

EXCERPTS FROM KEYNOTE REMARKS BY MICHAEL MILKEN

Russia's dynamic pace of change presents opportunities to those who study and understand the issues – which is the purpose of this important conference. As Charles Dickens observed, the best of times and the worst of times can coincide... and often do. It's a cycle of history.

An interesting book about financial markets I read last year contained this quote: "Real estate prices collapsed, credit dried up, house building stopped." Was this from 2008 or 2009? No, it was 1792, which was during the administration of George Washington in the United States and Catherine the Great in Russia.

Can you tell what year the following quote describes? "Stock markets dropped sharply. Banks curtailed lending. Widespread bankruptcies were predicted. Unemployment rose to double digits. Interest rates were volatile." Again, it sounds familiar today, but it wasn't 2008 or 2009. The year was 1974.

Live long enough and you begin to see cycles of history not only in theory but by personal experience, and you also begin to appreciate what remains constant. Amid all the changes since I first went to Wall Street 40 years ago, basic investing principles have not changed at all. Attractive opportunities still await those who do careful research; capital structure still matters; and the best investor is a social scientist. So today I'd like to talk about four ideas pertinent to any society at any time:

- The democratization of financial capital.
- The value of human capital.
- Capital structure and the nature of credit.
- The imperatives of education and medical science.

THE DEMOCRATIZATION OF FINANCIAL CAPITAL

During my first year at the University of California at Berkeley in 1964, my major course of study was math and science. But the following summer, the racially charged riots in the Los Angeles neighborhood of Watts changed my view of the world and my choice of what to study. I came to realize that the concept of civil rights is more than legal equality – it also means equal opportunity to pursue a dream of prosperity, which includes the chance to own and build a business. Many of the people in Watts felt excluded from this dream, this hope for prosperity.

That started me thinking about what it takes to start a company and make it prosper. I changed my major to business and began to develop a concept that would later be called the democratization of capital. It provides access to funding for small and medium-sized companies in much the same way that the U.S. financial system had served the needs of the few hundred big "investment-grade" companies.

For every company rated investment-grade, there are at least 10,000 non-investment-grade businesses. At any time in history, these kinds of smaller companies have the potential to

become the large enterprises of the future. Some people called such companies “junk,” because their debt didn’t carry a high-quality rating. But I never believed that. These are the businesses that create almost all new jobs. I’ve always believed that access to capital for entrepreneurial ventures should be based on ability, not who your parents were, your banking connections, your religion or your race.

Returning for my second year at Berkeley after the Los Angeles riots, and later at the University of Pennsylvania’s Wharton School, I developed a formula to explain the true components of prosperity. The formula,

$$P = \sum F t_i * (\sum H C_i + \sum S C_i + \sum R A_i)$$

says that prosperity in any society equals the effect of financial technologies acting as a multiplier on the total value of human capital, social capital, and the real assets – cash, receivables, land, buildings, etc. – typically found on balance sheets. Social capital includes educational, cultural, religious and medical institutions and such intangibles as enforceable property rights that provide crucial structure and incentives. Human capital – the largest, most-important asset – is the education, skills and productivity of people.

As for financial technology, much of it would be developed and expanded over the next two decades using tools such as collateralized loan and bond obligations and other instruments that freed businesses from dependence on any particular financial institution. The deployment of these financial techniques in the U.S. over the last quarter of the 20th century created unprecedented prosperity, not to mention 62 million new jobs in small and medium-sized businesses (even as the largest companies were *reducing* their workforces by four million). These innovations have stood the test of time through all kinds of markets. They’ve helped address the needs of societies everywhere. Today they can be part of the solution for environmental and energy challenges. They can even create incentives for crucial medical research. As financial technology is deployed around the world, it has the potential to reduce poverty and the kinds of tensions that breed terrorism.

But financial technology alone has little meaning unless there is underlying value. (If, for example, the structure of a loan lacks value, no amount of repackaging or changing its form will improve it. This fact was forgotten by some financial managers before the recent market downturn.) In order to create jobs and real prosperity, financial technology must act on the other factors in the equation; and none is more important than human capital.

THE VALUE OF HUMAN CAPITAL

Under current accounting standards, balance sheets do not show the most-valuable asset of any enterprise – human capital. In financing growing companies, we always looked at the quality of management, especially its vision and entrepreneurial drive. I saw this quality in executives like Bill McGowan of MCI, whose tiny company successfully took on the world’s largest company, AT&T, and changed telecommunications forever; in broadcast entrepreneur Ted Turner, who transformed news and cable networks (and created the Goodwill Games that brought Russia and America closer); in mobile-phone pioneer Craig McCaw, who helped create a major new industry that changed the world; in Steve Wynn, who revolutionized the hospitality industry; in Steve Ross, who created the world’s largest media company; and in hundreds of others. These talented leaders had passion, vision and the ability to execute a strategy. Once they had access to capital, they built businesses that

became engines of job creation and wealth. They are but a few examples of the value of human capital that exists everywhere.

Taking this principle to the national level, there are three primary ways a country builds human capital: one, by increasing knowledge through education; two, by improving public health so people live longer with a higher quality of life; and three, by providing incentives for immigration by highly qualified people. For example, among its many initiatives, the Russian government is encouraging former residents who left the country during earlier periods to return home.

Some nations have developed human capital more successfully than others. Consider the two former British colonies of Jamaica and Singapore. They're both islands with sub-tropical climates. Back when I was in school in the early 1960s, these nations had the same size population; and their economies were similar with gross domestic products of a little over US\$2,200 per person (in current dollars). But they chose different paths to development. Jamaica centered its economy on agriculture, mining and tourism and today has a per-capita GDP of about US\$5,300. Singapore, led by Lee Kwan Yew, developed its human and social capital and created a knowledge infrastructure. Today, Singapore is a technology powerhouse with a GDP of almost US\$39,000 per person.

In 1992, my good friend Gary Becker earned the Nobel Prize for his work showing that more than 75 percent of any nation's assets are to be found in the skills and productivity of its people. That is why I believe the 21st century will be defined by competition for human capital.

CAPITAL STRUCTURE AND THE NATURE OF CREDIT

The third area I want to discuss is capital structure and credit. Today's financial environment in many ways mirrors 1973-1977, when modern financial technologies were first deployed. The mid-1970s recession created unprecedented problems for financial institutions, which were dealing with their own weaknesses and the first oil shock. As a result, most banks were unable to meet their customers' financing needs. So companies turned to the capital markets, which offered an alternative through debt obligations and other securities. This allowed new forms of capital structure and assured economic expansion in the 1980s and beyond with reduced involvement by banks, whose role in financing corporate growth has shrunk ever since. Most companies are no longer dependent on any financial institution.

Properly applied and regulated, the market innovations of the 1970s disperse risk and create jobs. The disruption of the past two years was rooted in the continuing fallacy that all loans secured by real estate are investment-grade. In fact, most of these loans have never been high-quality. This fallacy has created multiple problems: unrealistic ratings that failed to reflect underlying credit risk; government encouragement of questionable investments; flawed underwriting practices; and deployment of excessive leverage.

Recently, just as in 1975-76, public and private markets provided capital that created the impetus for economic recovery. During both periods, the naysayers failed to recognize the power of these markets to pull us out of recession. In fact, companies have been able to raise more capital in the last 12 months than at any time in history. As the current recovery continues, companies with low capital costs will increasingly acquire those with higher costs and create investment opportunities. But if investors are to succeed in future markets, they

must avoid errors that prolong and deepen global downturns. This begins with an understanding of capital structure.

My belief – first stated 40 years ago – is that capital structure significantly affects both value and risk. The optimal capital structure evolves constantly, and successful corporate leaders must constantly consider several factors: the company and its management, industry dynamics, the state of capital markets, the economy, government regulation and social trends. When these factors indicate rising business risk, even a dollar of debt may be too much for some companies.

Over the past four decades, many companies have struggled with the wrong capital structures. During cycles of credit expansion, they have often failed to build enough liquidity to survive the inevitable contractions. Especially vulnerable are enterprises with volatile revenue streams that end up with too much debt during business slowdowns. It happened 40 years ago, it happened 20 years ago, and it's happening again.

In the late 1960s, many industries – including real estate, retail, airlines, aerospace, technology and conglomerates – became too leveraged. As the perceived risk of investing in such businesses grew in the 1970s, the price at which their debt securities traded fell sharply. But by using the capital markets to deleverage – by paying off these securities at lower, discounted prices through asset exchanges – most companies avoided default and saved jobs.

So here are six brief observations about credit:

1. Credit is what counts, not leverage. In recent years, many of the world's largest financial institutions were leveraged 30-to-one or even higher. That is simply not a business because at that level of leverage, no one is smart enough to withstand the volatility of financial markets. Over the long run, the best way to maximize profitability is not to increase leverage, but rather to analyze underlying credit properly.
2. A large percentage of loans to real estate are not – and never have been – high quality. This is especially true in places like much of the United States, where residential real estate loans are traditionally non-recourse to the borrower beyond the underlying property.
3. Interest rates are never predictable over time. In my view, the idea of borrowing short and lending long makes no sense. In the early 1980s, almost all of the most-conservative large financial institutions in the world were bankrupt on a mark-to-market basis because of increases in rates on riskless securities.
4. Rating is not credit. Long-term ratings have not been a good predictor of credit quality among different sectors of the world economy. In recent years, investors purchased hundreds of billions of dollars worth of AAA-rated mortgage-backed securities that were never close to AAA quality. You should not invest based solely on ratings.

5. The risk in sovereign and government debt has been dramatically underestimated for centuries. Throughout history, governments regularly defaulted on their debts. Those countries that didn't default often hyper-inflated their currencies, which had a similar effect. For a century and a half, foreign capital poured into Latin America and was rewarded by one default after another. In the last quarter of the 20th century alone, more than one trillion dollars was lost on loans to governments throughout the world.
6. The value of debt securities is the underpinning of all capital markets. As we've seen in the last 12 months, as the yield spread on corporate debt decreases, the value of equities rises. This is the best independent verification of value in any system.

I have cited a bit of history because once again we have seen shocks to the global financial system. And yet, that system remains remarkably resilient. Recent events in world financial markets, while dramatic, are not indicative of long-term trends. And remember that 2009 was the third-greatest year of wealth creation in financial history. Equity markets in Russia did especially well – more than doubling (as measured in U.S. dollars).

It is also important to understand global economic trends. Some claim that it is impossible to see the future. Yet we know as a fact that the majority of the world's economic output a few decades in the future will come from people who have already been born. And most of those people live in Asia. According to projections by the Milken Institute, nearly 60 percent of the world economy will be based in Asia by mid-century – in large part because of a substantial increase in access to modern capital markets. Asia will also be home to an estimated 80 percent of the world's scientists. Depending on your viewpoint, you may consider those facts alarming or simply indications of where to invest.

What other trends do we know? We know that the unrelenting march of technology is producing virtually unlimited data storage at a cost near zero; and that we can transmit the data at unimaginably high speeds anywhere in the world without regard to the expense. Consider how this affects different industries. Real estate, for instance. Not long ago, the most-valuable real estate in the world was in places like London, Moscow, New York, Dubai and Beverly Hills. No more. Today, the most-valuable real estate is found on the web pages of companies like Google, Facebook, Alibaba, eBay, Amazon, Baidu and YouTube.

THE IMPERATIVES OF EDUCATION AND MEDICAL SCIENCE

Because human capital represents more than three-quarters of the world's real assets, it follows that investments in education and health by governments, industry and individuals will provide the greatest returns – my fourth and final major point. Over the past two years, the world has seen net financial losses in the range of 10 to 20 trillion dollars. But if we could eliminate death and suffering from heart disease and cancer – not curing them, but simply turning them into chronic, rather than fatal, diseases – the increase in global human-capital value would be more than US\$200 trillion. That's the estimated value of the resulting longer lives and higher productivity. In other words, small increases in the value of human capital more than offset any losses in recent financial markets.

This is one example of why medical research is an integral component of the global economy. In fact, health advances account for as much as half of all economic gains. After thousands of years of nearly imperceptible growth, the world's wealth began doubling every few decades beginning in the last century and a half. The largest stimulus for this growth

was increased human productivity made possible by improved health and extended life spans – the result of improved sanitation, disease prevention and cures produced by research laboratories. The advance of such technologies as genomics and proteomics give us hope that we will continue to make progress against deadly diseases everywhere around the world. That is why FasterCures, a center of the Milken Institute, is working to remove barriers to progress in medical research worldwide.

Education also has a profound impact on the value of any nation's human capital. Among the factors that contributed to the growth of the U.S. over the last 200 years, the impact of education was crucial, especially in the period between 1880 and 1960 when we added a year of schooling each decade. By 1960, the U.S. was the most-educated nation on earth – at least 20 percent ahead of any other country. In the half-century since 1960, however, much of the world has caught up and in some cases moved ahead of America. That fact has been a significant factor in the rebalancing of the global economy. Russia doesn't need anyone to explain the value of knowledge. This nation's longstanding respect for education, its high literacy rate and its institutions of higher learning are all resources that deserve preservation and elevation.

Human capital is just as important in the non-profit sector as it is to businesses and nations. In the four decades of philanthropic work that have paralleled my business career, I've found that the same principles apply whether you're providing access to capital to grow a business, creating a new paradigm for medical research, or pioneering innovative approaches to education: Empower the most talented people in each field and encourage them to pursue their passions. The goal in every case is to create value. This always involves more than simply writing checks; it takes an entrepreneurial approach that seeks best practices and enables people to change the world.

Changing the world starts with understanding it. And I believe that's part of the spirit behind this conference. Troika Dialog chairman and CEO Ruben Vardanian was very clear when he said, "Russia has good chances of preserving its stability during the crisis period." I agree – this nation has the tools to emerge from uncertainty more prosperous than before.

Even as we emerge from a crisis period, however, it is important to remember the human impact of the downturn. Financial recovery does not automatically translate into a jobs recovery. Hundreds of millions of people worldwide suffered because of a misallocation of capital. I believe now, just as I did 40 years ago, that the focus of all nations should be on providing access to capital to the small and medium-sized businesses that are best able to create a jobs recovery. That has always been our focus at the Milken Institute. In fact, when we established the organization two decades ago, it was called the Milken Institute for Job and Capital Formation.

Thirteen years ago, we started a conference in Los Angeles that is similar to The Russia Forum. Our goal, much like yours, was to bring together leaders from the worlds of finance and public policy – as well as health, education and philanthropy – to exchange ideas in an environment of open discussion and vigorous debate. Over the years, the Milken Institute Global Conference has grown, each year quickly reaching our limit of 3,000 attendees, who come from 60 nations to hear 500 speakers engage in lively panel discussions over the course of five days. I hope many of you will join us in Los Angeles this April. More information about our conference is at www.milkeninstitute.org.

From what I've seen of The Russia Forum, its founders and its brief-but-impressive history, it seems clear this conference will also keep growing into greater prominence. I thank Troika Dialog and The Russia Forum for this opportunity to witness first-hand the realization of Troika's vision. And I invite each of you to join with the Milken Institute in its many programs to spread the benefits of human, financial and social capital to as many people as possible. This process can contribute to prosperity and freedom in all corners of the globe.

[Some of the slides used in the presentation of this speech can be viewed here.](#)