

## International Issues

### Context

- If my experience is any guide, your future will be a time of greater change and transformation than any experienced before in our nation's history.
- You are graduating at a truly extraordinary time...  
Think about it for a moment...  
While you were born and educated in the 20th Century, you will be spending the majority of your life in the 21st Century...
- You will find a future of great change, challenge, and opportunity
- i) It will be future in which our nation becomes a truly multicultural society, with a cultural, racial, and ethnic diversity that will be extraordinary in our history  
In which those groups we refer to today as minorities will become the majority population of our nation in the century ahead...  
In which women take their rightful place as leaders of America...
  - ii) It will be a future in which America will become "internationalized"... in which every one of our activities must be viewed within the broader context of participation in the global community...  
Whether through travel and communication, the arts and culture, the internationalization of commerce, capital, and labor, we will become increasingly interdependent on other nations and other peoples.  
Further, as the destination of roughly half the world's immigrants, the United States is rapidly becoming a "world nation" with not simply economic and political but strong ethnic ties to all parts of the globe.
  - iii) The Age of Knowledge  
But there are even more profound changes underway...  
Looking back over history, one can identify certain abrupt changes, discontinuities, in the nature, the very fabric of our civilization...  
The Renaissance, the Age of Discovery, the Industrial Revolution  
There are many who contend that our society is once again undergoing such a dramatic shift in fundamental perspective and structure.  
Today we are evolving rapidly to a new post-industrial, knowledge-based society, just as a century ago our agrarian society evolved through the Industrial Revolution.  
In a sense, we are entering a new age, an age of knowledge, in which the key strategic resource necessary for our prosperity, security, and social well-being has become knowledge--educated people and their ideas.

### The Internationalization of America

#### Key themes:

A shift in our economy from a national to an international base  
The industrial resurgence of Europe and the Pacific Rim after WWII

The development of communication and transportation technologies that make global industrial integration possible.

It will be a future in which America will become "internationalized"... in which every aspect of American life must be viewed from the broader context of participation in the global community...

Whether through travel and communication, the arts and culture, the internationalization of commerce, capital, and labor, we will become increasingly dependent on other nations and other peoples.

The world and our place in it have changed.

For most of our history our political and geographic isolation, abundance of resources, and technological leadership insured control over our own destinies and steady improvements in the quality of life.

Today's reality is different. The world economy has been transformed, and we face serious competition from other nations.

World trade has increased sevenfold since 1970, and most of the goods we produce must now compete against merchandise from abroad.

No longer isolated, we are a player, still powerful, but no longer controlling, in a competitive, global market.

Some facts of life:

The fact is that a truly domestic US economy has ceased to exist.

The market for nearly all significant manufacturing industries has become world-wide

In slightly more than 5 years, US trade deficit has taken us from the world's largest creditor to its largest debtor nation.

Jack Welch, CEO of GE, noted last November:

"Within the next 2 to 3 years, at most, the most important alliances will be forced in every significant global industry--medical, autos, defense, materials, and so on. Those who are slow to recognize the emergence of these global alliances or to act in forming them will find themselves locked out of the game as we enter the 1990s."

American will no longer take its know-how and apply it to low-cost natural resources from third-world countries, turn it into products, and then sell it back to them--as we do in a hierarchical economy.

Rather, we'll be only one member in a global dynamic economy with tremendous network interdependency between countries.

As Robert Scalapino of UCB puts it, "as far as the US is concerned, the 21st century is the Pacific Century"

More than 50% of world's people live in Pacific Rim.

We need a more careful analysis of the evolution of the USA as a true "world nation", shifting rapidly away from Eurocentricity. But a caution here: Kuhn notes that Europe is unique in sustaining a culture capable of achieving scientific progress (and goes further by noting that science is the only discipline capable of true progress--indeed, this might even serve as its definition). Hence, in our moment

- away from Eurocentricity, we may be moving away from a science-based culture.

The "shrinking globe" phenomenon suggests that understanding cultures other than our own is necessary not only for personal enrichment and good citizenship in the global community, but indeed, necessary for our very survival as a nation...

We are in the midst of an information revolution that is changing the basis of economic competitiveness and world power.

Today information and data flow quickly across continents, oceans, and nations.

We learn about events almost as they occur. The world is linked electronically.

As a result, the relationships between nations and the pace of change are increasing.

A global economy is not only possible, it exists.

Markets are changing and realigning. We have seen it in

the far east and now we are seeing it in Europe as the continent races toward 1992, an event whose potential consequences we grossly underestimate in the US.

What's more, these new technologies magnify the effects of change. "Today the velocity of change is so great... that the tectonic plates of national sovereignty and power have begun to shift" (Walter Wriston)

But there is another important reason for our renewed attention to the international agenda of the University.

The US has become the destination of about half the world's immigrants. Probably 10 million this decade alone...

With falling fertility rates, immigration will soon become the main determinant of the variability in our population.

America is evolving into the first true "world nation", shifting rapidly away from Eurocentricity into a society with strong ethnic ties to all parts of the globe-- with a growing focus on the nations of the Pacific Rim.

We are no longer self-sufficient or self-sustaining. We are not immune to the shocks of the world society. We have never been more dependent on other nations and peoples.

Understanding cultures other than our own will become necessary not only for personal enrichment and good citizenship, but indeed, necessary for our very survival as a nation.

If our institutions are to serve America in its role as a member of the global community, we must think and act more imaginatively, more aggressively, and more strategically to strengthen our role as truly international centers of learning.

Role of technology

Technology-driven change is changing the weight--physical and political--of goods, institutions, countries, and regions.

Manual labor was the norm until remarkably recently.

In the 1950s in Western Europe and America, 70% of all employed people were use-of-hands workers, 30% use-of-brain workers. This is now reversed.

85% of all the scientists who have ever lived are alive today... scientific knowledge is doubling every 13-15 years

The social change resulting from this is diluting the sovereignty of nations.

Example: Glasnost was forced on the Soviet regime by photos taken from a privately owned satellite showing pictures of Chernobyl.

In this wired world, there is no place to hide as currency values are controlled by the information standard. (Walter Wriston)

Wars have traditionally begun when borders were violated.

But today, borders are porous because money and ideas-- as powerful as armies--cross them electronically.

Markets are no longer geographic locations.

Rather they are data on millions of computer screens.

The markets render pitiless judgments on political actions by altering monetary values--and become a form of free speech telling the unregulatable truth about nations' politics.

Workplaces, like markets, can become geographically indeterminate.

Workers can be connected by computers to jobs far from their residences, and there are economic incentives for allowing people to commute electronically.

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Today, ecm

omic value is increasingly created by moving data`  
analyses and insights hither and yon, electronically.  
The products of economic production, such as Greenspan,  
are becoming progressively impalpable.  
So are the elements of national sovereignty.  
The rec

cause of the decline of nations is not the now

glorious notion of "k

perial overstretch", but the

phenomenon of creeping inflexibility, what might be called industrial sclerosis--the loss of the ability to change and adapt. (Samuel Huntington)

Mature societies start to decline when layers of powerful special interest groups--inefficient producers, inflexible unions, governmental bureaucracies--

**succeed in impeding the normal "creative destruction" of capitalism.**

**In order to hold on to what they have, they stave off change.**

**But in the end, the whole society pays for the accumulated**

obsolescences and inefficiencies. The result is decline (Mancur Olson)

**In the US, the continuing fluidity of society is our greatest**

asset and our primary defense against the gloomy prophecies of American declinists.

**It could be argued that the American political system is**

growing increasingly rigid. It gives great power to special-interest, hold-what-we-have PACs. It has so fractured political power that nothing ever gets done. It prevents the necessary, dynamic, and painful hard choices from being made.

**Has the US too grown sclerotic?**

Perhaps, but don't count on it.

The genius of democracy is that about twice a decade, it produces a new President.

Political equations can be rewritten.

Policies can be reversed.

Structures can be remade.

The American blessing is to have invented a system that reopens the question--and allows us to reimagine the world--every four years.

**Other Bits and Pieces**

Key element in transformation, is the emergence of knowledge as the new critical commodity, as important as mineral ores, timber, and access to low skilled labor were at an earlier time.

This new critical commodity knows no boundaries.

It is generated and shared wherever educated, dedicated, and creative people come together...and, as we have learned, it spreads very quickly.

**The Role of Technology**

And in this age, the major force behind economic change is technology, itself.

Of course, we know that technology has played an increasingly important role for many years.

Technological innovation, achieved by applying new knowledge created through basic research, has been responsible for nearly half of all US productivity gains since WWII

At another level--technologies of transportation and communication!

**make possible an integrated economy.**

Tremendous new industries have been created by new technical knowledge: electronics is the obvious example of the last three decades; biotechnology may be the example for the coming three decades.

These industries depend on knowledge as the most critical resource.

But knowledge is highly mobile...it is not tied to

geographic regions as coal or iron or oil.

Earlier historical periods that we remember with catch-phrases.. the "Age of Reason", the "Age of Revolution", the "Age of Discovery", were limited geographically to Europe. So was the Industrial Revolution since technology did not allow rapid dissemination of knowledge.

By contrast, the knowledge revolution is happening worldwide and at a very rapid rate.

That new technology means economic development and trade is widely understood in developed nations who have been sharply increasing their investments in science and technology.

But less developed nations are also learning the lesson and drawing knowledge from the developed world or generating it themselves.

Brazil, India, Korea are quickly advancing along the competitive path that Japan took 30 years before.

Example:

Over past two decades, India has increased its population of scientists and engineers by tenfold!!!

Note: As more countries understand that knowledge is now the critical resource, more are undertaking serious research programs. Our nation is already being challenged in the knowledge business itself.

The handwriting is on the wall...

Our economy is at a crossroads...and its future course rests on a disparate set of conscious choices.

Whether the economy moves on a path leading to stagnation, rising imports, and growing unemployment or on a path of rapid growth and technological change, will require "an unflinching reexamination of the way businesses are managed"

Maintaining America's competitive edge requires attention to our traditional strength -- people and research -- and a strong offensive strategy based on these resources.

Taxes, trade, and fiscal policies influence economic competitiveness. But in the long run, a strong base of science and engineering research and education is more important.

Central theme is that education, broadly defined, will play a pivotal role in the coming economic transition and its impact on individuals.

Previous economic transformations were closely associated with major public investment in infrastructure such as railroads, canals, electric networks, and highways.

In the coming economic transition, an equivalent infrastructure will be an educated population.

#### 1. Polity

While the international economy is increasingly integrated, many polities are pragmatically #Problem kU†  
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mechanisms to deal with probleo□ of□.hd□d 4 - capk□al flws  
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hec 4 - a national political center makes it unresponsive to the

variety and diversity of local needs.

In short, there is a mismatch of scale.

## 2. Demography

Not world populations, since it has passed the inflection

**point of the S-curve. Rather it is the widening gap between age cohorts in different parts of the world...**

**In Latin American and Asia, young are 40%...in**

**US and Europe, young are only 20%**

### Summary:

Key variable is scale.

Increasingly our social, economic, and political institutions are out of sync.

There may well be a shift away from bigness and bureaucracy.

If there is a universal consensus in Western societies, it is on the idea that individual and local community choice in as many matters as possible is a desirable value.

### University of 21st Century

Spacetime physics course...electronic networks

MIT, Oberlin, Vienna, Towson State, Boise State, New Mexico...

### A Future of Hope

Clearly the modern view of change suggests that the future is indeed not what it used to be...

...or at least as it has traditionally been portrayed, as a time of gradual, predictable change, rigidly moored to the past.

Rather, my crystal ball suggests a future characterized by rapid, unpredictable, and frequently dramatic change... a future of great challenge and responsibility...

But it will also be a future of great opportunity and excitement.

Let me dwell on this final point for a moment, because all too often we tend to press the panic button when we face the future, particularly by simply extrapolating the events of the past.

We must take care not to lose perspective--to lose the sense of excitement about the future, the optimism and confidence in ourselves and

**in each other.**

**Certainly events of the past 25 years have been both trying and traumatic.**

**But this has also been one of the most intellectually productive times in human history,**

**Knowledge continues to grow exponentially...the more we learn the more we are capable of learning.**

**Science and technology are now capable of fulfilling the age old promise of delivering us from the drudgery of labor.**

**Information technology now extends the span of our intelligence by orders of magnitude and transcends the distances that divide us.**

**On the whole, the world is becoming more connected and more democratic.**

From the moment when we first saw ourselves reflected as one world from the moon's surface back in 1969, we have been increasingly bound together through commerce, culture, arts, literature, travel, and communications.

**Indeed + Despite the pessimists, we have no full scale wars and we have made**

at least some progress in limiting the arms race.

**Chances of superpower warfare are less and prospects**

for prosperity are good.

**The coming era, most predict, will be one of competition,**

no confrontation or conflict.

**And, to paraphrase Mark Twain, the dead**

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**head 3 - America has been greatly exaggerated.**

**Our nation continues to be nourished and revitalized**

by the extraordinary diversity of our population--particularly those formerly excluded such as minorities and women and

by our immigrants.

**Indeed, it is the continuing fluidity of society that is our greatest**

asset and our primary defense against the doom and gloom

prophecies of America's decline.

**And leaders throughout the world continue to look to America for**

leadership--political, cultural, economic, and social!

Most agree with an eminent Japanese political scientist who recently stated:

"The 20th Century was the American century."

"And the 21st Century will also be the American century!"

**That is, if we wish it to be...**

...if we will it to be...

...and if we stay true to our ideals.

**As you stand on the threshold of a new century, it is true that**

you will face problems and challenges of a magnitude that would have been incomprehensible a century ago.

**I believe that your generation has the same imagination and wisdom,**

daring and energy that characterized earlier ages and enabled them to achieve greatness...

But, beyond that, you have the powerful tools of modern science and technology, the rich heritage of culture and art and experience from past generations, that will provide the knowledge base to enable you to shape your own future.

**True, in the immediate future there will be less security than in the**

immediate past, less stability, more unpredictability.

**But, as the philosopher Whitehead has noted,**

"The great ages have been unstable ages!"