GLOBALIZATION AND NEW ECONOMY[*]

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ABSTRACT

Since the 90's two trends dominates the evolution of the world economy: globalization and the rising of the new economy based in information and communication technologies. Both phenomena are closely related.

I examine the connection of their advent with the enduring expansion of American economy in the 90's and the subsequent recession which starts in 2001.

The recession of the American economy expresses contradictions arising out of the long boom and of the very nature of the technological transformations provoked by the new economy. These are **capital deepening** techniques, that is, the capital stock grows at faster rate than labour productivity. This is because the use of new technologies is highly concentrated in the tertiary sector of the economy, more than in the manufacturing one.

Besides the rising of the new economy coincide with a new regime of accumulation dominate by a financial logic. The boom of the new economy was associated with a sharp process of liberalization, deregulation and financial globalization. With the deceleration of production, the drop in earnings of corporations and the plunge of NASDAQ at the end of the last decade, the complex financial superstructure that commanded the long lasted expansion became fragile.

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1. Introduction

This paper ‘s objective is to analyze the extent of the technological revolution spurred by the new economy, its relationship to globalization and its influence in the U.S. economy’s recession and slow growth that began in 2000.

By “new economy” I mean the high-tech sectors of computers, telecommunications and Internet. According to the U.S.’s Bureau of Economic Analysis (BEA), the new economy includes the acquisition, processing, transformation and distribution of information. Its three main components are hardware, software and communications systems that acquire and distribute information (Nordhaus, 2001, p. 1). It embraces activities like the manufacture of computers, semiconductors, software packages, video equipment, telephones, radio and television. Activities like telephone services and entertainment, which pre-date computers by many years but whose development has recently involved them, are also considered part of the new economy.

The virtues of the “new economy” were extolled during the U.S. economy’s 1990s boom. Someone was always talking about a new technological revolution, similar, according to its proponents, to the eighteenth-century Industrial Revolution that opened the way for capitalism and the technological revolution of the late nineteenth and early twentieth centuries that accompanied the development of monopoly capitalism.

The computer-information and communications revolution was the material basis that conditioned globalization and the growing integration of the world’s economies. In addition, it was considered that their appearance implied a fundamental improvement in the economy’s productivity after decades of lethargy. It was said that the productivity increase guaranteed larger corporate profits, high rates of economic growth and investment, low unemployment, the elimination of the danger

of inflation and a robust hike in stock market indexes. It was said that, thanks to the new technological revolution and globalization, the economic cycle had changed.

As has happened in almost all of capitalism's extended periods of expansion, some economists began to even talk about a "new global economic order" and the end of economic crises. If other areas of the world like Japan, Europe and the so-called emerging countries were not experiencing the same bonanza as the United States, it was because they had not fully adopted the U.S. model and the rules of the "new economy".

The expansion of the economy was accompanied by a stock market boom similar in vigor and duration to the one that occurred during the 1920s. Between January 1991 and August 2000, when the boom hit its zenith, the New York Stock Exchange's Dow Jones Index increased 4.09 times, while the NASDAQ, which registers the value of the stocks of the "new economy" multiplied 10.2 times. New York's stock market boom and those in other developed-country markets took off in 1995 and later became even more pronounced after the 1997-1998 Asian crisis. At the high point of the boom in 2000, the ratio of stock prices to corporate profits was higher than that reached during the stock market frenzy that preceded the 1929 crash.

As happens in all great expansive phases, the U.S. expansion was accompanied by an accelerated growth of credit and other financial operations. Banking credit expanded rapidly to support the stock market euphoria and consumption of those sectors of the population who benefited from the boom. The United States' total debt now comes to U.S. $3.2 trillion, of which U.S. $0.7 trillion is public, U.S. $1.7 trillion is corporate and U.S. $0.7 trillion is household debt. Also, many forms of non-banking financing proliferated, as did operations, particularly in the high-tech sector, financed with venture capital. In addition, derivative market instruments (swaps, options, futures, etc.) ─which, though they contribute to the diversification

of portfolios and augment yields, also increase systemic risk– expanded exponentially.

Few academic studies support the theses of the "new economy". The main arguments in its favor were published by *Business Week*. Stephen B. Shepard (1997, p. 4-5), the magazine's editor-in-chief, defined the "new economy" as follows:

"By the New Economy, we mean two broad trends that have been under way for several years. The first is the globalization of business. Simple put capitalism is spreading around the world – if not full-blown capitalism, at least the introduction of market forces, freer trader, and widespread deregulation….

"The second trend is the revolution in informational technology. This one is all around us – fax machines, cellular phones, personal computers, modems, the Internet. This digital technology is creating new companies and new industries before our eyes … In Silicon Valley alone, 11 new companies are created every week … Last year on average, a Silicon Valley company went public every five days, minting dozens of new millionaires in the process ….

"All this entrepreneurial is transforming Corporate America. You can argue about whether there is a New Economy, but there sure as hell is a new business cycle ….

"These two broad trends, globalization and information technology, are undermining the old order, forcing business to restructure… The result: a radical restructuring than is making us more efficient ….

"These trends can combine in powerful ways to raise American' standard of living, create jobs, spur entrepreneurial effort – and do all this without boosting inflation."

Clearly, in Shepard's opinion, the two central elements of the "new economy" are globalization and the technological revolution in information, which, according to him, have allowed for a profound restructuring of the economy, changing the economic cycle. In his view, this ensures lasting growth with increasing employment, better living standards and controlled inflation.

Alan Greenspan (2000, p. 1), president of the FED, puts forward similar ideas:

“More recently, however, it has become increasingly difficult to deny that something profoundly different from the typical postwar business cycle has emerged. Not only is the expansion reaching record length, but it is doing so with far stronger-than-expected economic growth. Most remarkably, inflation has remained subdued in the face of labor markets tighter than any we have experienced in a generation”

Seen in perspective, says Greenspan (2001, p.1), “American economy was experiencing a once-in-a-century acceleration of innovation, which propelled forward productivity, output, corporate profits, and stock prices at a pace not seen in generations, if ever”

According to Greenspan, the new technological revolution is centered in information, in telecommunications, and outstandingly in the emergence of the Internet. The essence of this revolution is that it lies “in the roots of productivity and economic growth”. Just like the other scientific-technical revolutions of the past, he considers that its economic results are just barely being felt and that its main fruits will be seen in coming years. New technologies have spurred the emergence of new firms and at the same time caused the revolution in financial activities and their increasing globalization.

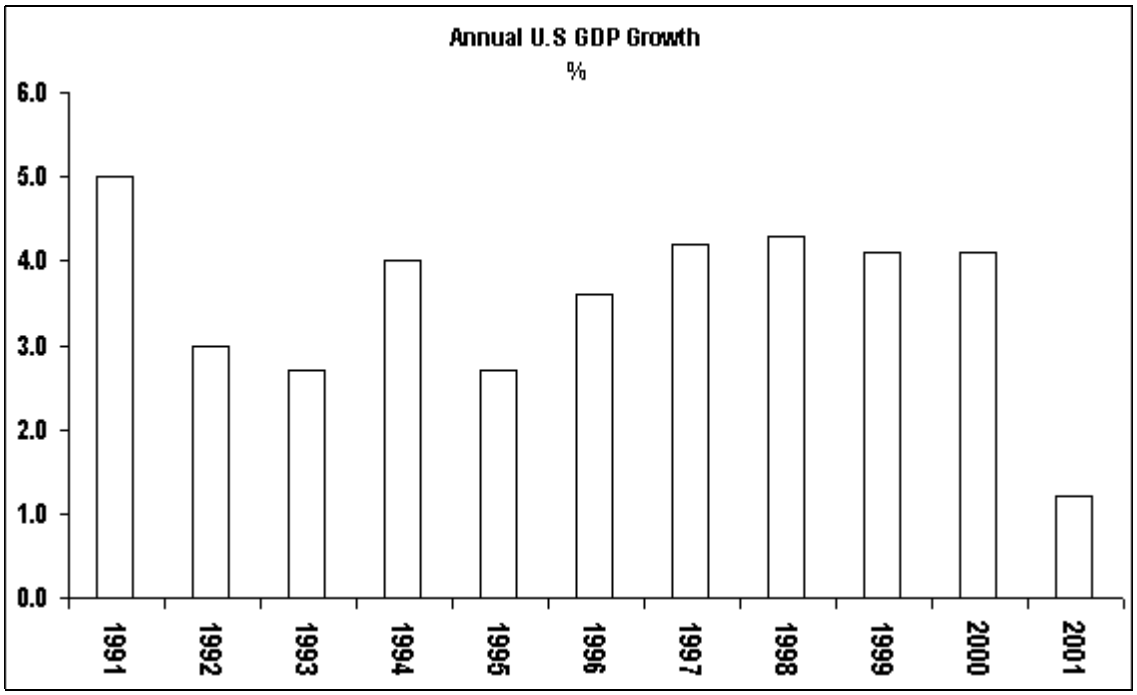
2. Myth and Reality in the New Economy

It is true that the revolution in information technology is transcendental today and that it is an important factor in the globalization of production and markets. It is also true that the changes this sector and others like bio-technology and

pharmaceuticals are going through have not concluded and will continue, as Greenspan observes, in the future.

What is more difficult to accept is that these transformations are as far-reaching as their defenders say and that the current technological revolution is equivalent to the late eighteenth-century Industrial Revolution or the technological revolution of the late nineteenth century, which later made it possible to move to the post-war Fordist mode of accumulation (Aglietta, 1976). The idea that a “new economy” has been created that is different from the “old” one, immune to crises or less susceptible to them also seems indefensible, much less that its existence ensures sustained growth of the world economy. On the other hand, empirical evidence shows that neo-liberal globalization is far from possessing all the dynamic, stabilizing virtues that its most ardent proponents attribute to it, as can be seen in the 1994-1995 Mexican crisis, the 1997-1998 Asian crisis and their repercussions in Russia, Brazil and Argentina.

From 1992 to 2000, the U.S. economy did, in effect, achieve a relatively high growth rate in a framework of price stability (graph 1). In that period, average real GDP growth was 3.4 percent, certainly a higher figure than the 2 percent achieved in the previous two decades, but not as spectacular as the “new economy” discourse purports. The open unemployment rate dropped from 6.7 percent at the end of the 1990-1991 recession to 3.9 percent at the highest point of the expansion (2000). The gross investment rate increased throughout the last decade from 9 percent of GDP to 15 percent.



Source: US Census Bureau. Statiscal of the United States, BEA.

As has already been mentioned, for the defenders of the "new economy", the U.S. economy's faster growth is the result of the revolution in productivity. However, it is not as marked as they say. In effect, in the years from 1990 to 1995, the annual growth rate of productivity in the non-agricultural sector was 1.26 percent below the 2.8 percent rate achieved in 1960-1974 and similar to the weak growth of the 1978-1989 period (see table 1). It is true that during the last years of the boom, linked to market euphoria, the rhythm of productivity increase accelerated to 3.16 percent in 1996-1998. However, even though productivity sped up, there do not seem to be solid arguments to sustain that it is a long-term trend and not, as seems to be the case, a cyclical phenomenon that tends to wear itself out as the de-acceleration advances and the unsustainable levels of investments plummet.

TABLE 1

Growth of Labor Productivity in the U.S. Entrepreneurial Sector

1960-1974	1978-1989	1990-1995	1996-1998
2.80	1.27	1.26	3.16

Source: Bureau of Economic Analysis

In any case, regardless of the figures, the information-computer technological revolution is far from being comparable with previous technological revolutions. The eighteenth-century Industrial Revolution associated with the steam engine and mechanized looms was a foundational feature of capitalism. In that sense, it cannot be repeated.

And, the technological revolution of the late nineteenth and early twentieth centuries had an impact on productivity and the population's living standards that far surpasses the current effects of the information-computer revolution. It was a longer lasting process that affected entire productive systems, allowing for a very important change in the well-being of the population (Gordon, 2000). The main transformations of the period were the harnessing of electricity; the introduction of running water and drainage systems in homes; the internal combustion engine and its collateral effects linked to the creation of suburbs, the development of highways and the emergence of supermarkets and large commercial stores; the production of oil and natural gas; the development of the chemical and petrochemical industries and their resulting creation of new materials and the transformation of pharmaceuticals and the increase in life expectancy; the revolution in the communications media and entertainment through the telegraph, the telephone, the phonograph, photography, radio, cinema and television.

As Gordon says (2002, p. 72),

“Internet surfing may be fun even informational, but it represents a far smaller increment in the standard of living than achieved by the extension of day into night achieved by electric light , the revolution in factory efficiency achieved by the electric motor, the flexibility and freedom achieved by the automobile, the saving of time and shrinking of the globe achieved by the airplane, the new materials achieved by the chemical industry, the first sense of live two-way communication achieved by the telephone, the arrival of live news and entertainment into the family parlor achieved by radio and then television, and the enormous improvements in the life expectancy, health, and comfort achieved by urban sanitation and indoor plumbing”

Despite the importance of the computer and telecommunications sector and its rapid growth, it represented only 9.1 percent of the U.S. economy in 1998 (Nordhaus, 2001); its contribution to GDP growth is only 0.3 percent a year (Artus, 2001).

One of the main problems of the information-computer revolution is that, in contrast with previous technological revolutions, it does not have a clear impact on the production of tangible goods. Most of computer technology stock is concentrated in unproductive activities, particularly in the service sector (Roach, 1998). According to U.S. Department of Commerce data, 82 percent of the total computer technology stock is in services (commerce, finance, telecommunications, etc.).

Because of its very rapid obsolescence linked to constant technological transformation, computer technology absorbs increasing sums in companies’ investment programs. In other words, they are techniques that increase capital density. However, despite its high cost, this new technology has still not been able to revolutionize industrial and agricultural production processes, at least to the

degree that the defenders of the “new economy” think it has. Gordon comes to a similar conclusion (2000, p. 50):

“The productivity revival appears to have occurred primarily within the production of computer hardware, peripherals, and telecommunications equipment, with substantial spillover to the 12 percent of the economy involved in manufacturing durable goods. However, in the remaining 88 percent of the economy, the New Economy’s effects on productivity growth are surprisingly absent, and capital deepening has been remarkably unproductive. Moreover, it is quite plausible than the greatest benefits of computers lie in a decade o more in the past, not in the future.”

According to the last part of this quote, the main effects of computers on the productivity of labor are to be found in the past and not in the future, as Greenspan and other authors think.

In my opinion, the hypothesis of the productivity revolution based on the “new economy” has three basic weaknesses:

a) It ignores or minimizes factors other than the use of information technology that have had an impact on the recent growth of labor productivity.
b) It leaves to one side structural and circumstantial non-increased-productivity factors which favor a rapid growth of the U.S. economy and inflation control.
c) It does not take into consideration the disruptive, destabilizing effects of financial globalization.

As Roach (1998) says, there are reasons to believe that a large part of the improvement in productivity should be attributed to factors other than the use of new technologies.

The first factor that has had an impact on productivity is corporate downsizing of personnel, a constant practice throughout the 1990s. From 1990 to 1997, the average annual number of jobs eliminated by downsizing was nearly 450,000. This means that in a period of expansion, the reduction of the number of employees was a factor as or more important in increasing productivity and profit margins as the use of new technologies.

The second factor is a substantial increase in the work day. A longer work day is associated with information technology, but is different from its direct impact on production. I refer to an extension of the work day facilitated by the proliferation of laptops, cellular phones, beepers, fax machines, etc., as well as the use of Internet, which allows the "leisure time" of workers and executives to be used as extra work time. According to a Harris poll, the average number of hours worked in the United States increased from 40.6 in 1973 to 50.8 in 1997. Due to globalization, this is occurring in many other countries. The lengthening of the work day, the acceptance by workers to labor a higher number of hours, is also associated to the relative stagnation of real wages and uncertainty about their ability to keep their jobs.

The role of new technologies is overestimated not only in the case of the growth in labor productivity and the economy, but also in their credit for controlling inflation. Greater economic growth and price declines in the United States were closely linked to other phenomena like:

- The over-valuing of the dollar that accompanied the expansion and permitted cheap imports.
- A world deflationary context associated to Japan's decade-long crisis, as well as the effects of the 1994-1995 Mexican crisis and the 1997-1998 Asian crisis (with their Russian and Brazilian spin-offs). One of the results of these crises was the persistent deterioration of the terms of exchange, which has

made for cheap raw materials (including energy) and food for the United States and developed countries in general.

- Economic growth was based on the expansion of private consumption. Consumption grew in this period at a higher rate than available income. This was possible because of the rapid growth in consumer credit through credit cards, mortgages and other forms of credit, as well as pension funds' "rent effect" and investment in the financial sphere during the long stock market boom. Consumers stopped saving and became net debtors (Parguez, 2001). Private sector net savings went from a positive 5 percent of GDP in the early 1990s to a 6 percent deficit in 2000.

3. New Economy and Regimen of Accumulation

The hypothesis of the "new economy" considers financial globalization an irreversible phenomenon linked to the new information technology, whose impact in the economy's functioning is highly favorable. In reality, from the mid-1980s, with the liberalization and financial deregulation undertaken by states, a new finance-dominated mode of accumulation has taken shape (Chesnais, 2000), increasing the financial fragility of "domestic" financial systems and the international monetary and financial system.

Among others, the main characteristics of this regime are the dominance of non-banking financial societies (pension funds, mutual funds, insurance companies, etc.) and a weakening of commercial banks that must compete in disadvantageous conditions with non-banking financial intermediaries (the so-called "non-bank banks") for deposits, which is translated into a process of banking de-intermediation.

Perhaps the most significant change involved in this new mode of accumulation is that it profoundly changed the ways corporations function. They have been

operating within a fundamentally financial logic. Company profitability and their executives' incomes (stock options) begin to depend not so much on their productive internal strength but increasingly on the value of their stocks on the market. The institutional investors' judgment on the financial market becomes the main barometer of corporate performance. The mergers and acquisitions that were rife in the last decade were decided on not so much because of corporations' productive or commercial potential, but mainly as a function of their impact on stock prices. Mergers were a powerful lever for fostering the stock market boom of the 1990s. This new functioning, together with deregulation, is at the bottom of the financial scandals and cases of accounting fraud that have tainted many multinationals in the beginning of the new millennium.

In other words, in the new mode of accumulation, it is the priorities of financial capital, capital injected into financial markets for speculative purposes, and not those of industrial capital, which order and determine the movement of capital accumulation as a whole (Chesnais, 2000).

This new mode of accumulation increases financial fragility, as can be seen in the series of banking and financial crises throughout the world from the 1990s on. This is not a context favorable to the productive revolution expected of the "new economy".

The 2000-2001 U.S. recession, as well as the current slow rate of growth, corporate financial scandals and the latent risks of a systemic financial crisis in the United States, point to the difficulties the world economy is facing if it continues to follow the guidelines of deregulation and neo-liberal globalization.

4. Conclusions

The information-computer revolution together with bio-technology and other contemporary technological transformations is a transcendental phenomenon, whose results will continue to be seen in the future. However, its current effects on

the economy's functioning are overestimated by "new economy" spokespersons. The main problem with information technologies is that, up until now, they have not had a direct impact on the productive sectors of the economy; this impact has been limited particularly to commerce, services and finance.

On the other hand, the technological transformations have occurred in the framework of a highly unstable new finance-dominated mode of accumulation, as can be seen in the series of financial and banking crises (with high social and growth costs) in the 1990s, the collapse of Wall Street and the U.S. economy's slow rhythm of growth. The interests of finance capital, mainly Anglo-American, dominate this new mode of accumulation. This capital commands the process of capital accumulation as a whole. The dominant financial regime radically changes the way companies operate and their decisions begin to depend on the behavior of financial markets.

The U.S. economy's recession was determined by the drop in the effective, expected profit margins in a context of uncertainty provoked by the stock market collapse and the decline in investment. The drop in profits was linked with the type of production techniques used by the new economy: capital-intensive techniques that cause an increase in the capital-output ratio since the increase in capital expenditures is higher than the increase in the productivity of labor in the economy's productive sectors.

The drop in effective profits and in the expectations of profits is associated with fragile financial conditions, characterized by stock market speculation, accelerated debt of households, corporations and financial institutions, and the proliferation of financial derivative instruments and other high-risk instruments.

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