

The New Landscape of Globalization:
How America Can Reap Its Rewards and Reduce Its Costs

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NDN Globalization Initiative

June 20, 2007



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Executive Summary

In this paper, Dr. Robert Shapiro, NDN's Globalization Initiative Director, presents a new analysis of the fundamental dynamics of globalization and how they affect U.S. growth, productivity, wages and job creation. He notes, "We live in a new period in our economic development, shaped by the demands of globalization and new technologies. So far, American businesses and workers have adapted quickly and well to these forces, and as a result, the United States has experienced stronger growth and productivity gains than any other large, advanced nation. These same factors also have serious adverse effects for millions of Americans. Even as growth and productivity have surged, new job creation and wage increases both have slowed sharply. We can address these adverse effects without sacrificing the benefits of globalization and technological advance, principally by expanding public investments in critical areas and reforming health care and energy policies."

Dr. Shapiro makes three principal recommendations to policymakers looking to restore broad-based prosperity in America.

Modernize our Health Care and Energy Policies – Reduce pressures on workers' wages and jobs through health care reforms that reduce the rate of increase in employers' and workers' medical insurance costs, and energy reforms that reduce upward pressures on energy prices and U.S. dependence on foreign energy.

Invest in our Workers and Kids – Enact a comprehensive new strategy to better ensure the life success of every worker and child in the 21st century; focus significant new investment on giving all Americans the skills and knowledge needed to work productively in the emerging idea-based economy; initiate a new national commitment to provide all Americans deep training in information technologies and ubiquitous and inexpensive access to the evolving global communications network itself.

Foster and Accelerate Innovation – Foster technological and business innovation and their spread throughout the economy by promoting the formation of new businesses, increasing support for basic research and development, upgrading our infrastructure and aggressively protecting American intellectual property rights in foreign markets.

About NDN's Globalization Initiative

NDN recently announced a major expansion of its path-breaking Globalization Initiative. This new expansion will allow NDN to dramatically increase its work in shaping one of the most important debates in American politics today – how to best make globalization work for all Americans. NDN's Globalization Initiative will include the Bernard Schwartz Forums on Economic Policy; the next series of papers in NDN's 21st century skills series; and opportunities to engage leading policymakers, Members of Congress, and Presidential candidates in the debate on globalization.

For additional information on NDN's Globalization Initiative, please visit our website at www.ndn.org. Comments on this paper or the globalization debate may be submitted to our blog at allamericans@ndn.org.

***The New Landscape of Globalization:
How America Can Reap Its Rewards and Reduce Its Costs*¹**

Robert J. Shapiro

We live today in a new period in economic development, one shaped by the demands of globalization and new technologies. So far, American businesses and workers have adapted quickly and well to these forces. As a result, the United States has generated stronger growth and productivity gains than any other large, advanced nation. These same factors, however, also produce some serious adverse effects for millions of working Americans. Even as growth and productivity have surged, new job creation and wage increases both have slowed sharply. The challenge for policymakers is to address these adverse effects without sacrificing the benefits of globalization and technological advance, principally by expanding public investments in critical areas and reforming health care and energy policies.

The United States Goes Global

Globalization is changing the basic conditions for every economy, and there is no going back. Over the last 15 years, the share of worldwide GDP that is traded across national borders increased from about 18 percent in 1990 to just under 30 percent today – the highest levels and largest increases ever recorded. In the United States, imports will likely reach \$2.4 trillion this year, more than the GDP of all but three other countries in the world. Moreover, the global exchanges occurring today are fundamentally different from what characterized international trade a generation ago. The companies that constitute the core of our own economy and many others operate through global networks based on technologies that enable them to break up the production of whatever they produce into dozens or hundreds of discrete parts, parcel them out to facilities in different countries, and then assemble and distribute them to scores of different markets. The other critical difference is that for the first time, there is one, genuine global economy, linking together not only the advanced countries of North America, Western Europe and Japan, but also the huge and fast-growing developing nations of Asia, the transition countries of the Russian Federation, Eastern and Central Europe, and even the lagging economies of Latin America and struggling nations in Africa.

The first and greatest impact of these developments has been felt in some of the poorest and largest places on earth, which have moved from economic outsiders to global players. In China and India, the number of people working in modern factories and offices has exploded, raising manufacturing wages by two- to three-fold in little more than a decade's time. Since those wages are still a lot lower than in most other places, the addition of hundreds of millions of Chinese and Indian workers to the global labor force has produced new pressures on jobs and incomes, especially in countries like Mexico and Malaysia that now compete directly with Chinese and Indian producers.

¹ This paper is adapted from *Futurecast: Three Forces Changing the Way We Live and Work*, to be published in 2008 by St. Martins Press.

For advanced economies as well, these developments offer enormous opportunities. Businesses most adept at building and operating global networks of suppliers, producers and distributors can take advantage of all of the cost savings and tap into all of the markets the world can provide.

In the last generation, the United States has become the most thoroughly globalized of the world's advanced economies, as its trade and investment flows have both risen sharply and been distributed widely across developing and industrialized nations. This represents a major break for American businesses. From the early years of the 20th century to its last two decades, the United States was singularly self-sufficient economically. While Europe's economies were too small to produce everything each country needed, and their proximity to each other allowed them to trade among themselves relatively inexpensively, the United States faced oceans separating it from most markets and so instead developed its own vast, national market. For nearly a century, America sustained its place as the world's largest economy by using its own natural resources and its own technological and human capacities to produce just about anything its businesses and people needed or wanted. Through the 1960s, all U.S. trade – the total of the nation's imports plus its exports – still equaled just 10 percent of our country's GDP, while the value of everything traded by French, Italian and British firms equaled between 28 percent and 42 percent of their GDPs.²

Today, America is still much less dependent on foreign trade than other advanced countries. In 2005, our imports and exports equaled 25 percent of GDP, compared to 56 percent for the major European nations.³ Even so, the United States is the world's most global economy and better positioned to prosper in the future. This view differs sharply from what might be called the "Chicken Little" view of America's place in the global economy, which sees the United States as essentially weak in trade and heading into decline. This view is wrong; and insofar as our officials buy into it, they could weaken the country's economic prospects.

The fact is, no country can do well economically today without a solid economic presence in the world's fastest-growing developing countries as well as in the major industrialized nations. Here, we find one of the most striking and important economic contrasts in the world today. In 2004, more than 44 percent of all U.S. exports went to the developing nations driving much of the world's growth and integration, and those same nations provided more than 50 percent of U.S. imports.⁴ By contrast, the nations in the EU-15 have continued to hold most of the rest of the world at arm's length, selling less than 15 percent of their exports to developing markets and buying just about 20 percent of their imports from developing nations.⁵ Instead, almost three-fourths of EU exports go to other EU countries, and more than two-thirds of EU imports come from other EU countries.

² World Bank, World Development Indicators, 2006.

³ *Ibid.*

⁴ U.S. Department of Commerce, International Trade Administration data, 2006.

⁵ World Trade Organization data, 2006., http://www.wto.org/english/res_e/statis_e/statis_e.htm.

Underneath America's more extended global network of imports and exports, U.S. companies also have much greater presence in the world's developing economies. From 1995 to 2003, about 28 percent of all foreign direct investment from the United States went to developing nations – two to four times the developing-nation share of the foreign investments coming out of Germany, France and Britain.⁶ Among advanced economies, only Japan focuses its foreign investment on developing markets as much as the United States. As a result, 47 percent of all U.S. merchandise imports come from subsidiaries owned wholly or partly by American companies, including 58 percent of those imports from Mexico and South Korea, as well as an astonishing 79 percent of our merchandise imports from Japan and 60 percent of those from Great Britain.⁷

The stark differences in foreign direct investment patterns between the United States and most other advanced countries extends to the most important developing economy and emerging market, China. In 2003 (the most recent international data), direct investments in China by American companies were 10 to 20 times as great as those of any European country; and as a share of all their foreign direct investments, American companies commit two-to-four times as much to the Chinese market as German, French or British companies.⁸ Already, 25 percent of our imports from China come from Chinese subsidiaries of U.S. firms. As China's economy and those of other fast-developing nations expand and mature over the next decade, the western companies with the largest and firmest footholds there also will be in strongest positions to tap these growing markets and benefit from their progress

Given America's trading position just forty years ago, this embrace of globalization is remarkable. By all the evidence, America's companies have adapted more successfully as global economic conditions have changed. There are many ways to understand why this is happening. Americans may be more comfortable operating globally, because our country is more ethnically and culturally diverse. U.S. companies also have less choice about adapting quickly and thoroughly, since domestic competition is more intense here than in Europe or Japan. American companies certainly face fewer legal and regulatory barriers in adapting to new conditions. Whatever the explanation, the American economy has been changing in ways that create real and growing advantages for a period of globalization.

The U.S. Economy and Its Strong Suits

A number of other measures also point to important underlying strengths in the American economy. Employing those who want to work is a traditional test and, compared to other advanced economies, one in which America remains strong. Over the last decade, the average share of our labor force looking for work but unable to find it – about 5 percent at any time – has been about one-fifth lower than in Britain, two-fifths lower than in

⁶ United Nations Conference on Trade and Development (UNCTD), 2006.

⁷ U.S. Census Bureau, "U.S. Goods Trade: Imports and Exports by Related Parties: 2006," May 10, 2007.

⁸ United Nations Conference on Trade and Development (UNCTD), 2006.

Germany, and half the share in France and Italy.⁹ Only Japan has had consistently lower unemployment than the United States. When Americans lose their jobs, they also usually find new ones a lot faster. Over the last ten years, about 80 percent of unemployed Americans found new jobs within six months, compared to 60 percent of jobless Britons and only about one-third of unemployed Germans and French. Americans with jobs also work 10 to 25 percent more hours in a year than the people in other advanced countries (except Japan). Shorter hours may seem appealing, but the difference is one of the reasons why most Europeans earn less and their economies produce less, *per capita*.

In these times, a country's ability to develop and use advanced information technologies is nearly as important for its economic health as its capacity to keep its people employed. This, too, is an area of comparative American strength. Over the last decade, a number of nations have successfully made computers and the Internet integral parts of the way they conduct their business and personal lives. Yet with the exception of the United States, all of them are small countries – Sweden, Finland and Denmark, Singapore, Hong Kong and South Korea, Bermuda and Australia – that deliberately set about to do that. Despite America's vast size, deep economic inequalities, an economy with thousands of sub-sectors and a stupefying variety of businesses of every sort, and no national policy or funding to support the spread of these technologies, in 2004 it had more than 76 PCs for every 100 inhabitants, and 63 percent of its population used the Internet.¹⁰ No other large, diverse economy has come close on both measures.

In the race to lead global innovation, what matters is how much is invested in research and development, and how well the country's economy commercializes and uses what comes out of it. Here, the United States also has broad and growing advantages. In 2003, the United States spent nearly \$300 billion on R&D, compared to \$210 billion by all of Europe, barely \$100 billion by Japan, and less than \$80 billion by China – and the gap in 2003 was larger than it had been in 1990 or 1995.¹¹ That's one reason why U.S. inventors and companies have early leads in many promising areas of biotechnology and nanotechnology, including genetically-modified food, personalized medicines, filtration systems for highly-polluted water, and advances in solar energy technologies. America's early leads in these areas may not ultimately matter, since no one can say which of these or other emerging technologies will have far-reaching economic value and effects. But if any of them strike gold, it is more likely to happen in the United States, with so much more annual R&D, so many more research universities and young companies coming up with technology breakthroughs, and private equity investors placing more than \$20 billion a year in long-shot bets on infant technologies.¹²

Given these advantages, it should be unsurprising that the National Science Foundation reports that American companies over the last generation have vastly increased their worldwide lead in the manufacture of high-technology products. Less than 20 years

⁹ The OECD takes all the jobs statistics from around the world and applies standard definitions. OECD Employment Outlook 2005.

¹⁰ International Telecommunications Union, 2006.

¹¹ National Science Board, Science and Engineering Indicators, 2006.

¹² Money Tree Report, 2006, PricewaterhouseCoopers and the National Venture Capital Association.

ago, Europe, Japan and America each claimed a little more than 25 percent of the world market share in this area; by 2003, the U.S. share had reached almost 40 percent, while Europe fell to about 18 percent, and Japan had just about 10 percent.¹³ If the United States can maintain this lead, globalization will increase its significance. American hardware, software and Internet companies will have a leg up as China and India go increasingly digital. In 2004, India had barely one PC for every 100 Indians and just 3 percent of its population was online, while China had about 4 PCs for every 100 Chinese and just a little over 7 percent of its people used the Internet. By 2020, China should be as digital and wired as most European countries today, and India also will make substantial strides. American companies will provide much of what will then be the latest generation of these technologies – even if much of it is produced by foreign subsidiaries and affiliates – as well as the IT services that will accompany their spread.

America's greatest advantage in advanced technologies lies not in their development and spread, but in how Americans use them. A succession of American and European studies have found that how much a company or a country spends on IT makes little difference in how productive they become. Over the last decade, European businesses invested nearly as much in IT as U.S. firms, relative to the size of their economies. Yet, the productivity of the industries that spent the most on these technologies increased by 3 to 4 percent a year in the United States, compared to no change at all or even slight declines in Europe.¹⁴

The fact is that the productivity gap between the United States and Europe and Japan has increased steadily for more than a decade, pointing to America's single, most important economic advantage at a time for rapid globalization: basic competition is more intense inside the U.S. economy. Japan and Europe's large countries still maintain regulatory walls around much of their retail, wholesale, financial, business and personal service sectors, so they are still dominated by millions of inefficient, small companies with little incentive to change almost anything. America's more bare-knuckled competition at almost every level and aspect of its economy makes its workers and companies less secure, especially in a time of galloping globalization and technological progress. It also forces companies and workers to change all the time, by using the latest technologies and business practices to improve something they make or do, or come up with new products, processes and ways of doing business.

The Hidden Costs of Globalization

Globalization and technology also are changing the character and needs of the businesses where most Americans work in another critical way. For centuries, large national and international companies focused on securing the basic resources of capital and labor at the lowest price. Globalization, however, makes labor and capital more easily and

¹³ National Science Board, "Science and Engineering Indicators," 2006.

¹⁴ Raffaella Sadun and John Van Reenen, "Intellectual property, technology and productivity: It ain't what you do it's the way you do I.T." EDS Innovation Research Programme, Discussion Paper No. 002. October 2005.

relatively cheaply available as global companies tap into the labor forces of large developing countries and global capital markets give U.S. business access to the world's savings for their investments. At the same time, new technologies have vastly expanded our capacities to manage and use information and ideas. The result is that modern businesses have shifted much of their focus from securing capital and labor, to creating and managing ideas and information.

The “idea-based” economy has gone from metaphor to concrete reality. Since the mid-1990s, U.S. companies have invested as much in intangibles – the formal intellectual property of patents and trademarks, as well as databases, branding, organizational changes and the training or human capital to use these ideas – as in all physical assets. These intangibles also have become the most important factor determining a business's market value. Twenty years ago, the value of the physical assets of the top 150 U.S. public companies – what those assets could be sold for, on the open market – accounted for 75 percent of the total value of their stocks. By 2004, the book value of the top 150 corporations accounted for just 36 percent of the total value of their shares. Today, nearly two-thirds of the value of large companies comes from what they know and the ideas and relationships they own.

As globalization and technology shift the strategic focus of modern businesses from labor and capital to information and knowledge, the implications for everyone who works for a living are enormous. Those people who create ideas and information – innovators – reap very large rewards. Those who can perform well in a business environment increasingly shaped by information technologies and streams of data also will prosper, whether they are in basic manufacturing, personal services or high finance. A teenager who can use the inventory control program of a fast-food restaurant or easily operate the computer-controlled cash register will earn more than a friend who only can flip burgers.

While globalization and technological advance clearly benefit the overall American economy, not everyone today gains. America's corporations clearly benefit, judging by their record profits in recent years. High corporate profits also benefit shareholders, who directly and indirectly include nearly half of all Americans – roughly 40 percent of U.S. stocks are now held by private pension and personal retirement plans.¹⁵ Moreover, all the imports coming from developing countries as well as other advanced countries help most Americans by stretching their wages further and vastly expanding their consumer choices.

But globalization also has had a nasty surprise for working people in America, as well as Europe and Japan. It begins with the most basic force in modern globalization, the waves of technology, investment and expertise that have gone to China, and to a lesser extent India, from companies in America, Japan and Europe. The labels of everything we use are silent testimony to the results: Chinese companies, many owned by U.S. corporations, now produce many sophisticated standard goods, from laptops and

¹⁵ As America's population continues to age, those profits will help support the retirement of tens of millions of elderly people -- and thereby also help support the overall domestic demand that helps create the jobs whose wages are rising only very slowly.

semiconductors to video games. They also still make thousands of less sophisticated things that they've been producing for decades, from steel and concrete to furniture and toys – and thanks to all the transfers from companies based in more economically-advanced places, they're producing them much in greater quantities and with higher quality.

The World Bank reports that China's merchandise exports soared more than 1,100 percent in the last 15 years, shooting up from \$62 billion in 1990 to \$762 billion in 2005 (in constant dollars, they're still up 970 percent). And they're still growing by 20 to 25 percent a year. At those levels, China's exports swamp those of its manufacturing rivals in other developing countries – they are almost two-thirds more than all the rest of East Asia, including five times that of Malaysia, six times that of Thailand, and eight times that of Indonesia. Chinese manufacturing exports are also three times those of Mexico, more than six times those of Brazil, and almost 30 percent greater than all of Latin America and the Caribbean nations.

Size alone matters here. Chinese companies, both domestic and foreign-owned, armed with technologies and business methods comparable to or better than those used by producers in scores of other developing countries, can now produce much of what their rivals in Thailand, Mexico or Malaysia have been exporting – and do it in much larger quantities and at lower cost. China's modernization and globalization produce waves of new competitive pressures for scores of industries in dozens of other developing economies. The good news for them is that the fast-growing demand for skilled Chinese labor is pushing up Chinese wages. But it will take years before Chinese wages catch up with those in Thailand and Mexico, much less Korea and Taiwan. In the meantime, Chinese businesses are squeezing these companies in these countries out of many industries and markets. But that's not the end of it, because other developing economies adapt to those pressures shifting to other industries – which then increases the competitive pressures on more developed economies. This process is repeated, from industry to industry and country to country, until those pressures reach businesses and workers in the United States.

Here's how it happens. Zhejiang Linhai Guohai Forging Co., a Chinese manufacturer of forged metal parts, expands its production of automobile and motorcycle parts, at prices that undercut producers in Mexico and Thailand, while Dongguan Sunpower Enterprise, Ltd, a large producer of hotel furniture, and the Chinese subsidiary of Perry Ellis International ramp up their operations and undercut rival producers in Malaysia and Egypt. As customers in Munich, Seattle and Seoul learn about it, some less productive makers of metal parts, hotel furniture and apparel in Mexico, Thailand, Malaysia and Egypt are squeezed out of business – and capital and expertise in those countries shifts a bit from those industries. It migrates either down the value scale to agriculture or other commodities, or up that scale to, say, basic electronics or more sophisticated equipment. In either case, the infusion of capital and expertise makes those industries in Mexico, Thailand, Malaysia or Egypt a little more competitive. When the resources shift down the value chain, the result squeezes producers in poorer countries. When it shifts up to more advanced products, the additional capital and expertise for Mexican and Thai electronics manufacturers or Malaysian and Egyptian equipment makers puts new pressures on rival producers in those industries in, say, Korea and Brazil. This process repeats itself, and

capital and expertise shifts a bit in those economies as well, often up the value chain again to, say, LCD makers in Korea and auto producers in Brazil. This time, the new competitive pressures may begin to squeeze LCD producers in Germany and auto makers in the United States.

China's manufacturing sector is so big and diversified that its fast-growing exports are intensifying competition across scores of industries in dozens of countries, ultimately ratcheting up competitive pressures everywhere in the world that is connected through global capital markets and trade. When those competitive pressures finally reach America, they have the same impact as increased competition has in any advanced economy: it makes it harder for companies to raise their prices. For the last several years, thousands of companies in the United States (along with Europe and Japan) have found that they have, as economists put it, less "pricing leverage." But what happens in companies with little pricing leverage when their costs go up? In the United States, the health insurance and energy costs of business have risen by more than 70 percent since 2001, and pension costs for many of them have gone up sharply as well. When a firm's costs increase and competitive pressures prevent it from raising its prices enough to cover those cost increases, it finds other costs to cut. In recent years, most of them have turned to jobs and wages.

This squeeze on the ability of companies to raise their prices when their costs increase is rapidly changing two basic economic dynamics in the American economy. First, it changes the relationship between how fast the economy grows and how many jobs we create. The first evidence came in the 2001 recession, when job losses relative to the actual decline in economic growth were six times greater than in previous postwar recessions. It didn't stop there. Once the recovery took hold, it took four years to get back to pre-recession job levels, compared to 18 months in the previous recovery. Five years into the current American expansion, job creation was still running at half the rate of the preceding expansion. Despite this unprecedented slowdown in U.S. job creation, the official unemployment rate has remained low, only because the number of working age Americans looking for jobs has declined even as the economy has grown.

In much the same way, globalization is weakening the long-standing connection between increases in the productivity of workers and the wages they earn. Since 2001, labor productivity in the United States has grown, on average, by more than 3 percent a year. That's the best U.S. performance in decades. Yet, for the first time on record, the average real wages of American workers declined through five years of strong productivity growth. Even counting the value of the employer-paid health insurance and pension contributions whose costs have gone up so much, the average American worker's total compensation has increased little despite the five years of strong productivity gains. Andy Stern, the leader of the Service Employees International Union, recently put it this way:

The challenge in America is not to stop globalization. The real question is how, in the long term, can the jobs that remain in America become decent-paying jobs ... If we don't find [the answer], then Alan Greenspan is going to be proved right – the gap between the rich and the rest of the population

is growing so wide and so fast that it's going to threaten democratic capitalism.¹⁶

These effects are not limited to the United States. Across most of Europe and Japan, job creation has been weak even by their standards, and wages have declined or stagnated.

These new pressures on jobs and wages will grow even stronger in coming years. The competitive pressures emanating from China are not going away. China's exports should continue to grow by leaps until at least the next global recession – which will also cost jobs and reduce wages in America, Europe and Japan. And in the last six months, our economy has slowed sharply. Looking down the road, as China's lightning economic development continues to push up wages and other costs there in coming years, it should ease some of the initial pressures on rivals in other developing countries. However, India's large and fast-developing manufacturing sector, with wages today that are still a fraction of China's levels, may take its place in this new global process.

Where We Go from Here

We cannot entirely avoid these hidden costs of globalization, but we can outsmart and outrun them. There are many proposals to cushion their effects, through measures such as wage insurance. Those measures may help for a while, but by themselves they tacitly accept the underlying dynamics as inevitable and inalterable. A better approach focuses directly on affecting those dynamics. To begin, we will have to relieve some of the cost pressures on businesses which in the more intensely-competitive environment of globalization, hold down wages and job creation even as growth and productivity increase. Reforming our health care and energy practices, in short, is now the number one jobs and incomes issue, and one on which American workers and American businesses have real common cause. Both areas are already major public policy issues. Recognizing how the enormous increases in health care and energy costs of recent years directly and substantially affect wages and jobs should give greater sense of urgency to finally addressing both areas, in specific ways that will slow those increases.

In addition, we also should expand our public investments and other commitments in those areas in which American workers and businesses have advantages in the global economy. In an increasingly idea-based economy, the education of every American child should specifically include advanced skills in information technologies. Every child can and should have continuing access to a personal laptop computer in the school for 21st century instruction and at home for their homework. A recent proposal by Alec Ross of One Economy and NDN, "A Laptop in Every Backpack," is a sound and innovative start. Every worker in America also should have access to training in these technologies. Nearly half of our current workers cannot operate a basic computer, principally those workers with relatively few other skills. We can and should create a federal grant program for the country's 1,200 community colleges to use their existing computer labs and personnel to offer free computer training several nights a week to anyone who walks in and asks for it.

¹⁶ <http://www.seiu.org/docUploads/Andy%20Stern%20Introduction%20Booklet%2001312006%2Epdf>.

Finally, Congress should look at ways to give workers more and better tools to prosper in this more competitive world, such as portable pensions and the passage of the Employee Free Choice Act.

As global competition increases, we also can and should expand public investments in the factors that foster innovation and help all industries grow and become more efficient. The federal government has long supported the nation's infrastructure, basic research and development, and education and training, all of which are essential to creating new business and spreading technological innovation. In recent years, however, our commitments in these areas have contracted sharply. For example, new commuter rail systems in the nation's larger metropolitan areas can not only bring more workers to more jobs, but also help reduce congestion and dependence on fossil fuels and consequent production of greenhouse gases. In addition, greater support for basic R&D in nanotechnologies for energy and health care, and the human genome for health care, can help to develop new business and over time address some of the long-term cost pressures in health care and energy.

Serious commitment to basic health care and energy policy reforms and meaningful new investments in education, training, infrastructure and basic R&D will be costly, especially at the outset. In the meantime, we can finance these necessary investments in many ways. Wasteful spending in other areas, including tax and spending subsidies for some well-connected companies and industries, can be pared back. Recent tax cuts for very high-income individuals, whose incomes have soared as those of average people have stalled, also can be pared back. Given the economy's basic strengths in this period, such steps will not slow down or hamper its growth in any meaningful way.

There are sound reasons to be wary of deficit spending, especially the prospect of sharply-rising federal expenditures for retirement and Medicare benefits as the baby boom begins to retire just a few years from now. These concerns, however, need not preclude our undertaking these commitments and investments. They will create substantial dividends for both the economy and government revenues over time, by bolstering those specific economic areas where the United States either has real advantages or needs real change. In so doing, they should help generate stronger growth and higher incomes, producing the revenues needed to sustain them. In this sense, these commitments and investments will operate like a sound investment that a good business makes, and often borrows to finance.

In addition, globalization itself can reduce some of the traditional costs associated with budget deficits, especially for the United States. As recently as the 1980s and early 1990s, when global capital markets were smaller and less efficient than today, large deficits in a growing economy claimed domestic savings that otherwise would have gone for business investments. As capital markets have gone truly global, the sheer volume and variety of financial assets flowing through the world's economies have blunted those effects because productive American businesses have direct access to the world's savings.

For some time, global capital has been growing faster than world GDP, faster than global trade, and faster than worldwide saving.¹⁷ A fair estimate of the global capital pool today is more than \$150 trillion, more than three times world GDP and more than three its size less than 15 years ago.¹⁸ Moreover, the rate at which dollars, yen and euros move from one country to another (and often one currency to another) is accelerating even faster than their quantities, tripling in just the last 10 years and reaching more \$5 trillion a year in 2006.

The fact that global financial assets today are growing faster than global GDP is meaningful. Since these assets are claims on the future, this rapid growth signals that overall, the world's rich people and rich businesses that hold them most of them are bullish about the future – certainly more so than in 1980, when the world's financial assets were growing much more slowly and totaled just 10 percent more than world GDP.

The unprecedented size of both the global capital pool and capital flows from country to country ultimately reflect the new prosperity of much of the developing world, along with the revolution in information technologies. After the last 15 years of massive transfers of Western investment, technologies and expertise to many countries that had stagnated for decade or centuries – China, India, Malaysia, and Mexico, for instance – their businesses and people are amassing large amounts of new saving and wealth. Modern finance exchanges much of this wealth for corporate bonds, bank deposits, stocks and other kinds of financial assets – economists call this process “securitization” – so that much of this new prosperity ends up in local or national capital pools.

Information technologies play a special role in moving these local and national pools of financial assets into the global capital system, because most of these financial assets now exist in the form of the bytes created, stored and transmitted by those technologies. And no sector has more thoroughly globalized itself than banking and finance. These technologies allow them to not only link up and manage their global operations, but turn physical wealth into securities and financial deposits that unlike paper or gold, can move from account to account and country to country in a nanosecond with no shipping costs. So, while there are relatively limited numbers of businesses in Chile or Indonesia – or even China – that can profitably use all the capital they create and save, firms and wealthy people in Santiago, Jakarta and Shanghai can easily and seamlessly invest their profits and savings in companies in Raleigh, North Carolina and San Jose, California, or lend it to the U.S. government.

There is a cost: Our trade and budget deficits require that we tap into global savings to maintain our business investments, and the result is that a growing share of the U.S. economy and its assets are owned by non-Americans. At last count, 12 percent of all U.S. equities, 25 percent of all U.S. corporate bonds, and 44 percent of U.S. government securities. And the large U.S. current account deficit, comprised mainly of our trade

¹⁷ IMF, Statistical Tables, tables 4, 5, 8, 10, 14, 15, 18, 19.

¹⁸ McKinsey Global Institute, “\$118 trillion and Counting: Taking Account of Global Capital Markets,” <http://www.mckinsey.com/mgi/publications/gcm/index.asp>.

deficit, means that every year, we have to borrow hundreds of billions of dollars more from non-Americans. All that borrowing has depressed the value of the dollar, making it more expensive for American and U.S. businesses to invest abroad. It also raises the possibility of an eventual dollar crisis that would drive up U.S. interest rates.

These are all legitimate concerns, and we should take serious steps to increase our domestic savings. With global capital markets continuing to help finance business investment in the United States, these concerns need not delay the public investments and reforms required to better prepare Americans to live and prosper in an economy shaped by globalization and new technologies.

About the Author

Robert J. Shapiro is the chairman of the NDN Globalization Initiative. He is also chairman and co-founder of Sonecon, LLC, a private firm that advises U.S. and foreign businesses, governments and non-profit organizations on market conditions and economic policy. Dr. Shapiro has advised, among others, U.S. President Bill Clinton and British Prime Minister Tony Blair; private firms including MCI, Inc., New York Life Insurance Co., SLM Corporation, Google, Nordstjernan of Sweden, and Fujitsu of Japan; and non-profit organizations including the American Public Transportation Association, the Education Finance Council, and the U.S. Chamber of Commerce. He is also Senior Fellow of the Progressive Policy Institute (PPI) and a director of the Ax:son-Johnson Foundation in Sweden. From 1997 to 2001, he was Under Secretary of Commerce for Economic Affairs. Prior to that, he was co-founder and Vice President of PPI. Dr. Shapiro also served as the principal economic advisor to Bill Clinton in his 1991-1992 presidential campaign, senior economic advisor to Albert Gore, Jr. and John Kerry in their presidential campaigns, Legislative Director for Senator Daniel P. Moynihan, and Associate Editor of *U.S. News & World Report*. He has been a Fellow of Harvard University, the Brookings Institution and the National Bureau of Economic Research. He holds a Ph.D. from Harvard, as well as degrees from the University of Chicago and the London School of Economics.