

By Jeremy Kahn

Jan. 17 (Bloomberg) -- Over the course of 2012, the U.S. economy rebounded with all the vitality of a slug waking from a long nap. In debt-strapped, recession-hit Europe, investors fret about a Spanish bailout, a Greek default and whether the euro itself will shatter.

In Asia, slowing growth in China and India has called into question the national narratives of the two emerging-markets giants -- and dragged down earnings and commodities prices around the globe.

If all of that weren't bad enough, last summer saw the publication of a much-talked-about paper by Northwestern University economics professor Robert Gordon titled, "Is U.S. Economic Growth Over?" Bloomberg Markets magazine will report in its February issue.

Gordon doesn't mean over in some happy-days-aren't-quite-here-again-yet-just-wait-another-quarter kind of way. He means over as in finished, finito, happy days ain't never coming back.

"Future growth in real GDP per capita will be slower than in any extended period since the late 19th century," he writes.

The 72-year-old macroeconomist elaborated on his argument in an e-mail exchange with Bloomberg Markets.

"The inevitable decline in future growth required by the need to reduce government and consumer debt will guarantee a contentious political landscape not just over the next year but over the next several decades," he said.

Resilient Dynamism

With all of this evidence of crushing stagnation, it's surprising, or at least contrarian, that this year's high-powered World Economic Forum in Davos, Switzerland, should take place under the cheery rubric Resilient Dynamism.

The logic of the organizers, as spelled out in the program for the Jan. 23 to 27 event, is that hard times require "successful organizations to master strategic agility and to build risk resilience."

The corporate leaders of those organizations won't find much cause for optimism in Gordon's work.

He starts out with a base-line projection for growth in U.S. real gross domestic product per capita of 1.4 percent per year during the next 15 years. That's more than one full percentage point lower than the average growth rate the U.S. experienced from 1928 to 1950 and 0.4 percentage point lower than the average annual growth from 1987 to 2007.

Wait, it gets worse. In his paper, Gordon identifies six "head winds" that he says will subtract from U.S. growth: an aging population, declining educational attainment, rising income inequality, increasing offshoring and automation, climate change and the prospect of a carbon tax to combat it, and the high debt burden on both households and the government.

Alarm Bells

Together, he says, these head winds could flatten 1.4 percent growth to near zero.

Gordon argues that extremely low growth rates were the norm in earlier periods of human history -- he cites data from British researchers showing that England's GDP grew only 0.2 percent per year on average from 1300 to 1750 -- and could be the norm again. Other economists extend Gordon's thesis to Europe and beyond.

The forecast sets off alarm bells for Bill Gross, co-chief investment officer at Pacific Investment Management Co., the

world's largest bond investor.

"A 1 percent differential means a lot in terms of unemployment, and it means a lot in terms of profits," Gross says. "Corporate profits grow more after overall economic growth hits 2 percent. Below that, they stall out."

Gross is among those who think Gordon is onto something. He says he worries that as growth ebbs, the U.S. and most developed economies will be tempted to paper over the problem by printing money, as they have with recent quantitative-easing policies.

Chicken Littles

That will eventually mean higher inflation, the nemesis of bond investors, which is why Gross says he's looking for returns in frontier markets and in real assets, such as commodities.

The idea that the world has reached the limits of growth has a long pedigree, running from Thomas Malthus in the late 18th century to the Club of Rome in the early 1970s. All of these doomsayers wound up looking like Chicken Littles.

Concerned primarily with resource scarcity and overpopulation, they underestimated mankind's capacity to innovate and find new ways to stretch supply -- be it food or fossil fuels -- to meet demand.

In contrast, Gordon puts innovation at the center of his thesis; it's just that he thinks we've smashed headfirst into a technological brick wall.

At first glance, this claim might seem ludicrous. Hardly a month goes by without the rollout of some slick new device that promises to transform the way we live -- and that's just the stuff from Apple Inc.

Angry Birds

What about carbon fiber? MRI scanners, heart stents and new cancer treatments? What about Angry Birds? Well, Gordon says, all that stuff may be cool; it just doesn't change living standards half as much as indoor plumbing did.

Tyler Cowen, an economist at George Mason University in Fairfax, Virginia, shares Gordon's belief in a technological plateau.

In his 2011 book *The Great Stagnation* (Dutton), Cowen references the work of Pentagon physicist Jonathan Huebner, who looked at innovations per capita throughout history. Huebner found that the rate peaked around 1873, in the early years of the Second Industrial Revolution.

Declining innovation slows per capita productivity gains and, in turn, economic expansion. From 2004 to March 30, 2012, U.S. labor productivity growth averaged 1.33 percent per year, well below the 2.33 percent from 1891 to 1972, according to Gordon.

'Value Destruction'

From 1972 to 1996, despite the information technology revolution, productivity growth slowed to 1.38 percent. This led Nobel laureate Robert Solow, the doyen of growth economists, to quip as far back as 1987 that "you can see the computer age everywhere but in the productivity statistics."

Total factor productivity growth, which counts both labor and capital, tells a slightly more encouraging story.

Yet even taking into account the gains seen since 1996, when the Internet started to become a commercial phenomenon, average annual total factor productivity growth from 1996 to 2012 in the U.S. remained 1.08 percentage points below the average level from 1947 to 1969.

Hang on, you say. Didn't U.S. labor productivity spike to record levels from 1996 to 2004? Well, as Cowen argues, this surge coincided with a period in which the financial sector's

share of the U.S. GDP rose rapidly from about 6 percent to more than 8 percent. Then came 2008.

"What we measured as value creation may actually have been value destruction," he writes.

Austerity Programs

Cowen and Gordon argue that many real productivity gains, be it from electrification or women entering the workforce, can happen only once -- and already have.

Gordon, an early and prominent skeptic of the late 1990s dot-com boom, confines his end-of-growth argument to the U.S. Still, given that the U.S. economy constitutes 20 percent of world GDP, that might be little consolation to the rest of world.

Daniel Gros, director of the Centre for European Policy Studies in Brussels, says public debt and the austerity programs designed to address it will be particular drags on Europe.

"Growth rates in southern Europe are likely to be close to zero for the next decade," he says.

Unilever NV chief executive Paul Polman has expressed a similar view, telling Bloomberg News in December that his company isn't expecting Europe to recover for 10 years.

'Tremendous Wave'

In China and India, despite hand-wringing about the slackening pace of economic activity during 2012, there are few reasons to think the party is over. Although China's one-child policy has resulted in a rapidly aging population, the country's economy has plenty of pent-up domestic savings and demand.

"There is a tremendous wave of consumerism coming in China," says Mark Mobius, the globe-trotting stock picker for Franklin Templeton Investment Funds, citing fast-rising wages.

India has problems -- too much red tape, too much protectionism, too much corruption and too little infrastructure -- and yet it is trying to address them, says Jagdish Bhagwati, an economist at Columbia University in New York.

"In India, just three quarters of lower growth have created a huge debate about what to do," he says.

Other less-developed countries are also charging ahead. Mobius says the best growth may come from frontier markets such as Egypt, Kazakhstan, Nigeria and Vietnam.

Asia's Impact

Even if Gordon is right about declining productivity in the U.S., he may still be wrong about the future, says former Morgan Stanley chief global economist Stephen Roach, a longtime student of productivity who researches Asia's impact on the global economy at Yale University.

Gordon's headwinds will fade in importance, Roach says.

"None of them are permanent," he says. "They are potentially long lasting, like deleveraging, but bringing debt levels down to lower levels is a good thing and lays the foundation for future growth."

Daron Acemoglu, an economics professor at the Massachusetts Institute of Technology, counsels against despair.

"We don't know what the next big thing is going to be," he says. "But there is no reason to think there won't be a next big thing."

Stephen Broadberry, a professor at the London School of Economics and Political Science whose research on pre-industrial Britain was used by Gordon in his paper, says that averaging growth rates from 1300 to 1750, as Gordon does, misses the point: Innovation during those years set the stage for the Industrial Revolution that followed.

Gloomy Sentiment

Economic historian Paul David showed that it took decades for the invention of electricity to create productivity growth: At first, manufacturers simply swapped one power source for another without fundamentally altering their processes.

Robert Johnson, executive director of the New York-based Institute for New Economic Thinking, says economists tend to extrapolate from the present.

"That tends to amplify current sentiment," he says. "We are in a slump, so sentiment is a little gloomy right now."

To pierce the gloom, Roger Pielke Jr., a political scientist who specializes in environment and innovation policy at the University of Colorado in Boulder, sifted through the same historic data as Gordon.

His conclusion: Although its pace may vary, economic growth is irrepressible.

Through contagions, wars and economic downturns, the potential for managing risk while fostering growth is an enduring feature of human history.

The World Economic Forum leitmotif of Resilient Dynamism echoes that conviction. Beyond the Alpine slopes of Davos, the challenge is to figure out how to turn a slogan into reality.

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