tell them if I could secure the finance, I would be Lehman Brothers and would not want the design.

Avoid the pitfalls of “sweat equity” by delaying receipt of project profits or investing to increase order backlog.\* Remember that marketers will naturally gravitate to marketing and selling BOT, BOOTs, etc., because they are easier to market, but since you are assuming greater risk, a win is like “kissing a cousin.” You must decide whether the project makes sense economically and/or financially. If not, who is pushing it? Why? Who will own it? Does your own staff have proper perspective or are they confusing an 18-month design/construction contract with a 20-30 year investment as a part of a concession?

Avoid the euphoria of Memorandum of Understandings (MOUs). An MOU is only the start of a long process and not an excuse to either claim a victory or, worse yet, issue bonuses to agents or staff.

Experience shows certain factors are essential to successes in privatization and concession initiatives. These include:

- Proper enabling framework
- Proper selection of concessionaire (balance price/ quality, qualified owner/ operator, etc.)
- Proper risk allocation between the government, concessionaire, lender/ financier, contractor and operator
- Firm price, fixed-term design/ build or design/ bid/ build contracts
- Reasonable covenants and financing terms
- A clear, equitable and transparent franchise agreement
- Clear, transparent and preferably competitively procured supply contracts
- Reliable revenue flows
- Clear definitions of underlying political realities and public needs
- A proper regulatory framework to resolve disputes and misunderstandings, revise tariffs, etc.

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\* Signed contracts for work to be undertaken in the future.



## **5. Class Discussion of VMS Asset Management Contract for Virginia's Interstate Highway**

The VMS asset management program discussed in the article *VMS Asset Management Contract for Virginia's Interstate Highways* offers us insight into a number of risk management issues and opportunities including:

- Privatization
- Outsourcing, and
- Risk Management and Risk Transfer

*The VMS initiative involved:*

- Outsourcing the maintenance of 250 miles of Interstate highways in Virginia
- Virginia Department of Transportation was already a client of the two VMS sponsors – Sverdrup Engineering (now Jacobs) and The Louis Berger Group
- It was an unsolicited proposal with significant risks. The bid, once submitted, was open to competition for 30 days.
- The cost of preparing the unsolicited proposal was almost \$2 million
- Local Virginia contractors fought it
- The contract pioneered a new concept, asset management. What is it?
- The roads had to be returned to the state in their original condition (subject to independent condition audits).
- No “Acts of God”, e.g., force majeure or wiggle room, hurricanes, excessive snow claims could be made and it was performance based
- It was a new business for Virginia and became one of the 10 fastest growing companies in the U.S. according to “*Inc.*” Magazine

*Critical Issues*

- Prior state record keeping, including lack of detailed costs, e.g., only budgets which did not include state management or state police costs; inaccuracies, e.g., traffic; incidents under-counted
- Testing new approaches
- Essential software/ database support, and
- Risk management practices and opportunities

## 6. **Risk Management Summary for an Outsourcing Program or Concession**

Clearly, as noted, a number of risks are common to all or most large-scale construction projects or programs but the following is a useful summary of the goals, concerns and objectives of key participants in a concession such as VMS.

### *Host Government*

#### Goals:

- Well-constructed facility at an affordable price
- Ensuring a proper balance of public and private interests
- Proper integration of projects and investments into overall systems
- Proper operation to ensure maximum public welfare including reasonable cost, accessibility, satisfactory levels of service and responsiveness, safety and proper maintenance
- Security in event of default

#### Seeks:

- Reliable concessionaire with a proven record
- Adequate and affordable financing
- Performance and delivery guarantees
- Timely completion
- Right of review and approval during construction and commissioning

- Environmental sensitivity
- Community acceptance
- Compliance with agreements and laws
- Ongoing regulatory control
- Minimum subsidy

### *Concessionaire*

#### Goals:

- Rapid recovery of initial expenses and capital investment
- Attractive management fees or revenues
- Maximum ROI and/ or early exit

#### Seeks:

- Minimum capital investment and maximum leverage
- Revenue and/ or income floors, guarantees or subsidies
- Export guarantees, supplier and bilateral credits if a foreign concession and low cost debt
- Control of contractor/ subcontractor participation
- Transparency and rule of law
- If a foreign concession, convertibility and some degree of protection from currency devaluation
- Tax benefits and consistency in tax enforcement
- Flexible and adjustable toll rates, off-take or fare systems
- Protection from contractor, vendor and supplier delays and penalties or claims from the government for delays
- Refinancing flexibility and access to refunding

- A minimum regulatory framework
- Opportunities for contract/ facility sale, exit or take-out

### *Contractor*

#### Goals:

- Construction contract
- High profit margin

#### Seeks:

- Access to cost effective and timely A/ E services
- Accurate and well defined plans and specifications
- Control of subcontractors and if design/ build, the architect/ engineer
- Adequate construction financing and acceptable partnering
- Prompt resolution of claims disputes
- If a foreign contract or currency convertibility and guarantees or protection against devaluation
- Tax transparency, tax holidays and clear rule of law
- Import privileges
- Clear and timely closeout, warrantee and guarantee approval processes

### *Operator*

#### Goals:

- Reliable fees
- Positive cash flow
- Financial leverage
- Reliable, efficient and safe facilities and operators

Seeks:

- If a foreign concession, currency convertibility for revenues and profits
- Minimum revenue guarantees (subsidies)
- Ease and reliability of operation
- Reduced life cycle costs
- Limited price risk
- Liability protection
- A stable commercial, legal and regulatory climate
- Host government support
- Opportunities for system integration and/ or expansion
- Rate and tariff flexibility
- Clear and transparent rule of law
- Tax holidays or a low and transparent tax structure

*Senior Lender*

Goals:

- Minimal financial risk
- Timely repayment of principal and interest
- Attractive fees

Seeks:

- Sufficient capital to finance project
- Nonproject-based guarantees
- Reliable revenue flows

- Sufficient equity to buffer and protect senior debt
- Tiered debt with preferred senior collateral position and/ or control
- Scopes of work, contracts, guarantees, etc., in sufficient detail for independent review and evaluation (IDC/ ICE/ financial and technical advisors, etc.)
- Turnkey or fixed price construction contracts
- Firm price and fixed terms for all work and change orders
- Adequate provision for government and lender oversight of construction and operations
- Adequate financial and bonding capacity for contractors and concessionaire
- Appropriate warranties
- A credit-worthy concession contract
- Adequate payment streams and timing
- Currency convertability
- Potential for securitization of cash flow to facilitate selling debt
- Host country backup agreements
- An appropriate commercial and legal framework
- Legally enforceable loan agreements, contracts (including adequate bankruptcy provisions), etc.
- Limited market risk
- Clear concession performance parameters
- Suitable force majeure provisions

In summary, experience shows certain factors are essential to successes in privatization, concession and outsourcing initiatives. These include:

- Proper enabling framework
- Proper selection of concessionaire or outsources (balance price/ quality, qualified owner/ operator, etc.)
- Reliable revenue flows
- Proper risk allocation between the government, concessionaire, lender/ financier, contractor and operator
- Firm price, fixed-term design/ build or design/ bid/ build contracts
- Reasonable covenants and financing terms
- A clear, equitable and transparent franchise agreement
- Clear definitions of underlying political realities and public needs
- A proper regulatory framework to resolve disputes and misunderstandings, revise tariffs, etc.

## 7. **Parochialism**

We have, in earlier sessions, introduced the theme that a number of risk concerns in the international A/E/C field reflect parochialism and the resultant unfounded fears are often serious, if unrealistic constraints to international involvement.

Furthermore, this does not bode well for the U.S. A/E/C industries when one considers that in the past 25 years, the domestic U.S. construction volume has decreased from 50% to 20-25% of the world's construction volume. Many other OECD nations are experiencing similar relative declines. Yet, as we discussed, growing globalization is all too often accompanied by increased parochialism. Fear of the unknown, fear of competition, fear of our own inability to learn or adopt new technologies also encourages parochial or isolationist attitudes.

In the United States, we often take the attitude, "If it was not invented or developed here, it does not exist." In that most parochial of all regions, New York City, Donald Trump "invented" the modern multilevel urban shopping center despite its use in Hong Kong and Singapore since the 1960s. Yet, increasingly, foreign design and construction processes are winning coveted awards in the U.S., and foreign architects, engineers and contractors increasingly win choice assignments, e.g., Skanska, Vinci, Arcadis, Arup, Norman Foster, Richard Rogers, Mott MacDonald, Halcrow, Fugro, Agrar, Golder, to name a few.

So, there remain numerous parochial barriers to overseas involvement. Some are cultural, attitudinal or historic, but many are political or economic. These include:

*a. Boycotts*

- Unilateral Boycotts (typically national and local)
- Boycott of the Moscow and Los Angeles Olympics
- The “Arab Boycott”
- Cuba
- North Korea
- Myanmar, and
- Iran

Early U.S. state and local boycotts of South Africa led to the Fluor Daniels’ loss of a major program management assignment at the new Denver International Airport. In 1996 the Massachusetts legislature, to express its disapproval of human rights abuses by the military-led government of Myanmar, passed a law prohibiting state agencies from purchasing goods and services from companies doing business in Myanmar, Berger’s first international client. In May 1997, the New York City Council also approved a bill restricting the City’s dealings with companies and financial institutions that have business relationships with Burma. The bill prohibited city agencies from contracting for goods, services, or construction with companies doing business in Burma, and prohibited City funds from being deposited in banks that, directly or indirectly, provide banking services in Burma. The bill was signed into law and went into effect at the end of June 1997. Also in May 1997, the New York City Council Speaker introduced a bill to impose similar restrictions on, “the City’s dealings with firms doing business in 15 countries engaged in ‘state-sanctioned persecution of Christians,’ including China, Egypt, Indonesia, Saudi Arabia, and Turkey.” Fortunately, that bill was not passed into law.

In the U.S. alone, it is difficult to prepare an accurate tally of the dozens of jurisdictions that have introduced or passed such legislative measures because they range from states like California and New York to the tiny city of Tacoma Park, Maryland. They included city, county, and state governments in California, Colorado, Connecticut, Illinois, Maryland, Massachusetts, Michigan, New Jersey, New York, North Carolina, Rhode Island, Texas, and Wisconsin.



The measures that have been introduced or passed range from benign non-binding resolutions expressing the jurisdiction's disapproval to laws (like New York City and Denver) establishing boycotts against particular countries and imposing potentially harsh economic punishment on firms that fail to comply with the boycott. These penalties often apply to non-U.S. firms, as well, who have operations in those jurisdictions. For example, the Commonwealth of Massachusetts had identified 150 foreign companies that did business both in Myanmar and Massachusetts, including Honda, Nestle, Siemens and Unilever. They would all have had to make a choice between doing business in Myanmar or Massachusetts. One study estimated that as a result of federal, state and local sanctions, U.S. companies were losing \$15-20 billion in overseas sales and roughly 250,000 lost jobs.

The European Union (EU) lodged a protest against such non-federal actions, claiming the Massachusetts/Myanmar law imposed discriminatory conditions on public procurement. Moreover by taking a position that conflicts with the WTO agreements on government procurement, the Massachusetts legislature could be viewed as constitutionally undermining, and even repudiating, U.S. trade and U.S. foreign policy. U.S. officials and constitutional law scholars similarly argued that, by infringing on the federal government's exclusive right to regulate U.S. foreign commerce, and by infringing on the federal government's exclusive responsibility to conduct U.S. foreign policy, these local sanctions laws violated well-established constitutional principles. The U.S. Supreme Court has now, fortunately, overruled all lesser jurisdictions.

*Other Barriers Include:*

- *Most Favored Nation (MFN)* – threats to withhold such designation often in violation of WTO agreements can severely damage trade
- *Licensing and Registration, including:*
  - Contractors: step-by-step licensing with ever increasing contract limits (e.g., Japan, Spain and Korea)
  - Professionals: state or province vs. central government, national vs. EU-wide or worldwide registration
  - Ownership - Minimum local ownership requirements (e.g., China, Nigeria, Malaysia), most flag carriers, etc.
  - Visa/ Working Papers - While OECD consultants and contractors can readily move capital, software, etc., over national boundaries to gain from their comparative economic and technical advantages, emerging countries (e.g., Mexico)

cannot as easily transport low cost labor to take advantage of their comparative advantages.

*b. Other Issues and Restrictions*

Regionally, the EU, NAFTA, Mercosur and, recently, ASEAN agreements have also focused on encouraging increased competition and lowering technical barriers to entry among their members, while the WTO governmental procurement agreement bloc stipulates that there should be no differences between host and trading countries and other signatory (WTO) firms in laws, ordinances, procedures, and practices governing government procurement.

Nevertheless, many U.S. firms face predatory financing, where many foreign countries, despite OECD and WTO restrictions, continue to offer concessionary (below market) financing, often called mixed credits, and credit risk insurance for large foreign sales to cover emerging countries. In addition, the U.S. is one of the few countries that taxes its citizens when working abroad, limiting the attractiveness of overseas works.

Furthermore, since the U.S. does not rely on value-added taxes as a major revenue source, it cannot as readily rebate taxes on exports, and alternate procedures (DISC, FISC, ETI, etc.) have proved clumsy and subject to widespread WTO condemnation and rulings that they are in violation of the WTO agreement.

**8. Class Discussion**

*a. Transparency International Findings and Overall Competitive Rankings –*

As we have noted, lack of independent and transparent judicial, administrative and regulatory systems and procedures can be serious impediments to firms and investors pursuing international work. Furthermore, the lack of such transparency and absence of the rule of law, often serves to mask unaccountable bureaucracies and, worse yet, favoritism, cronyism, corruption and kleptocracies. Such corruption and cronyism not only raises cost and creates an uneven playing field, but also holds the contract or concession political hostage to subsequent charges and demand for renegotiation, further extortion and possible cancellations when governments change (e.g., Ontario, India, Korea).

Transparency International, an independent NGO that has been tracking for a number of years how the public and international businesses view corruption worldwide, published its largest “Corruption Perceptions Index” (CPI) to date in 2005, reviewing 159 countries and ranked no one as fully unscathed.

As you will note, all of the top 20 nations are wealthy and all but six were European. Does this reflect any bias?

At the other end of the scale, the last ten are Angola, Bangladesh, Chad, Equatorial Guinea, Haiti, Ivory Coast, Myanmar (Burma), Nigeria, Tajikistan and Turkmenistan and all except Nigeria are relatively poor, though Angola and Chad have oil.

How does this list compare with the World Economic Forum 2005-2006 “Growth Competitiveness Report” for 117 nations?

Will these issues impact on your market choices and business plans?

Please analyze the relative national rankings in *Transparency International* and *Global Competitiveness* reports.

- How do they differ?
- Why do the U.S., Japan, Taiwan and Korea rank higher in the *Global Competitiveness Index* rankings than in the *Transparency International Index*?
- Why are the U.S. (17), France (18) and Japan (21) ranked so low in the *Transparency International Report*?
- What can or should be done about these issues?
- Are or have the corrupt countries been penalized?

*b Reading from “The Lexus and the Olive Tree” - Chapters 5-12*

What does Friedman mean by:

- Is globalization is only a political phenomenon?
- The difference between Treaty and Deal?
- The difference between Superpower and Supermarket?
- How can nations preserve their identity?
- How is finance, technology and information impacting democratization?
- What is MID?

- What does Friedman mean by the Electronic Herd? Is it only a financial phenomenon?
- Does the Electronic Herd encourage democracy and how does increased democracy influence corruption?
- Who starts the stampedes?
- Will increased financial transparency help or hurt?
- What are the implications for the AEC fields?
- We moved from a world where the heavy eat the light, to one where the light eat the heavy?
- Do you agree with his comments on country branding? Any examples?
- What is the Golden Arches theory? Is it valid? Is Friedman's Yugoslavian argument valid?
- What does Friedman mean by filters?
- How does globalization affect the environment?
- Does globalism and "The Straightjacket" inevitably lead to income polarization?

## 9. **Session 9**

In Session 9, we are going to explore in greater detail alternate project delivery systems, international concessions, various approaches to strategic and tactical planning and globally marketing new and innovative delivery systems and concessions.

During the next session, Dr. Firouz Vakil, the former Minister of Planning and Budgeting for the Government of Iran, an MIT graduate and an internationally recognized figure in the development planning and project finance fields, will be joining us. I think you will very much enjoy Dr. Vakil's observations from a lifetime of experience in both government and private sector service. A copy of his resume is attached.

In this session, we will dive headfirst into international AEC work and, to help you, we will discuss a real-life case – “Empresas ICA and the Mexican Road Privatization Program.” Copies of the case can be found on the course website. Be prepared to discuss:

- ICA’s early business model
- What led it to changes?
- What are the risks in Mexican BOTs?
- Why (p. 7) do you suppose most “Concessionaires were typically affiliated with a Mexican construction firm?”
- What strategy would you adopt in preparing a BOG bid?
- What were the benefits of Toll Roads? To whom: How would you measure it?
- What are the implications and risks of foreign financing for BOTs?
- If you were ICA’s Vice President for Planning, what would be your plans and recommendations?

Finally, please read Chapter 13, Demolition Man; Chapter 14, Winners Take All; Chapter 15, The Backlash; and Chapter 16, The Groundswell, from “The Lexus and the Olive Tree” and be prepared to discuss.

What Friedman means by:

- Winner Takes All – is it fair and equitable?
- Will the world homogenize?
- Will the inequities encourage a counter-reaction?
- Is Grameen Bank part of the solution?
- What can turtles do?
- What will turtles do?
- Did Malaysia’s former Prime Minister, Dr. Mahathir Mohamad, have a choice on globalization (Did he succeed?)?

- Do you feel that globalism will be the dominant international force in the period 2000-2010?