

Globalization of Business Strategies in the 21st Century

Keynote Speakers: Prof. Lester Thurow and Prof. Donald R. Lessard
Conference Minutes
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On January 29, 2002, The Epoch Foundation, The Industrial Development Bureau of the Ministry of Economic Affairs, and The Knowledge-Based Economy Action Committee jointly hosted a conference entitled "Globalization of Business Strategies in the 21st Century", in Taipei, Taiwan. The keynote speakers included Lester C. Thurow, Professor of Management and Economic, Massachusetts Institute of Technology, and Donald R. Lessard, Professor of International Management, Massachusetts Institute of Technology. The following participants also addressed the conference: Paul S. P. Hsu, Executive Director, The Epoch Foundation, and Senior Partner, Lee and Li, Attorneys at Law; Morris Chang, Chairman, Taiwan Semi-Conductor Manufacturing Company; Sheng-chang Hu, Minister Without Portfolio, Executive Yuan; Yen-Shiang Shih, Director General, Industrial Development Bureau, Ministry of Economic Affairs; Yen-Peng Chu, Research Fellow, ISSP, Academia Sinica, and Professor of Economics, National Taiwan University.

I. Opening Remarks by Yen-shiang Shih

II. Prof. Lester C. Thurow: Is the Era of Globalization Over?

- I The world was more globalized 100 years ago at the peak of colonial empires when there were less than fifty countries in the world.

This era of globalization arose because countries saw their colonies as the root to their economic success. Raw materials that colonies supplied were considered the key to a country's wealth. This era ended for two reasons:

- 1) Technology began to cost less, raw materials were no longer the key to economic success, and colonies were no longer enriching their ruling countries. Maintaining a colony became too costly.
- 2) In World War II, Germany and Japan tried to colonize countries in Europe and Asia. When they lost the war, the ideas that they advocated became discredited ideas, and colonization and colonialism were shunned by democracy.

By 1965 colonial empires had disappeared and that wave of globalization in economic history was over.

- I In the post World War II period, a new era of globalization began that started for political reasons but ended as an economic phenomenon.

In the Cold War, when the United States needed military allies to unite against the Soviet Union, the United States' policy was to build up prosperous allies and integrate them into an international economic network. In the 1970s-1990s a new wave of communication and transportation was born that influenced the new era of globalization even more. Transportation became so inexpensive that business firms manufactured their goods in the world's least expensive countries and then shipped those goods to where they would sell for maximum profits. Globalization became a business and economic phenomenon as opposed to a political phenomenon. This phenomenon was different from the first era of globalization 100 years ago where colonizers sought gold mines, oil fields, or materials that would make them wealthy. Instead it was an intellectual conquest to acquire knowledge over geographic space.

- I Soft Power vs. Hard Power

Hard power characterized the first era of globalization where colonial empires ruled with military force. Soft power rules myriad international organizations like the World Bank and the International Monetary Fund. A common culture unites the leaders of these organizations because they are mostly American educated.

- I We have not entered into a new era of globalization post September 11.

The World Trade Center (WTC) collapse on September 11 and the attacks against the United States were not significant economic events. They are obviously important events militarily, politically, strategically and ethically. Yet only \$34 billion worth of buildings were destroyed in the WTC collapse, whereas in Hurricane Andrew \$250 billion worth of buildings were damaged. The economic slump that occurred post September 11 has hardly affected the United States' Gross Domestic Product (GDP), which is \$11,000 billion per year. The WTC collapse and the economic slump that resulted thereafter are trivial economic events. Globalization is an economic phenomenon that is going to continue.

- I There have been several violent reactions against globalization, and the events of September 11 can be seen as such, in addition to the WTO protests in the United States, Sweden and Italy.

It is important to analyze the vague feeling that there is a rising swell of objection to globalization that will eventually destroy it. If you look at the arguments of those who stand for anti-globalization, their argument states almost exactly Marx's message in the mid-19th century: the poor will get poorer, the system will have repeated economic crises, small scale terrorism will erupt, a major revolution will occur where the poor revolt against the rich and a communist utopia will replace capitalism. Those who object to globalization believe that it lowers wages, makes the poor poorer, increases class and country inequality, creates monopoly powered global companies, makes profits more important than people, causes wide-spread economic collapses.

- I Why are religious fundamentalists worldwide all reacting at the same time?

In times of enormous change people feel uncertain and religious fundamentalism directly responds to uncertainty. Religious terrorism is a reaction to globalization. All religious fundamentalist groups intend to rid the world of the current governing systems, replacing them with a theological utopia.

- I The people who are revolting against globalization are not poor; they are frustrated.

Marx said the poor would revolt, but the hijackers from September 11 were not poor. Usama Bin Laden is wealthy. Mohammad Atta, who is suspected of orchestrating the September 11 hijackings, was from an upper class family in Egypt, but he believed the German universities he attended treated him unfairly.

- I A history of economic inequality is worthy of examination.

Economic historians believe that 300 years ago there was no significant per capita income difference between the poorest and richest country in the world. Ninety-nine percent of all people worldwide had exactly the same income because most of the world was composed of farmers who made basically the same living. With the invention of the steam engine in 1702, and its perfection

during Industrial Revolution, 8000 years of agricultural history ended in three decades. While some countries moved forward with industrialization and their economies became richer, those that failed to embrace industrialization, maintained the same technologies and the same standard of living reminiscent of the middle ages, creating an enormous gap between poor and wealthy countries.

- I Electrification can be considered the 2nd Industrial Revolution causing economies to change dramatically as people could work more hours per day.
- I The Germans changed the evolution of technology by inventing the concept of systematic investment in research and development based on academic science.

Before the 20th century, technical progress evolved because of tinker inventors. The Germans changed this by investing money in their science and engineering academics to accelerate technical inventions. Many countries realized that they would fall behind if they did not invest in science based research and development (R&D), and if they did not educate their populaces. The reason the United States caught up with Great Britton was because the United States had a more educated populous.

- I Countries are left behind when they cannot leap through these various economic and technological revolutions.

Now the per capita income difference between the world's richest and poorest country is 140:1. Some of the poorest countries in the world are still feudalistic because they still use feudalistic technology. Poor countries don't get poorer, rich countries get richer, and poor countries get left behind.

- I Now, we are experiencing a 3rd Industrial Revolution.

It is based on leaps and interactions between six key technologies: microelectronics, computers, telecommunications, new materials, robotics, and biotechnology. This revolution is just beginning and we have only witnessed the electronics part thus far.

- I Anti-globalization is an anti-capitalist argument.

Those who argue against globalization are arguing against capitalism. This is a

futile argument, since capitalism is the only proven system. Anti-globalization people object to rising inequality, financial recessions, financial crashes, all of which are characteristics inherently linked to capitalism. People must understand why the capitalist market has its ups and downs.

I There are three reasons that financial crashes and recessions are intrinsically and genetically part of capitalism:

- 1) It is human nature to want to acquire wealth. Greed makes capitalism work and the market collapse. Tulip mania in Holland was the first recorded market crash in the 1620s.
- 2) It is human nature to be optimistic and hope for more. When people see the value of their stocks rising, human nature tells them to hold on until it rises even higher.
- 3) The herd mentality also makes financial markets crash. In financial markets you have to run with the crowd to survive.

I Anti-globalization is partly Anti-American.

America is seen as getting to many of the gains too easily. Part of the problem is that people want American standards of living without doing what Americans have to do. Women who work are part of the American standard of living. Muslim culture will have to change to let their women work, if it wants to enjoy the benefits of an American standard of living. If you want the American style of living you have to change your culture. The American standard of living is so attractive it is seen as the devil.

I Globalization threatens the nation state because it is building a global culture.

Countries who participate in globalization inevitably accept foreign influences, much of which is "made in America", but is not American. With globalization, countries package products as American when they are not, like Russell Crowe and Penelope Cruz, neither of who have American passports.

I Globalization cannot start in underdeveloped countries unless there is economic, social and political stability. Globalization will leave countries that become unstable, like Indonesia.

- I Think about globalization like this: One must be willing to make voyages of exploration like the early explorers did.

Humankind had the technology to sail to the New World centuries before Christopher Columbus set sail in 1492. It is well known that the Vikings sailed to the New World in 850 AD. The reason no one attempted to sail to the New World before Columbus and after the Vikings was because the Europeans were afraid of monsters. One modern day example of monsters involves the debate surrounding genetically modified foods. The Europeans are debating the use of genetically modified foods and they are afraid of making that voyage of exploration. How do you prove that there are no sea-monsters in genetically modified foods? The Europeans attempt to hide their fear by arguing that using genetically modified foods will hurt the 3rd World. Yet, all evidence shows that it will be better for underdeveloped countries to have genetically modified foods be able to grow in their adverse climates.

- I Sir Francis Drake sailed in seven ocean voyages, but only had one success story. Professor Lester Thurow wishes for Taiwan just one success story of Sir Francis Drake's magnitude that will make Taiwan rich.

III. Professor Donald R. Lessard: 'Value Added' Globalization: From Manufacturer+ to Exporter of Management Services

- I Taiwan should not leave its manufacturing industry behind in embracing globalization. The a key issue is how to aggregate Taiwan's management services to its manufacturing base in order to retain its competitiveness.

- I Taiwan is becoming more of an exporter of management services.

Becoming a global headquarters is to become an exporter of management services because it means managing, promoting, researching and developing, doing logistics and finance on behalf of operations that occur elsewhere.

Nevertheless, Taiwan's policy structure provides enormous support to technology-based and engineering-based manufacturing. Policy has not traditionally supported the growth of management services and could be more helpful to these services' growth.

I Upgrading Taiwanese Activities: Technological Capabilities vs. Management Capabilities.

Over the last twenty years, Taiwan has made enormous growth from being a sub-contractor to becoming an Original Equipment Manufacturer (OEM) and an Original Design Manufacturer (ODM). Taiwan is better at adding technological capabilities to labor than it is at management capabilities. A knowledge-based economy is achieved by adding both enhanced management and technological capabilities to core labor. Achieving a knowledge-based economy also means moving from being just a manufacturer to becoming an exporter of management services.

I Taiwan's product life cycle over time has a sharp incline, followed by a slow drop off. Taiwan's strength is in production engineering.

I What are the threats to Taiwan?

The main threat that has driven policy makers and managers over time is that Taiwan will "hollow out" by losing its manufacturing assets. The real threat is actually that Taiwan will "be bypassed." This is a threat from lead market countries and lower cost countries like Mainland China.

A recent development in electronics is one-stop-shopping contract manufacturers that take over all the manufacturing activities from brand name marketers and manage and coordinate from Europe, North America, and low cost countries. They do not need Taiwan to provide that coordination.

Another threat to Taiwan's manufacturing are companies who know that they eventually want to tap Mainland China's vast market, and begin producing their products in Mainland China so as to connect to the market from the beginning production stages. They do not need Taiwan's manufacturing.

I How does Taiwan address the threat of "being bypassed"?

Taiwan must constantly acquire new products to produce throughout their product life cycle. A constant problem is that every product is going to commoditize and go away. Therefore, Taiwan must acquire new products to

extend its competitiveness and find better ways of capturing new products, and new product life cycles, before other countries grab them.

Taiwan can address the bypassing threat by becoming a design innovator, by designing new products within a particular technology, and by increasing ODM. Taiwan has been successful at this with notebook computers, as the increasingly smaller packaging for notebook computers is Taiwan driven.

Taiwan can fight against the bypassing threat by integrating and extending its supply chain, and by becoming a manager of the global system, as opposed to only the direct producer. That is the competitive challenge for Taiwan and each individual Taiwanese company.

- I To become more competitive Taiwan should continue its leadership in ramp-up product engineering and in building trust with lead market players. Taiwan firms have pioneered new models that allow them to relate to clients in lead markets based on a set of interesting global strategies that are highly trust based and must be maintained.

- I Taiwan should developed the following capabilities in order attain new sets of product life cycles:
 - 1) Increase product market knowledge, increase listening posts and participation.
 - 2) Increase technological capacity.
 - 3) Increase direct expansion into lead markets.
 - 4) As the manufacturing, sales, delivery, and service process becomes integrated, Taiwan may need to participate directly in those markets, as opposed to being just a supplier to those markets.

- I How to extend the Taiwanese "sweet spot":
 - 1) Continued supply chain leadership. Taiwan is very good at managing on a low cost supply chain. Taiwan is a manufacturer plus a logistics manager.
 - 2) Taiwan needs increased service competence.
 - 3) Continued direct expansion into lower cost regions like Mainland China, which represents a particular challenge because it is a low cost region and a rapidly growing market.

- I Complementary Services: Taiwan should not think of services and manufacturing as totally separate industries but rather as compliments of one another.

Taiwan's policies have been friendly to technology based manufacturing, yet protective and security oriented towards other services. As Taiwan moves forward in its business model from the manufacturing base, it must realize that many services are complementary to manufacturing: design capabilities, supply chain capabilities, finance capabilities, market sensing capabilities, marketing service capabilities, general management capabilities with global operations. All of these involve an increasing and diversifying knowledge base and require a broadening of the educational base in engineering and science, as well as deepening the management and organizational disciplines.

- I Taiwan faces a glass ceiling in upgrading because it still does not have world-class financial capabilities. While its product engineering capabilities and logistics global integrations capabilities are world-class, its financial capabilities limit Taiwan's overall potential.
- I Finance is one of three necessary complimentary services that Taiwan must develop in order to not "be bypassed". There is a need to change Taiwan's mindset associated with finance from "how do we avoid being hallowed out" to "how do we avoid being bypassed".

To finance an OEM Taiwan needs world-class working capital finance and the ability to finance the core risk finance, which is the capital equipment and the design. Because of Taiwan's supply chain management innovations, it has cut down the need for working capital.

To finance an ODM the same things are required as OEM plus you need to attract creative, technologically deep, market savvy employees. To attract such people you need a value recognition outlet and a strong stock market, so that a firm can offer those people stock options that have value.

As an innovator and integrator, Taiwan should improve in risk finance, cross border M&A, and in its ability to make complex long-term contracts.

- I Taiwan must upgrade its finance to be a complement to manufacturing, logistical

and innovative activities.

Taiwan must shift government role from air traffic controller to airport builder. Taiwan has a huge financial bureaucracy where international transactions must be approved by the government. The government must stop scrutinizing every little financial transaction.

There is a need to develop finance as a complement to manufacturing and as a compliment to the globalization of Taiwan companies, so that those companies don't have to go to Singapore or elsewhere to base their international operations. Without a world-class financial system, you will drive away your manufacturing base.

In upgrading Taiwan's financial system it should not try to capture unrelated finance business, but rather focus on not driving manufacturing away due to the lack of these capabilities.

- I The following elements are critical in upgrading Taiwan's financial system:
- 1) Supply Chains—Eventually a tremendous proportion of the financial transactions will be seamlessly integrated into the sale of goods and services.
 - 2) Secured Finance—The securing of finance through the flow of goods is a natural service for Taiwan to provide between risky countries and the countries to which it sells its product. Taiwan has an advantage because of its leadership position in the physical movement of goods.
 - 3) Secured Collection—We are moving towards a world of encrypted cash-on-delivery where cell phones become the mechanism by which micro-transactions are made, where one does not receive a service until it has been paid for, and where credit disappears as a key factor in the supply chain. Taiwan needs to examine whether the regulation of the financial sector will allow this integration. There should be a common set of standards for the imbedding of financial services, so that financial services can be sold based on the assets that Taiwan already offers in the manufacturing processes.
 - 4) Stock Options—If you are going to use high-powered finance to attract exceptionally educated employees you have to offer them compensation in the form of valuable stock options. As Taiwan globalizes its operations it will have to find ways to carry these incentives to other countries.

- 5) Value Recognition—Global valuation and the ability to have initial public offerings in the best context. Taiwan would be better off if all companies were listed on New York Stock Exchange or the NASDAQ, and not on the Taiwan Stock Exchange.
- 6) Mergers & Acquisitions—Taiwan firms have succeeded in domestically consolidating, but will have to consolidate with other global players to survive. Taiwanese firms' ability to issue shares for making acquisitions will be important as newly issued shares are the currency of this new economy,

I There are four key elements of a knowledge-based economy:

- 1) Knowledge Capital—This means educated individuals. Taiwan is already very much a knowledge-based economy in this sense.
- 2) Institutional and Regulatory context—Taiwan's institutional and regulatory context for supporting manufacturing capabilities is very proactive and one of the better ones in the world.
- 3) Application of Information Technology—The application of information technology in Taiwan is reasonably good.
- 4) Innovation Capability—Taiwan's innovative capability must strengthen. This could be strengthened through a course on Tech Based Entrepreneurship between MIT and Taiwan.

I In terms of finance, Taiwan is less developed in each of the previous four components of a "Knowledge-Based Economy". As Taiwan moves towards the OEM/ODM Integrator and Innovator Chart, it must develop more and more complementary services and quickly add these capabilities to its core manufacturing abilities.

IV. Government in the Global Competition

Moderator: Paul S. P. Hsu

Panelists: Morris Chang, Lester C. Thurow, Donald R. Lessard, Sheng-cheng Hu, Yen-shiang Shih, Yun-Peng Chu

Paul S. P. Hsu: Taiwan is at a crossroads in terms of government policies and hopefully this panel will help all of us discuss the choices as to which direction to follow. Will each member of the panel speak for five minutes on this topic?

Sheng-cheng Hu: Echoed Professor Donald Lessard's argument that the government should be an airport builder, rather than an air traffic controller. Economies compete by accumulating human capital, by attracting skilled labor from abroad, and by promoting research and development.

Taiwan's labor-intensive production is moving to Mainland China despite Taiwan's "go slow and be patient" policy. The result is that approximately fifty percent of Taiwan's direct investment abroad has been in Mainland China. Taiwan is not "hollowing out" because for every labor-intensive company that transfers to Mainland China, another high-tech company establishes itself in Taiwan. Due to high-tech investment in Taiwan, it is now the world's third largest producer of LCD monitors.

It is worrisome that the recent movement of capital to Mainland China is not to take advantage of low wage labor, but rather to take advantage of its ample supply of skilled labor. Given this, the government must invest in Taiwan's human capital. To achieve an enhanced pool of human capital, the government must first invest in education that concentrates on teaching the ability to analyze, innovate, create, and integrate, rather than teaching technical skills. Secondly, the government must promote and invest more in research and development so that companies will come to Taiwan to harness its concentration of upgraded human capital.

Yun-Peng Chu: Please refer to the attachment.

Donald Lessard: It seems that finance activities on the purchase of goods that are currently separate, will in the future be directly imbedded in the transaction flow. One of the potential advantages of a small economy is institutional innovation. It would be to Taiwan's advantage if it decided to become the world's pioneer in B-to-B and B-to-C transactions of imbedded finance.

In the future, Taiwan will need more investment not only in human capital, but also in the institutional and regulatory infrastructure. What would the regulatory infrastructure have to be like in order for Taiwan to become the world leader for imbedding finance in physical transactions, both to make payments on the delivery of goods by suppliers and the collection on delivery of goods by purchasers? This could be a challenge for Taiwan.

Lester Thurow: There are four basic components for a country to be an airport builder, instead of an air traffic controller: an educated populous; infrastructure that

includes rules and regulations; investment in research and development; and, the ability to generate social attitudes that embrace globalization. An important part of "building the airport" is fostering a society with constructive attitudes. Another measure of the success of an "airport builder" is whether a country can cope with "crashes" without "shutting down the airport".

One way to think about "hallowing out" is to consider who is making profits. Japanese computer companies build millions of computers, but Intel and Microsoft are the companies who financially profit from the Japanese PC industry. Taiwan needs to figure out how to make these sorts of profits.

In order to prevent "being bypassed", Taiwan firms must consolidate with other global corporations before it is too late.

Donald Lessard: To avoid "being bypassed", Taiwan firms must consolidate in global capital markets and obtain secondary passports, as Taiwanese passports are not ideal for acquiring other companies. The Taiwanese government should allow all companies to obtain dual passports, in order to encourage them to consolidate globally. To avoid "being bypassed" Taiwanese firms must change their business models to match their global industries.

Paul S. P. Hsu: Is Taiwan "hallowing out" or "being bypassed"?

Lester Thurow: Taiwan is afraid of being corrupted by Mainland China. However, Taiwan is going to corrupt Mainland China by importing capitalism, because it is the only system that works. Entrepreneurship in Asia exists in Taiwan and not in Mainland China.

Yun-Peng Chu: Taiwan must focus its anxieties about "hallowing out" towards upgrading its industries. However, Taiwan should be concerned with whether there are enough emerging industries and competitive products for it to maintain a leading position in the scheme of globalization.

Paul S. P. Hsu: What if the Taiwan government adopted policy, in addition to Financial Holding Companies, that established regular holding companies? In Chinese these are referred to as "industrial holding companies". If these holding companies were transparent, recorded their worldwide assets and investments, held shares of their investments globally, including investments in Mainland China, had the

capability of going public in Taiwan, and provided attractive incentives, would this steer Taiwan away from "hollowing out"?

Donald Lessard: An ordinary holding company policy is a necessary condition for upgrading Taiwan's industries. A holding company law is important because it allows companies to operate without the government scrutinizing each business transaction, however it is only part of the solution because Taiwan still needs to upgrade.

Lester Thurow: Taiwan's goal is to catch up with wealthy countries' per capita income. Taiwan is a success story because in half a century, it is half caught up with wealthy countries, but it still has half way to go. In order to catch up, Taiwan needs to change its strategy.

Sheng-cheng Hu: A natural consequence of Taiwan's push toward a knowledge-based economy will be increasing inequality in income. As Taiwan moves towards achieving a knowledge-based economy it needs to think about how to enlarge the winner's circle, so that a maximum number of people can benefit from the country's economic growth.

Lester Thurow: Social norms must balance laws. Enron would not have happened if it were located in Chicago, because it would have been treated and regulated as a commodity-trading firm. The social mores in Texas are different from other parts of the United States, which is why Enron and the Savings and Loans scandal both occurred there. Texas has various examples supporting an environment of social norms where it is okay to cheat the law. You must have a set of social norms that tell people that you should not break the law.

The moral of the story is that "Enrons" are going to happen, and you must be capable of cleaning up the mess without shutting down the airport. Part of this means punishing lawbreakers, so that taxpayers will give you money to clean up the mess.

Donald Lessard: The biggest challenge for an economic system is to move forward with globalization without leaving its society behind.

Paul S. P. Hsu opened the floor to a Question and Answer Session:

I A question regarding policy and Cross-Strait relations was generally addressed

by the panel:

Yun-Peng Chu: The Cross-Strait relationship is one of the most sensitive issues in government policy and there is no foreseeable change in the current policy unless the issue of economic development and national security is clearly sorted out. The national security side is more cautious towards investing in Mainland China than the economic development side. However, without economic development, there would be no national security for Taiwan. There should be an open debate on this topic.

Lester Thurow: Mainland China is not growing in at eight percent. It is a big Enron, riddled with lousy accounting, hidden debts, and corruption. Local mayors, who do not want to sacrifice their political careers, constantly report exaggerated economic growth and inaccurately measure Mainland China's eight percent growth rate. The truth is that no one knows how fast it is growing, so it is impossible for Taiwan to be steamrolled by Mainland China.

However, the idea that Taiwan's Cross-Strait economic policies can control Mainland China's development is absurd. Taiwan should focus on how to use economics to maintain positive relations with Mainland China. Countries that are economically dependant on one another do not go to war with each other.

Paul S. P. Hsu: The Taiwan government should not try to stop local companies from expanding into Mainland China. It is up to individual companies to conduct their own risk analysis and decide for themselves whether it will be profitable to expand into Mainland China. However, the government should entice Taiwan business to contribute some portion of their earnings back into Taiwan's economy. A practical way to do this is to allow the establishment of holding companies.

Donald Lessard: The engine of Taiwan's growth is going to be Taiwan's firms. However, the Taiwan government must not be so protective that it keeps foreign firms out.