

# The Long Look Ahead: The Economic Crisis and the Importance of Investing

*Remarks (as prepared) by Paul Otellini, Intel Corporation President and CEO,  
to the Economic Club of Washington, D.C., on Feb. 10, 2009*

Thank you and good morning.

In recent weeks, this city has been the center of an urgent national debate over the best way to bring our economy back to health.

I thought I'd give you a bit of perspective from the world of technology and manufacturing – the world I know best.

I think the debate in Washington has been a very healthy one. But at the same time, I worry that we might see what some call an “unintended consequence.”

When we face a crisis -- let's be honest -- our habit is to hunker down and hold fast to what we have and what we know: the jobs, the businesses, the institutions, and the ways of life we are familiar with and don't want to lose. It is a perfectly understandable reaction when uncertainty becomes a part of our lives.

But I see this economic crisis differently. Our institutions and paradigms have become unfrozen by this economic crisis. We have a once in a lifetime opportunity to re-shape how things will look and behave as growth resumes.

This is riskier. There is more uncertainty. It is less comforting. Taking that leap can be downright scary. But it is the only proven path to pull out of bad times. If we want to see a return of American prosperity, we have no other choice than to invest in creating the future, not merely preserving the past.

How we reach for that future -- and why it is so important – is why I'm here today.

I don't want to sound cavalier. I know, first hand, that we are experiencing the worst economic conditions that we have seen since I began at Intel almost 35 years ago.

Due to the dramatic contraction in global demand for computers, our revenues dropped 23 percent in the fourth quarter. And like every company, Intel is taking steps to manage our way through the near-term reality. It is tough on our employees and our business partners.

Every business in Silicon Valley is suffering similar results. Indeed, this recession is sparing no part of the global economy.

No one is confident predicting what the next quarter is like, yet alone the next year.

Our entire country is experiencing anxiety about the future. Today, when I look out at the American economic landscape I'm aware of a cruel, but ironic, fact: I have spent my life at a company that has been devoted to a theory – Moore's Law – about the predictability of technology and product development.

And yet I find myself acknowledging that there nothing predictable about our future economic well-being.

On this issue, we need a lot more candor: For nations like the United States, absolutely nothing about the future is inevitable or guaranteed—not jobs, not leadership, not our standard of living.

We are at an inflection point. The fundamentals to which we have become accustomed have changed. How we deal with these changes can lead us to new heights -- or they will define the beginning of a downward spiral.

As we contemplate our future, we must accept the fact that many of the assumptions under which business operated for the past 50 years no longer hold true.

The forces of globalization that were reshaping the world before the economy went into a severe downturn are still hard at work today, despite the desire of many to attempt to turn back the clock.

With the emergence of new economic powers like China and India, America no longer dominates the global economic stage. Innovation no longer belongs to a single country or region. It is more evenly distributed and, in fact, accrues to countries in proportion to the quality and rigor of their educational systems.

The future for every nation will be shaped by new ideas and creativity. These are the engines of future prosperity.

I think it's fair to say that today America lacks the confidence that we have the right strategy to maintain unquestioned leadership in this new environment. And this leads us to uncertainty about our future.

But if you've come today for a depressing message, you've come to the wrong place.

At Intel, it is deeply embedded in our culture that times of crisis are opportunities, not only to build *back*, but to build *better*.

Our former CEO, Andy Grove, once said, "Bad companies are destroyed by crisis. Good companies survive them. Great companies are improved by them." I think that the same holds true for industries and even for countries.

In the current crisis, I believe that America's goal should not be just to survive, but rather to become better than ever.

How do we do it? Almost exactly 100 years ago, President Theodore Roosevelt said, "The one characteristic more essential than any other is foresight. It should be the growing nation with a future which takes the long look ahead."

Looking ahead it's clear that we are living in one of the most remarkable periods of creativity and possibility.

From biomedicine to nanotechnology, the world of life science is destined to change the way we live within our lifetimes.

From wind turbines to solar panels, we are at the very beginning of transforming how we generate and consume energy.

From broadband to microprocessors we are connecting the world in ways that were unimaginable just a few years ago.

Our challenge is not to just enjoy the benefits of the discoveries so far. Our *obligation* is to invest to take them further.

Taking the "long look ahead" requires a conscious decision to continue as the global leader – especially while there is a lot more competition for that title.

I say "conscious decision" because remaining the global leader won't just happen on its own.

And let me warn you, while it is easy to talk about investing in future technologies, in practice, it can be a frustrating process:

- For example, we now know an enormous amount about alternative sources of energy; but we still have a long way to go to find a way to power a city efficiently using wind and solar power, yet alone a single car running all day on safe battery power.
- Nearly all American schools are wired for broadband; but finding a way to use digital content and emerging social networks to craft young minds is not yet a well understood teaching paradigm.
- We all know that technology has the potential to revolutionize the way that healthcare is delivered, yet we cannot even agree on common standards for electronic medical records.

Solving these problems will be challenging and exasperating. But there is good news even before those solutions are discovered. Simply pursuing these challenges will improve us. That is the critical point. We have to invest in the pursuit before the solutions are clear in order to progress. There is an old adage in sports: you can't win if you don't show up. The same is true for these grand challenges of our time.

In fact, for any nation in the 21<sup>st</sup> century, but particularly for the United States, supporting a true culture of investment is the key to long-term success.

What do I mean by a "culture of investment?"

It begins with common understanding that good investments ought to lead to ideas and discovery....

which spawn new businesses....

that in turn create new jobs...

and ultimately leads to wealth creation and higher standards of living.

The start of this cycle is investment. Investment by government. Investment by business. Investment by individuals.

We will argue about the size, timing and return on the investments we make.

But on this much there has to be agreement: If we are committed to investing in ideas to *improve* - not just *maintain* - what we have and what we know, the United States will do more than just recover from this recession. We will emerge, once again, as a competitive, global powerhouse. This is the essential stimulus plan we need; not one which attempts to shore up the status quo or delay the inevitable changes needed.

It won't surprise any of you that I believe that the world of technology lies at the heart of creating this future.

The invention of the silicon transistor 61 years ago set into motion a chain reaction of unprecedented progress and wealth creation that has kept America at the center of the global economic stage.

These microscopic building blocks inspired Moore's Law which has delivered technology that gets significantly more capable and yet costs less year after year.

At Intel, we see this pace of discovery continuing for the foreseeable future.

In fact, some of the most interesting breakthroughs in technology we see today are just the tip of the iceberg:

- Powerful computing and communications devices that deliver the full Internet and fit in your pocket.
- Computers so inexpensive that the poorest villages in Africa can have them in their classrooms.
- High-tech sensors that replace the role of full-time nurses caring for the elderly.

- Smart networks of microprocessors, software and sensors that will eventually re-engineer the electrical grid.

The truth about technology is that it is constantly building on ideas that came before it. This is a critical distinction if we are going to think about “investment” in the right way. All the breakthroughs I’ve just mentioned are not one-off products. They are platforms on which thousands of other innovations will be built.

That is the model that drives us at Intel. It is the model for the technology industry. And it ought to be the focus of what we do when we talk about stimulating the economy and remaining competitive as a country.

Who will deliver these innovations? No one knows. We’re working on many of them at Intel. But I’ve been around long enough to know that the next big breakthrough may come from companies we’ve never heard of, or industries that haven’t been invented yet, in places we least expect. Remember that the microprocessor was invented in a former prune orchard in a lazy agricultural valley less than four decades ago.

By definition, competition is fraught with uncertainty. But one thing we do know is that staying competitive requires a consistent commitment to investing in the future.

I’m proud to say that at Intel we have long been willing to back our words with billion-dollar investments.

I believe the United States has the potential to remain the world’s leading innovator – a statement that, to read the press, is increasingly in doubt.

And contrary to conventional wisdom, I believe that we *can* retain a vibrant manufacturing economy here in the United States. But we need to focus on industries of the future. Ones in which we can command a competitive advantage.

Intel is a global company today, and proudly so. Yet, we still think of ourselves as a prime example of American enterprise in the 21<sup>st</sup> century.

Seventy-five percent of Intel products today are sold outside the United States. Yet, we still build 75 percent of our products in US factories and more than half our employees work here. And 70 percent of the dollars we devote to research and development and capital investment are spent here in America.

We believe in this country. And we believe in its power to create a future that will promote long-term growth. We believe that we can help to create the future.

Since 2002, we have matched that commitment with our investment: Putting more than \$50 billion to work right here in America, in plant and equipment and research and development. Those investments support over 45,000 Intel high tech jobs in this country.

And tough as these times are, we are not blinking. Today, I am pleased to announce our intention to stamp the words, “Made in America” on even more Intel products in the months and years to come.

Today we are announcing that Intel will add to its already large factory network with our largest-ever investment in a single process technology...and it’s in the US.

We will invest \$7 billion into factories in New Mexico, Arizona, and Oregon to manufacture silicon wafers with the world’s most advanced 32nm process technology.

These factories – we call them “fabs” – will produce the most advanced computer technology in the world.

These are remarkable sites of innovation. Many Americans think manufacturing means gritty assembly lines and smokestacks. Let me give you a glimpse inside our fabs to show you manufacturing at its finest

<VIDEO>

As you can see, these factories are truly remarkable, and we believe that they will produce chips that will transform what is possible. They are platforms for future creativity. Our customers will use them to build world-changing technology.

Of course, these factories also support jobs: high-wage, high-tech manufacturing jobs that are the economic engines of the states where they are located. The investment will also support thousands of contract jobs for technicians and construction workers.

These factories will also incorporate breakthroughs in environmental impact. They will recycle more chemicals, reclaim more wastewater and have half of their power supplied from renewable sources.

As a global company, we have made a conscious decision to expand these factories here because we believe that investing in the future of American discovery isn't just the right thing to do – it is an essential business decision if we want the United States to continue to be the engine of new ideas and technical leadership.

This is what investment means. Putting capital to work not just for the new products you will produce, but for creating the capacity for innovation we haven't yet imagined. If investment is going to make a difference, it has to lay the groundwork for the future.

As an American manufacturer, I want this idea about investing for the future to be better understood and embraced by other industries and our lawmakers.

That is why Intel is beginning a year-long initiative to bring together some of the world's best minds in business, entrepreneurial circles, academia, the media, and government to lead a discussion on how technology investment can help grow the economy and create jobs.

We will do this in partnership with the Aspen Institute. I am very happy that Walter Isaacson, the President of the Aspen Institute, is here with us today. We will share details about our partnership soon.

Let me conclude with a little bit of advocacy:

This year, we are going to see an unprecedented level of public investment in schools, bridges, roads, and healthcare. It is important. It will make a difference. It is long overdue. But let me be very clear. All that investment is not sufficient. While it may help lift us out of our current crisis, it will not secure our future. By itself, it won't help stimulate the next generation of ideas.

A secure future requires investment in areas that will give rise to new ideas and new industries. We can't look to government to do this. In fact, creating the future is an area where American business and entrepreneurialism has a stellar track record, one that I believe we can continue.

What I am asking is that other companies join us. Companies that are willing to step up now and place investments to lay the groundwork for our future. Yes, it's important to deal with the realities and inefficiencies of today. But it is essential for the well being of all of us that we make a collective investment in tomorrow.

Thank you.

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