Growth Potential of the U.S. Economy and the "Shale Revolution" - *Overcoming the Financial Crisis and Anticipating a "Reverse Oil Crisis"*

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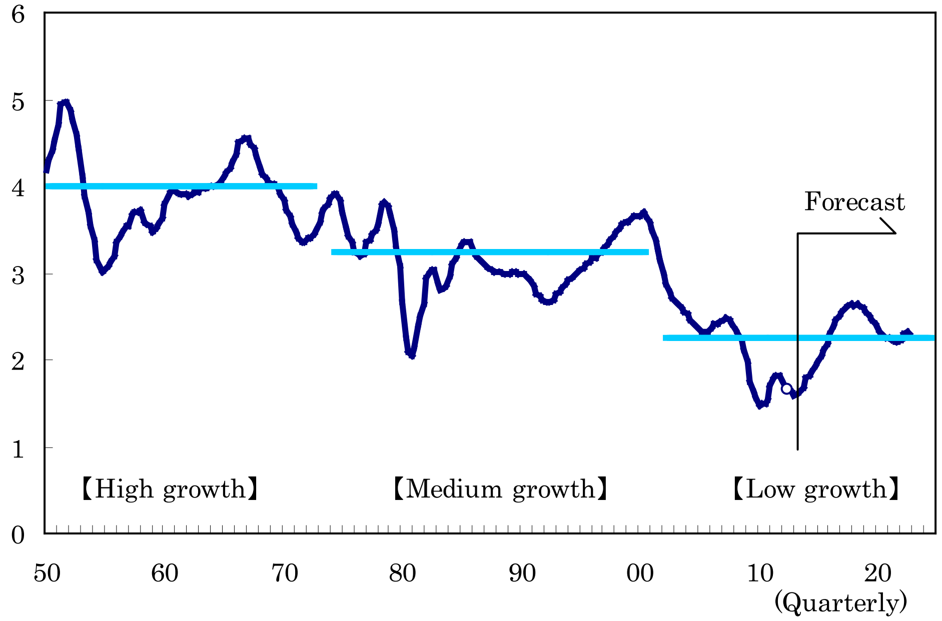
With the financial crisis as a trigger, concerns arose that the growth potential of the U.S. economy would decline. Notwithstanding, if we examine the determinants of growth potential, namely, trends in the supply of labor, inputs of capital, and productivity, we find that the growth potential of the U.S. economy had already begun to decline early in the 2000s, and the economy was headed for a period of low growth. We can also state that the accumulated imbalances in finance created an economic bubble and then led to the bubble's collapse. On the other hand, around the time of the financial crisis, there were no major changes in labor supply, capital inputs, and productivity, and there is no evidence of changes in growth potential in the United States.

Chart 1: Potential Growth of the U.S. Economy

(% change from previous period)



Note: Estimates of growth potential were prepared by the Congressional Budget Office.
Sources: Congressional Budget Office, Department of Commerce

Chart 2: Potential Growth by Time Interval

	1950-73	1974-81	1982-90	1991-2001	2002-11	2012-22 (Forecast)
Potential growth rate	3.9	3.2	3.1	3.2	2.2	2.2
Non-agricultural sector (a+b+c)	4.0	3.5	3.2	3.5	2.5	2.8
(a) Labor contribution	0.9	1.6	1.2	0.8	0.3	0.5
(b) Capital contribution	1.2	1.3	1.2	1.4	0.7	1.1
(c) Total factor productivity (TFP) contribution	1.9	0.7	0.8	1.3	1.4	1.2

Note: Averages of annual growth rates during the intervals indicated, in percent (%). However, figures for the breakdown (a to c) are contributions expressed in percentage points.
Source: Congressional Budget Office

In general, the principal reason for declines in the potential growth rate following a financial crisis is that balance sheet adjustments lower corporate growth expectations. In the United States, balance sheet adjustments were made relatively quickly following the financial crisis, thus making it possible to avert a decline in corporate expectations regarding growth. This is the main reason why trends in the potential growth rate did not change.

A review of movements in the potential growth rate in the United States during the postwar era shows three distinct periods. The first is the time up to the first oil crisis (1973), when the potential growth rate was about 4%. The next lasted until the end of the 1990s, when the rate was approximately 3%, and the most-recent period began in 2000, when the potential growth rate declined to 2%. Looking forward, the outlook is for this rate to remain around 2% as it was prior to the financial crisis.

The shale revolution is expected to raise incomes by an amount equivalent to 0.30% of the GDP, just from the direct effects of lower energy costs, and it will support the maintenance of the potential economic growth rate through capital inputs and productivity increases. The indirect effects of the shale revolution will be influenced by future policies and energy prices; however, if energy exports from the United States come up to speed, the transfer of wealth from overseas will proceed and we can expect a "reverse oil crisis" We cannot ignore the possible upside scenario where the U.S. economy returns to its medium potential growth rate.

Chart 3: Direct Effects of the Shale Revolution

	Energy expenditures (billion US$, average for 2006-2010)	Forecast decline in prices (%)	Amount of the decrease in energy costs (billion US$)
Households	2,422	2	48
Office/commercial	1,776	4	71
Industrial	2,272	9	204
Transportation	5,667	-	-
Electric power generation	978	10	98
Total	13,115	-	42.1
Percentage of GDP			0.30%

The United States will thus remain a growth engine of the world economy as it sustains a competitive environment and the shale revolution gives the economy additional vitality. Since capital inputs and productivity increases, which are determinants of the potential growth rate, depend on the economy's past performance, it is this very sustained growth at the pace of the potential growth rate that will be the biggest factor supporting future economic growth. From a long-term perspective, it is this very continuation of economic growth that is the correct way to avoid economic decline, from a long-term perspective, through increases in capital inputs and productivity.

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*This is an English language summary of a report originally published on February 14, 2013. The full report is available only in Japanese, but the author will answer questions regarding the topic by e-mail.

*The information and the views contained herein are subject to change without notice.