Leyendecker & Associates
Consultants In Executive Search

ARMCHAIR ECONOMIC PERSPECTIVE
"Technology Hangover Debate"
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For those that did not read my January and follow on February piece on the "technology hangover", they will soon be on the L&A web site. Below are the salient points to those perspectives.

"The root cause of our current economic problem is that we are experiencing a "technology hangover"; disruptive technologies are running amok in our economy."

What are the tools of this disruptive technological period?

"The PC, fax machine, cellular telephones and the Internet."

What is the disruption these tools are causing?

"Almost everyone in the world today has instantaneous access to virtually all the information that man has generated in his entire existence. And in addition, we have the ability to share, debate, research, collaborate, compete and innovate with all this information… instantaneously."

How has this disruption manifested itself in our economy?

"Resource allocation productivity all over the world now seems to be improving at an ever increasing rate of speed."

What is the result of resource allocation productivity growing so fast?

"Technology today is destroying jobs faster than our natural economy can replace them."

But what does this have to do with our real problem, the financial crisis?

"Bubbles can be created when disruptive technologies run past man's ability to understand how to efficiently use them. Having instantaneous access to every piece of financial information lured us into over confidence and complacency. The financial crisis is a derivative of the technology disruption."

At this stage of thinking there seems to be one primary debatable point about this "technology hangover" concept. Can we actually be destroying jobs faster than we replace them?

Innovation historically has led to both productivity increases but also job growth. New jobs are created around the disruptive technologies that replace jobs those technologies destroyed.

Looking at history it would appear that past disruptive technologies like fire, wheel, printing press, steam engine and electricity all inspired job growth. As all these new economic tools worked their way around the globe more and more people were employed in the economic expansion their derivative developments created.

Two derivative developments from each previous period was an improved living experience and expanded life expectancy. This inspired population growth, naturally leading to more job creation. The more population grows, the more homes need to be constructed and furnished. In addition, more food and energy are needed to support the growing number of consumers.

Suggesting our current disruptive technological period is leading to fewer rather than more jobs would seem in conflict with past disruptive technology periods. So why might this time be different?

Maybe it is because historically it took generations for disruptive technologies to be assimilated into the global economic and social system. Today's disruption has been assimilated globally in only one generation. We have not had the luxury of multi-generational change to adapt.

In addition, there could be another even more challenging factor to today's disruption.

"Resource allocation productivity all over the world now seems to be improving at an ever-increasing rate of speed."

To consider this theory, we might first want to define "resource". We certainly understand the concept of "natural resources" like minerals, timber, water and food. These resources provide the foundation from which we can produce. Over the course of history they have either enhanced or stymied our ability to produce. It is no surprise to see that the world's major cities all developed in areas of great natural resources…mostly with respect to water transportation.

Many might argue that America's ascension into a global power has something to do with the vast wealth of natural resources contained within our borders. But other countries like Brazil, Canada, Australia and even Russia also possess resource abundance. Why then has the U.S. been able to rise farther and faster than these other countries?

Part of that answer likely involves our "human resources". America has been the land of opportunity, where dreamers could go and make their dreams come true. That "can do" passion combined with an encouraging social system and rules of engagement plus ample natural resources has provided the U.S. its competitive advantage. So we can add "human resources" to "natural resources" into the equation that results in economic prosperity, or not.

There is one other resource that likely must be thrown into this equation. It is something we may not consider a resource, but yet may be the most powerful of them all…."Information".

Information is critical to understanding how to access and manage both natural as well as human resources.

At any given time in history we had access to only so much information, limiting our ability to manage natural and human resources. Historically, people and entities with the best information always had the competitive advantage.

But at no time in our history, up until the proliferation of the PC, cell phone, Internet and search engine, have we had "instantaneous access to virtually all the information man has generated in his entire existence and the ability to instantaneously use it…to better manage our natural and human resources."

With "information" you control both natural and human resources. The better the information, the more productive you manage your effort. More "productive" means getting more output out of the same amount of natural and/or human resources. As we become more productive, we need less labor to produce the same quantity of goods and services.

If with information we improve resource allocation productivity, why might this productivity be improving at an ever-increasing rate of speed? Quite possibly it is because our capitalist system of economy rewards the best users of information with greater success, greater margins and the most wealth accumulation potential. Whether we like it or not, our capitalist culture inspires a "he who dies with the most toys wins" world.

The result of combining instantaneous access to all the information ever generated in man's existence with the capitalist pursuit of wealth is likely the force behind an ever-increasing rate of resource allocation productivity. Every day, every entity has the motivation and ability to squeeze more output from fewer and fewer employees.

This disruptive technological period is destroying jobs faster than our natural economy can replace them.

It is doing so for two likely reasons. For one, this period of technological disruption is being assimilated into the global market in one generation when previous similar transformative periods have had the benefit of multiple generations to adapt. And second, this disruption's ability to provide a capitalist system with instantaneous access to virtually all the information created by man is driving resource allocation productivity at an ever-increasing rate.

Some people might think these perspectives quite pessimistic. Why add more doom and gloom on top of our current situation? Well, maybe the better we understood our circumstances, the better we are able to adapt and sail as safely as possible through these troubled waters. The rising tide lifts all ships. When the tide goes out we can tell which captains have sailed themselves on to a reef. Hopefully with better knowledge of the water, **better information**, we can navigate ourselves into a blissful sunset.

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