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Why Economic Slumps Following Economic Crises Turn Out to be Long and Arduous: Japan's experience of the "Lost Decades"

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Summary

The U.S. economy is gradually recovering, having cleared concerns of a double–dip recession. However, the pace of recovery is languishing at a historical low level, prompting assertions that the U.S. economy may fall into a prolonged slump (referred to as the "Lost Decade(s)") as in the case of Japan.

There are many who attribute the lackluster growth of the U.S. economy to deleveraging – namely that the reduction of excess household debt which had accumulated during the bubble period and reduction of the fiscal deficit which had ballooned in order to absorb the negative impact of the deleveraging process upon the economy are dragging down economic growth.

However, a closer look at what really happened during Japan's "Lost Decades" reveals that complex factors not limited solely to "deleveraging" led to its prolonged stagnation. After the financial crisis in 1997, Japanese corporate enterprises curbed employment and investment in a bid to secure liquidity. As a result, wages were held down, job insecurity rose, and workers' skills degenerated. The excess funds in the corporate sector were used to finance the fiscal deficit which had ballooned due to social security spending.

Another large factor is that the growing uncertainty engendered a conservative attitude among corporate entities, individuals and investors which served to undermine incentives to take risks for new opportunities. The rise of calls for stability and protection and the avoidance of competition led to a delay in Japan's socioeconomic renewal process, resulting in the protection of vested interests.

Furthermore, policies reflecting excessive calls for emphasis upon the manufacturing sector, and corporate enterprises and their business models which had resigned to low value–added despite their high competiveness, have delayed Japan in adapting to the environmental shifts of globalization and digitalization, leading to a prolonged stagnation. Japan's prolonged slump stems from a complex entanglement and amplification of the forgoing factors

which resulted in a vicious cycle of stagnation leading to further stagnation.

Judging from the nature of Japan's long–term doldrums, it would be naïve to assume that the completion of the deleveraging process would provide a quick fix for the recovery. The U.S. economy is showing signs of a possible lapse into long–term stagnation. In a rush to build liquidity after the financial crisis, corporate enterprises are curbing employment and investment. The deterioration of the labor market such as the surge of long–term unemployment is leading to the deterioration of skills and incentive. Business start–ups, which were once the source of economic vitality and job creation are shrinking in size, and could be undermining economic growth.

The possibility of the U.S. economy falling into a prolonged stagnation is not low. Moreover, it should be noted that no one has a clear script to climb out of the dire straits.

1. Economic recovery is still weak

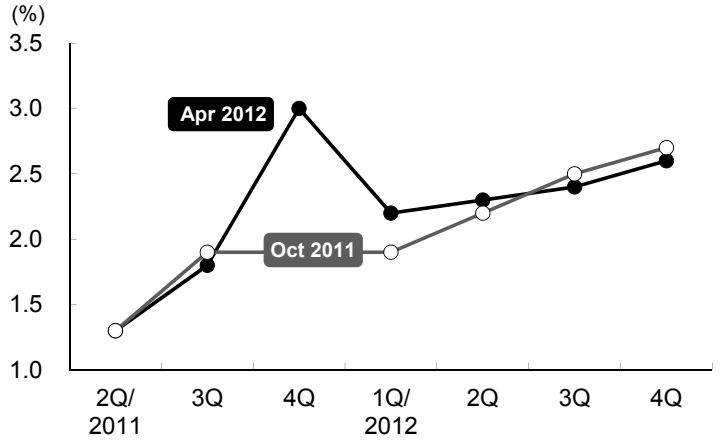
Given the recent upturn of economic data, many economists believe that the chances of the U.S. economy falling into a double dip have become remote. Economic growth in real terms has climbed to 3.0% q–o–q p.a. in the Oct–Dec quarter of 2011 after bottoming out at 0.4% q–o–q p.a. in the Jan–Mar quarter of 2011. In the Oct–Dec quarter of 2011, real GDP growth has also recovered to a level 1.8% above the Jul–Sep quarter of 2008 when the Lehman Brothers collapsed. This sets forth a sharp contrast with Japan where the level of GDP is still below the pre–crisis level.

Job recovery is also progressing. In March 2012, nonfarm payroll employment grew by 120 thousand from the previous month, recording an increase for the 18th consecutive month since October 2010. Likewise, the unemployment rate which peaked at 10% in October 2009, has declined to 8.2% as of March 2012. Corporate

business conditions are also improving. Although the ISM business index released by the Institute of Supply Management fell close to the expansion–contraction threshold of 50 in mid–2011, it has been rising thereafter. Note also the dramatic recovery of the stock market.

On the other hand, not many believe that the U.S. economic recovery will continue to gather momentum. A comparison of the consensus forecasts of economists as of April 2012 with the consensus as of October 2011 reveals that the current rate of real GDP growth (Oct–Dec quarter of 2011) has turned out to surpass the forecast. However, subsequent forecasts have turned decidedly cautious, indicating that the rise of the growth rate is perceived as temporary (**Chart 1**). Some forecasters even warn of downside risks in the second half of 2012.

Chart 1: Consensus Forecast



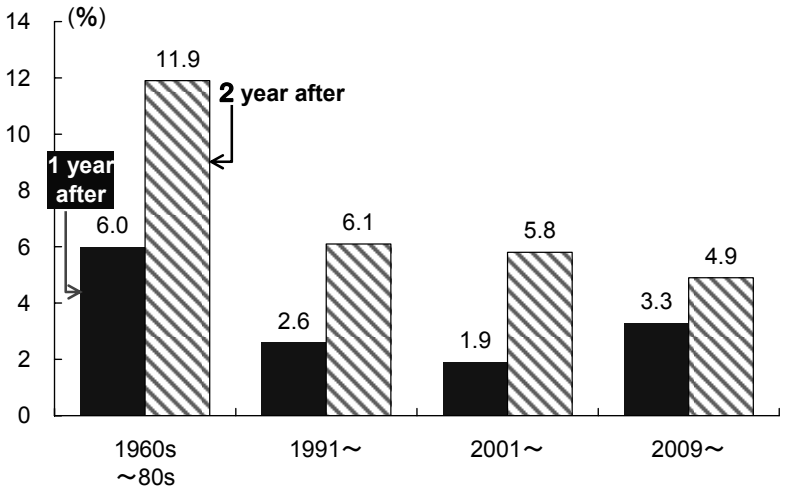
Notes: 1. Real GDP growth rate (seasonally adjusted annual basis)
2. ● are actual results, ○ are consensus forecasts
Sources: Wolters Kluwer Law & Business, *Blue Chip Economic Indicator*.

Upon stating that "the recovery of the U.S.. economy continues, but the pace of expansion has been uneven and modest by historical standards" in the *Semiannual Monetary Policy Testimony to Congress* in

February 2012, Federal Reserve Board (FRB) Chairman Ben S. Bernanke indicated the possibility of a sharp economic deterioration in the event the Bush tax cuts and payroll tax cuts are suspended from January 2013 and compulsory expenditure cuts are implemented along with the collapse of bipartisan talks on fiscal rehabilitation.

In fact, the rate of GDP growth (cumulative) one year and two years after the trough of the economic cycle reveals that the current U.S. economic recovery of 3.3% and 4.9% (the trough being the Apr–Jun quarter of 2009) falls far below the average rate of growth of 6.0% and 11.9% in the period from the 1960s to 1980s (**Chart 2**). Furthermore, a comparison of the forecasts on real economic growth by the Federal Open Market Committee (FOMC) as of July 2011 and January 2012 reveals that the forecasts have been revised downward from 2.7%–2.9% to 2.2%–2.7% for the year 2012 and from 3.3%–3.7% to 2.8%–3.2% for the year 2013.

Chart 2: Sluggish recovery of real GDP



Notes: Rate of real GDP growth 1 year after and 2 years after the bottom of the economic cycle (cumulative)
Source: Bureau of Economic Analysis, U. S. Department of Commerce.

The sluggish and weak recovery of the economy as depicted above reflects the fact that the current recovery pattern differs greatly from past economic recoveries. From a cyclical perspective, when the economy hits bottom and starts to recover, this causes expansionary impacts upon various fields, leading to a wider and sustainable recovery of the economy (the cumulative effects of the economic cycle). According to past experience in the U.S., a typical recovery cycle would develop in the following pattern: (1) the impact of monetary easing would first lead to an upturn of housing investment, (2) which in turn, would cause the recovery of employment and income, (3) in turn, triggering spending on durable goods and capital investment, and (4) keep the economy on growth track.

However, the current recovery differs from past patterns. In addition to the weakness of the recovery itself, the housing market has fallen precipitously and spending on durable goods is also sluggish. Housing starts fell sharply, from an annualized pace of 2 million units in 2005 to 500 thousand units p.a. in 2009, and is continuing to stagnate. In terms of employment, the pace of job growth remains sluggish despite movements signaling a recovery. Even though 8.8 million jobs were lost in the process of economic recession, only 3.6 million jobs have been recovered thus far.

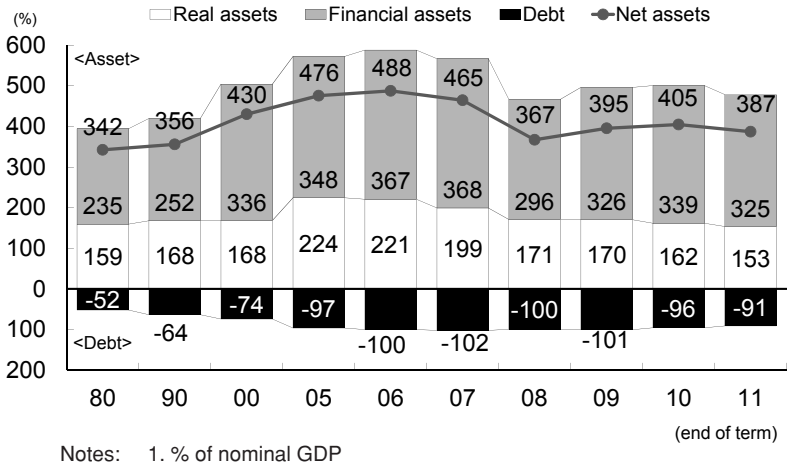
2. Lingering anxiety of the long slump

Given the current slow recovery of the economy which differs from past patterns, there are some who indicate that the U.S. economy might be falling into a prolonged slump – namely a U.S. version of a "Lost Decade" experienced in Japan. Carmen Reinhart and Vincent Reinhart shed light upon the fact that a prolonged slowdown of the rate of economic growth, rise of the unemployment rate, housing price falls and decline of debt levels are observed in the

years following severe financial crises in the developed countries such as the U.S. stock market collapse (1929), the 1973 oil crisis (1973), the collapse of the bubble economy in Japan (1992) and the U.S. subprime loan crisis (2007) (note 1). Indeed, the U.S. economy appears to be following this path.

Furthermore, if the U.S. economy were unable to avoid a prolonged stagnation, many economists and scholars contend that the major factor of the slump would be "deleveraging" (the reduction of excessive debt) and that the deleveraging in the household and corporate sectors is indeed serving as a drag. A closer look at the household sector balance sheet reveals that while the level of outstanding assets (total of financial assets and real estate assets) as a percentage of GDP as of the end of 2011 (325% + 153% = 478%) falls below the level as of the end of 2000 prior to the U.S. housing bubble (334% + 168% = 502%), the level of outstanding debt as a percent of GDP is still high (91% as of the end of 2011, as compared to 74% as of the end of 2000) (**Chart 3**). As a result, the level of net assets as a percentage of GDP is lower than the level prior to the bubble (387% as of the end of 2011, as compared to 429% as of the end of 2000), indicating that households are still in the process of repairing their balance sheets which were impaired by the collapse of the housing bubble.

Chart 3: Household sector balance sheet (U.S.)



Notes: 1. % of nominal GDP
2. Includes nonprofit organizations
Source: Bureau of Economic Analysis, U. S. Department of Commerce.

Households are building up their savings in a bid to reduce their debt which had increased due to housing purchases and increased spending during the housing boom, and to restore their financial assets which had shrunk as a result of factors such as the stock market fall. As a matter of fact, the household saving rate rose from 1.3% in the Jul–Sep quarter of 2005 to 6.2% in the Apr–Jun quarter of 2009 and stands at 4.5% as of the Oct–De quarter of 2011. Thus, the recovery of household spending is still weak, given the rise of the saving rate, coupled with the lackluster rise of income.

Undoubtedly, the Obama administration's massive economic stimulus measures and built–in stabilizer through the increase of unemployment benefits and reduction of tax revenues helped to avoid a sharp slowdown of the economy after the Lehman Shock. This resulted in a sharp deterioration of U.S. fiscal conditions. The fiscal deficit surged from USD160.7 billion (1.2% of GDP) in FY2007 to USD1,412.7 billion (10.1% of GDP) in FY2009. In FY2011, the U.S. still has a large fiscal deficit of USD1,295.6 billion (8.7% of GDP). Government debt held by the public (as a percentage of GDP) also

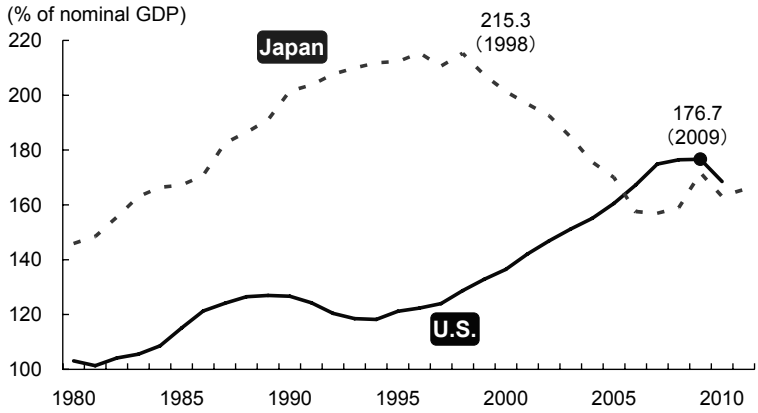
rose sharply from 36.3% at the end of FY2007 to 67.7% at the end of FY2011. The expenditure cuts and rise of tax burdens pursued in a bid to reduce public debt, is the act of "deleveraging" by the government which had shouldered the costs of the economic deterioration. This process itself serves as a drag upon the recovery and growth of the economy.

Of course, there are many who contend that the U.S. economy will not fall into a Lost Decade. As of the spring of 2008, Dr. James Wilcox of the University of California at Berkeley said that the U.S. economy will not fall into a prolonged stagnation like that of Japan. To back up his argument, he cited the following reasons: (1) the size of the bubble is small, (2) the real estate sector only comprises a small percentage of the economy, (3) stock prices are firm, (4) financial institutions have solid capital adequacy, (5) business corporations possess sufficient liquidity, (6) exports are expanding, (7) the central bank is proactive toward monetary easing, and (8) the population is growing. (note 2)

FRB Chairman Ben S. Bernanke also testified before the Senate Budget Committee (February 7, 2012) that the U.S. differs from Japan where long–term stagnation was caused by (1) investment and economic growth hampered by tight financial conditions stemming from long–term deflation, (2) delay in reinforcing bank capital, and (3) the decline of the labor force population.

Many of these assertions are correct. For example, the level of corporate and household debt outstanding (as percentage of GDP) peaked at 215% (1998) in Japan, whereas the peak in the U. S. (176% in 2009) was lower than Japan (**Chart 4**). Moreover, general government debt (comprised of the central government, local government and social security funds) outstanding as a percentage of GDP (based upon OECD forecasts for 2012) in the U. S. (103%) is less than half of Japan (219%). Thus, the assertion that the negative impact of deleveraging upon the economy is comparatively benign in the U. S. than in Japan's case after the collapse of its bubble economy holds true even in consideration of the difference in overseas dependence in financing of the fiscal deficit.

Chart 4: Debt outstanding (as a percentage of GDP)



Notes: Corporate and household sectors.
Sources: Federal Reserve Board (FRB), Bank of Japan (BOJ), Cabinet Office etc.

3. The complex nature of prolonged stagnation: Japan's experience

However, from the perspective of an economist who has observed the Japanese economy's long–term stagnation over the years, such a perception on prolonged economic stagnation after economic crises and Japan's slump (note 3) does not provide an accurate portrayal of what really unfolded.

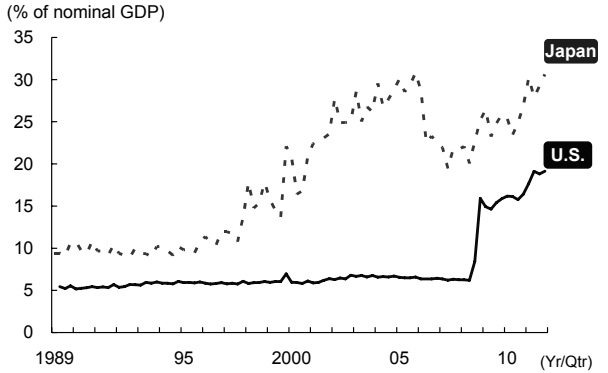
Would the economy rebound into a self–sustained recovery once the deleveraging process takes hold? **Chart 4** shows that Japan's debt outstanding as a percentage of GDP (corporate and household sectors combined) as of 2006 (158%) fell below the level in 1985 (167%) at the time of the bubble, indicating that the deleveraging process following the collapse of the bubble has ended. Even so, Japan's economic growth is still continuing to stagnate.

Many allege that the delay in solving the nonperforming loans (NPLs) in the banking sector (which is the reverse side of the coin of excessive debt in the corporate and household sectors in Japan, given the large percentage of bank credit in financing) has hampered the self–sustained recovery of the economy. However, note that the NPL ratio among major banking institutions which was as high as 8% at the end of FY2004, has declined to half the level by FY2003 and to the 1%–level from FY2005 onward. Even though this has led to an upturn in funding availability for corporations and the easing of lending stances among banking institutions, corporate demand for funds failed to rise and the economy continued to stagnate.

Japan's experience cited above reveals that the completion of the deleveraging process does not necessarily mean that the economic recovery will rebound back to the trend prior to the collapse of the bubble. Namely, deleveraging is not the sufficient condition for economic recovery.

Moreover, some of the assertions in the comparison of the U.S. and Japan are not accurate. For example, the Bank of Japan took a far more proactive stance toward monetary easing than the Federal Reserve Board (FRB). In terms of central bank assets outstanding (as a percentage of GDP), the level in Japan from the year 2000 onward is higher than the recent level in the U.S. (**Chart 5**). Even so, Japan is unable to climb out of its prolonged economic stagnation and deflation.

Chart 5: Central bank assets outstanding (as a percentage of GDP)



Sources: Cabinet Office, FRB, etc.

Neither is the decline of the labor force population the major cause of Japan's long–term economic stagnation. A decomposition of the factors contributing to the fall of Japan's real economic growth rate from the 1980s onward shows that the contribution by the decline of productivity is greater than the contribution by the fall of the labor force population. In other words, it is beyond doubt that the fall of the labor force population led to the decline of Japan's growth rate. A crucial point here is that productivity gains fell sharply, causing the rate of economic growth to fall even lower (**Chart 6**).

Chart 6: Japan's real GDP growth and factor contribution

(Yearly average, %)

FY	Real GDP growth	Contribution by change in labor input	Contribution by change in productivity growth
1980-1990	4.7	0.6	4.1
1990-2000	1.1	-0.9	2.0
2000-2010	0.8	-0.5	1.3
Change from 1980s →2000s	-3.9	-1.1	-2.8

Note: Labor input = no. of employed persons x labor hours per person (employee)
Source: Source: Cabinet Office, *National Accounts*.

Then, why has the Japanese economy continued to stagnate?

Firstly, Japan had fallen into a vicious cycle of stagnation where stagnation had led to further stagnation.

The financial crisis of 1997 – namely the successive failures of major banking institutions and the severe financial contraction thereafter – led to funding uncertainties in the corporate sector, causing restraints upon hiring and investment, prompting companies to place priority upon the accumulation of liquidity on hand. As a result, corporations which were cash–strapped transformed themselves into cash–rich entities. The excess funds of such cash–rich corporations were used to finance Japan's fiscal deficit (**Chart 7**).

Chart 7: Financial balance (Japan)

(FY average, %)

FY	1980-89	90-99	2000-09
Non-financial corporate enterprises	-6.0	-2.5	4.8
Household	9.3	8.0	2.5
General government	-1.6	-3.0	-5.7
Overseas	-2.1	-2.3	-3.2

Note: FY average of financial surplus/shortage (% of GDP)
Source: BOJ, *Flow of Funds Accounts*.

The major cause of the expansion of Japan's fiscal deficit is the rise of social security expenditures accompanying its graying population, at the expense of spending on education, science & technology development. Therefore, the excess funds in the corporate sector – accumulated by cutting spending on employment and capital investment – were used not on investment but for transfer spending, sapping the economy of growth in a twofold manner.

Amid the ongoing economic slump and severe global competition, and given the need to secure liquidity as mentioned above, corporate

enterprises have cut down their labor costs. Per capita wages fell by as much as 12.4% during the period from FY1997 to FY2009. As of the Oct–Dec quarter of 2011, the number of non–regular staff reached 18.3 million, making up 35.7% of the entire labor force.

Among the non–regular staff, approximately 4 million workers are estimated to be working reluctantly in such non–regular status. In particular, the percentage of those working involuntarily as non–regular staff is high among the young generation in their 20s and 30s. (note 4) Furthermore, a look at lifetime wages by employment status reveals that lifetime wages of non–regular staff are only one–third to one–fifth (depending upon whether the worker is male or female, full–time or part–time worker) of regular employees with undergraduate level diplomas, and the chance of a non–regular worker being hired as a regular employee is not necessarily high. Taken together with the fact that the unemployment rate among the young adult population is higher than in other age brackets, labor cost cuts appear to be a heavier burden upon the young adult generation. As a result, the young adult generation is faced with a lag in terms of the build–up and improvement of skills, formation of both hard and financial assets and formation of families, which in turn, is leading to the deterioration of economic growth and fall of living standards.

Summarizing the foregoing shifts, we arrive at the following conclusions. Firstly, even though corporate earnings grew as a result of the decline of the labor share due to corporate restructuring efforts, the inaction to utilize such earnings for investment to raise Japan's productivity and growth served as the major cause of the chain reaction of economic stagnation.

Secondly, amid the rise of uncertainties, the mentality among business executives, individuals and investors shrank, turning more conservative, leading to a loss of environment and mentality conducive to take risks and challenge new opportunities.

As the economy took successive downturns, calls for proactive fiscal spending and monetary easing and public support toward ailing industries, companies and regions intensified. The general sentiment

gravitated toward stability and protection, at the expense of an atmosphere stimulating renewal through competition and self–sustenance.

During the period from 1992 to 2002, 12 economic stimulus packages were compiled in a bid to prevent a sharp deterioration of the economy and to jump start the economic recovery into growth track. The aggregate amount of the stimulus measures adds up to as much as JPY90 trillion in terms of actual public works, or JPY57 trillion in terms of budget supplementations to the general account (as a percentage of annual average nominal GDP during said period would be 17.9% and 11.4% respectively). However, the impact of the packages turned out to be sporadic as the measures consisted primarily of public investment and measures to finance small and medium–sized enterprises (SMEs). Thus, an endless cycle ensued in the following manner: implementation of measures → wax and wane of impacts → implementation of yet another round of new measures. In the process, strong requests for economic stimulus measures arose in regions with a high degree of dependence upon public investment, given their sense of crisis that "local economies would erode in the absence of stimulus measures", sapping them of their opportunity and drive for independence.

The shift of economic policy from independence to protection appears to have intensified from the mid–2000s. In particular, the rise of awareness on the widening income gap and deterioration of SME business conditions amid the recession following the collapse of Lehman Brothers, encouraged society's stance of "weeding–out" or shakeout through market competition and the enhancement of efficiency and rationalization, to shift toward an emphasis upon reinforcement of regulations and protection of vested interests.

For example, the *Act on Temporary Measures to Facilitate Financing for Small and Medium-sized Enterprise* was effectuated in December 2009. The Act facilitates the amendment of lending conditions such as the extension of repayment deadlines by financial institutions in a bid to provide support toward SMEs whose businesses and funding conditions deteriorated sharply after the

Lehman Shock. While the Act was initially intended as a temporary measure for a year or so, after subsequent extensions, it is currently expected to remain in force until March 2013. While the Act is commended for easing liquidity positions of SMEs in difficult times, there are also indications that it is unduly sustaining companies lacking growth prospects and profitability.

Amid the severe employment and income conditions, the young generation in Japan is turning decidedly conservative. In terms of career options after graduation from university, note a rising preference for civil service and financial institutions and major trading companies which are perceived to enjoy stable business conditions, in contrast to the falling preference for foreign companies, SMEs and venture corporations. As a result, a mismatch between job offers and job seekers is emerging in the labor market, with the ratio of job seekers to job openings at approximately 0.5–times for large enterprises while the ratio is surpassing 2–times for SMEs. Note also that Japan's young generation is also passive about studying abroad and working overseas.

Furthermore, the intensification of calls in the business community toward the government to produce a "growth strategy" also signifies a decline of entrepreneurship and rising dependence upon the government. The "growth strategy" cited here is often used in the context of industrial policy where the government establishes growth industries, technologies and markets and provides support from the fiscal, financial and institutional perspectives. Growth strategies in such sense have been compiled and implemented at least six times since 2000. For example, in 2001, the New Growth Strategy Subcommittee of the Industrial Structure Council, Ministry of Economy, Trade and Industry (METI) submitted a report titled "*Inobeshon to juyo no kojunkan no keisei ni mukete*" (Toward the formation of a virtuous cycle of innovation and demand), setting forth the future growth strategy and growth areas. The report listed areas such as the environment, energy, healthcare & nursing care, digital contents, and tourism as new areas possessing growth potential, predicting that the market for such growth areas would grow from

JPY22.4 trillion to JPY67.5 trillion in ten years. Moreover, in 2010, the new administration headed by Prime Minister Yoshihiko Noda announced the *New Growth Strategy*. The *Strategy* lists seven strategic areas including green innovation, life innovation, Asia, and tourism, and 21 strategic projects. According to the *New Growth Strategy*, the foregoing four strategic areas alone are expected to generate demand equivalent to JPY123 trillion and 4.99 million jobs by 2020.

However, the fact that the compilation and implementation of successive growth strategies have been unable, thus far, to jump start the Japanese economy out of stagnation serves as proof that even if such industrial policy would be able to create a certain growth market, it would still be difficult to lift the Japanese economy as a whole. As a matter of fact, even though the growth markets cited in the report grew as expected or even above expectations, the contraction of other markets led to the ongoing stagnation of the Japanese economy. Even so, as far as business executives make demands toward government that growth strategies are essential to put the Japanese economy back on growth track, they would not be able to escape criticism that they are losing what John Maynard Keynes called "animal spirits" and are turning more dependent upon government.

Thirdly, despite the inability of Japan's conventional growth model to adapt to the globalization and digitalization of the economy, the momentum to change the model has been insufficient thus far.

There is no doubt that the manufacturing sector was a major engine of Japan's economic growth during the post–WWII recovery up to the present. The expansion of the manufacturing sector gave rise to various innovations, generating a huge trade surplus through the expansion of exports and import substitution and served to drive the Japanese economy by creating numerous jobs and a large middle class. Furthermore, even after the collapse of the bubble economy, the manufacturing sector and exports served to prop up the Japanese economy. Indeed, exports comprising a mere 14% of GDP supported more than one–third of Japan's economic growth during the 1990s and virtually 100% of growth in the 2000s. Even today, there are high

expectations toward the manufacturing sector as the driver of economic growth. As such, the fall into a trade deficit and acceleration of production sites overseas is viewed with great apprehension. In a bid to halt the hollowing–out of Japan's manufacturing sector, there are vociferous calls to halt the appreciation of the yen, reduce corporate tax rates, secure energy supplies and stabilize energy prices, secure non–regular workers in manufacturing sites, deregulate environment–related regulations and promote free trade (the failure to achieve these challenges is said to cast Japan's manufacturing sector with a six–fold handicap).

On the other hand, from an extreme point of view, we can also say that an excessive emphasis upon the manufacturing sector will sap the Japanese economy of its growth. Even though the maintenance of the yen at weaker–than–actual levels would benefit export–oriented manufacturers, the deterioration of trade terms and fall of real purchasing power possess the effect of curbing domestic demand. If Japan were to continue to compete with manufacturers of emerging countries in terms of price competitiveness, it would curb domestic demand through pressures to cut labor costs, while simultaneously drag down its ability to generate added value (in other words, productivity growth) through the deterioration of its labor force. As symbolized by Apple Inc., as the source of added value shifts from hardware to software, design and new business models, the deterioration of the labor force is a significant negative factor for the growth of companies and economies. While the easing of environmental regulations may serve as shackles for existing industries, it can also serve as a drag upon technological innovation in areas such as energy transfer, energy & resource conservation and the creation of new industries and markets.

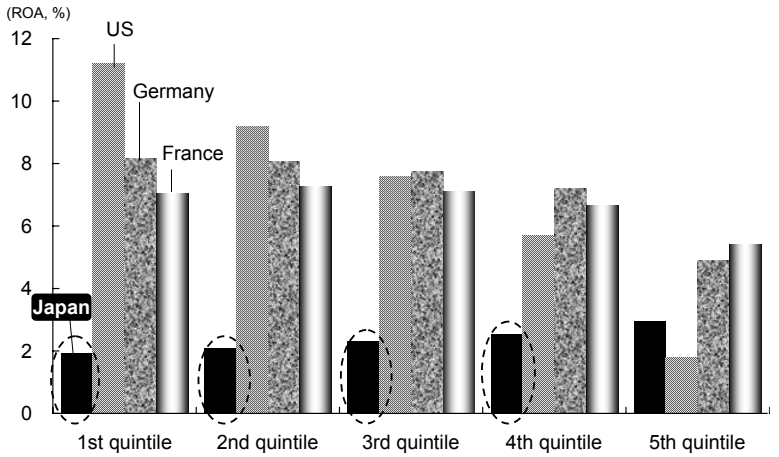
Furthermore, conventional industrial models and business models may be depriving Japanese companies of their potential power to create added value.

Numerous Japanese companies, factories and supply chains suffered enormous damages from the Great East Japan Earthquake. What was rediscovered was the existence of many companies in

Japan which manufacture parts, materials and products possessing global market share (these are referred to as "global No. 1 company(ies)" or "only–one company(ies)" and are, in many cases, small and medium–sized enterprises (SMEs)) and the valuable role Japan plays in the global supply chain.

Curiously, however, the profitability of these companies are low. The total return on assets (ROA) of Japanese SMEs fall short of their US counterparts (**Chart 8**). The Iwate, Miyagi and Fukushima prefectures – the three prefectures hit hardest by the Great East Japan Earthquake – have a high percentage of manufacturing industries. In particular, while production in real terms of the electrical machinery sector has doubled in the past decade, its value–added rate falls below the national average and the other two prefectures (Akita and Yamagata prefectures) of the Tohoku area.

Chart 8: Comparison of ROA of corporate enterprises (by size)



Notes: 1. Median value of ROA (by total asset bracket) of Japan, US, Germany and France. Asset brackets are quintiles of total assets of SMEs in each country.
2. ROA = operating profit/total assets. FY2007 based upon financial statements.
3. SMEs are defined as corporations with 20 to 300 employees.
4. No. of samples: Japan (66,406), US (11,664), Germany (28,514), France (71,012)

Sources: Bureau van Dijk, ORBIS.

The foregoing enigma may stem from the possibility that these enterprises are maintaining a business model of securing the sales of their products (parts and materials) at the cost of submission to relentless price cuts through their integration in supply chains of major manufacturers. In other words, these SMEs may be maintaining a business model of securing sales and capacity operating rates in exchange for curbing profits per–unit. As a result, this could imply that they would lose their opportunity to reap the high profits they could have generated if they were to attain independence from the supply chain and shift to a business model of engaging in direct global transactions with overseas enterprises. Furthermore, they may be more vulnerable toward global competition and the overseas expansion of large enterprises ("hollowing out").

4. Can the U.S. avert a "Lost Decade"?

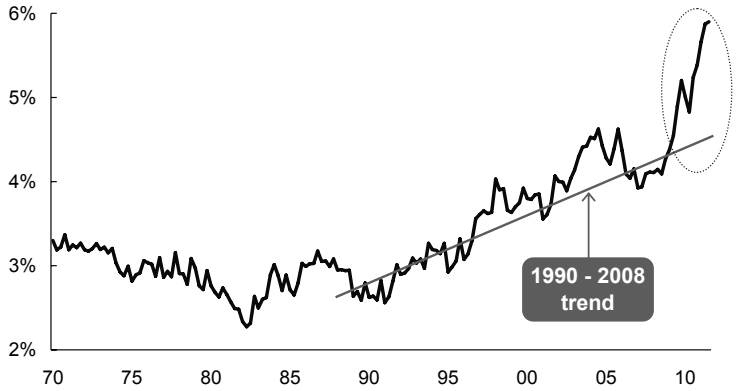
Considering the foregoing mechanism which gave rise to Japan's "Lost Decades" and the possibility that the U.S. may be starting to follow the same path, the progress of the deleveraging process would not necessarily promise a return to a sustainable growth track and monetary easing such as the third round of quantitative easing measures in the US (QE3) would not lead to the rise of growth potential. In reality, the US economy is exhibiting many symptoms suggesting that it may be standing at the brink of a chain reaction of economic stagnation.

Firstly, note that corporate enterprises are accumulating liquidity, thus curbing hiring and investment in the course of doing so.

While it is true that the ratio of cash and deposits to total assets (the liquidity ratio) in the nonfarm nonfinancial corporate sector had been rising steadily since the 1990s, it should be noted that the ratio has surged far above the conventional trend ever since the Lehman

Shock (**Chart 9**). A plausible factor in the background is the rush to build up cash reserves among corporate enterprises which held strong concerns regarding funding availability amid the tighter lending stance among banks and risk–averse stance among investors. As a result, U.S. corporate enterprises have become "cash–rich entities", using their excess liquidity along with the household sector to finance the government's shortage of funds (=fiscal deficit) (**Chart 10**)

Chart 9: Sharp rise of corporate liquidity ratio (U.S.)



Note: Liquidity ratio = (cash + deposit) / total assets
Source: FRB, *Flow of Funds Accounts*.

Chart 10: Financial balance (U.S.)

Yearly average, %)

FY	1960 -69	1970 -79	1980 -89	1990 -99	2000 -08	2009 -11
Non-financial corporate enterprises	-1.2	-1.6	-0.5	0.1	-1.3	3.0
Household	2.4	3.5	3.6	1.4	-0.9	3.4
General government	-1.0	-2.1	-4.2	-3.0	-3.1	-10.8
Overseas	0.5	0.0	-1.7	-1.6	-4.9	-2.2

Note: 1. Yearly average of percentage of nominal GDP
2. Data for 2011 is average through 3rd quarter
Source: FRB, *Flow of Funds Accounts*.

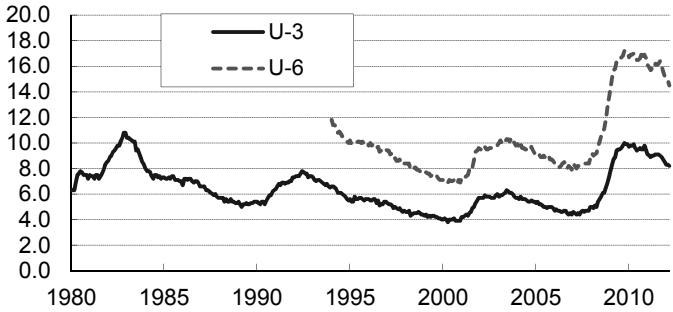
Considering that the same phenomenon is observed in Japan after the financial crisis in the mid–1990s up to the present, and that the upward trend of the liquidity ratio in the U.S. since the 1990s may have been triggered by the S&L crisis and the rise of bank non–performing loans, and the accompanying credit market crunch, this may be referred to as a "financial crisis trauma" which may serve as a drag upon economic growth over a prolonged period of time.

Secondly, note that anomalies are detected in the labor market.

As mentioned at the beginning of this paper, labor market conditions are starting to improve. However, as indicated by many economists including FRB Chairman Ben S. Bernanke, it appears that the unemployment rate is falling far more than the level which can be explained by the weakness of U.S. economic growth. This may stem from the rise in number of people who are giving up their search for jobs in view of the state of the labor market. In fact, the labor force participation rate – the percentage of the labor force population (workers + job–seekers) in the 16–or–older age bracket– has been falling after peaking at 67.3% in the Jan–Mar quarter of 2000. As of the Oct–Dec quarter of 2011, the labor force participation rate is down to 64.0%. The decline is particularly significant in the youth age bracket, with the participation rate in the 16–24 age bracket falling sharply from 65.8% to 55.5% during said period.

The rise in number of people giving up their search for jobs stems from the ever–more severe labor market conditions. The average period of unemployment and the percentage of those who are unemployed for 27 weeks or longer (the long–term unemployed) stand at a historically severe level of 39.4 weeks and 42.5% respectively (both data as of March 2012). Furthermore, while the oft–cited unemployment rate (referred to as "U–3" in statistical terms) is 8.2%, the actual unemployment rate (referred to as "U–6") is 14.5%. The "U–6" includes those in the U–3 category as well as (1) "marginally attached workers" or people who are not actively looking for work, but who have indicated that they want a job, and (2) people who are looking for full–time work but have had to settle on a part–time job for economic reasons (**Chart 11**)

Chart 11: Trends in the unemployment rate (U.S.)



Notes: 1. U–3: the unemployment rate in the usual meaning
2. U–6: U–3 plus (1) "marginally attached workers" or people who are not actively looking for work, but who have indicated that they want a job, and (2) people who are looking for full–time work but have had to settle on a part–time job for economic reasons

Source: US Department of Labor

Many economists attribute the foregoing anomalies in the labor market to the economic stagnation and the accompanying sharp drop of labor demand – which are cyclical factors. However, if there are structural factors in the background, such as cost cutting pressures under global competition such as those faced by Japan, it could have a persistent downside impact upon productivity and economic growth via the decline of employability, the obsolescence and delay in succession/accumulation of skills and the fall of labor incentive.

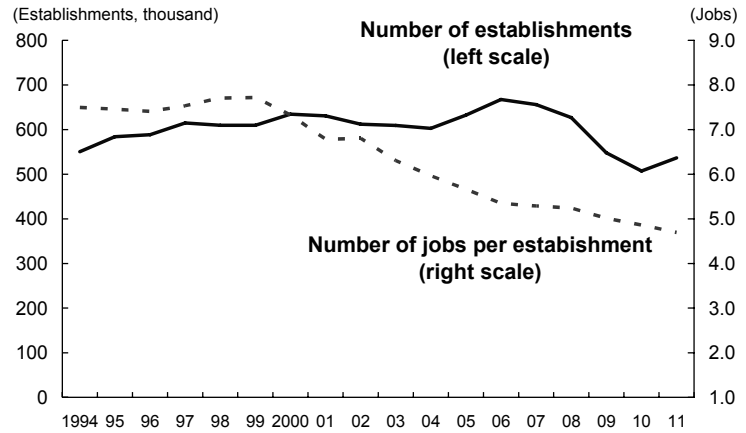
Thirdly, there is the possibility that business start–ups – the source of dynamism of the U.S. economy and the engine of job creation – may be shrinking in terms of their size and dynamism.

Needless to say, start–ups have served as a powerful engine of economic growth through the creation of innovative technologies and businesses and generation of new markets and high productivity. Indeed, a visit to Silicon Valley provides evidence of numerous entrepreneurs and nurturers of such entrepreneurs comprised of "senior" entrepreneurs, incubators and investors, forming large agglomerations to engage in active start–ups. Moreover, of the annual gross employment generated in the private sector

(approximately 30 million jobs), approximately 20% is said to be generated by new business start–ups whose workers make up only 3% of the total. (note 5)

Even though these conditions still hold true today, the sluggish state of start–ups and accompanying job creation should be noted. A look at the number of newly–established enterprises and business establishments and number of workers (more or less equivalent to the number of employees at the time of start–up) per enterprises or business establishment, according to data releases by the U.S. Department of Labor, reveals that the number of enterprises and business establishments has been declining from around 2006 when the housing bubble reached a peak, indicating that the crisis had a large impact upon the downturn of start–up activity. The current signs of upturn most likely stem from economic recovery. On the other hand, the number of employee per start–up or business establishment has been falling since the peak of 7.7 employees in 1999 to 4.7 employees in 2011. Thus, judging from the number of employees, the "shrinking" of start–ups had started from before the financial crisis (**Chart 12**).

Chart 12: Entrepreneurship and job creation



Note: Establishments less than one year old
Source: Bureau of Labor Statistics, *Business Employment Dynamics*.

The reason for the "shrinking" of business start–ups is not entirely clear. There are some who indicate that the spread of "cloud computing" has made it possible to start businesses without as many employees necessary in the past. Or, there is the possibility that the surge in demand for document management tools, games and various applications along with the spread of smart phones is leading to the increase of individuals and small groups developing such applications, hence resulting in the smaller scale (or "shrinking") of business start–ups.

In the course of the foregoing developments, the final stage, or "exit", of business start–ups is no longer an IPO (initial public offering) but rather business acquisitions of products and services by large corporate enterprises. In the background is a possible shift in mindset among entrepreneurs, namely a focus upon the creation and sell–off of small businesses and a decline in incentive to develop their start–ups into large enterprises such as Microsoft or Apple. If we assume that such a shift stems from a change in business model among large corporate enterprises to acquire promising technologies and businesses from outside parties rather than engaging in their own research & development activities, business start–ups might gradually lose their large impact they once had as a driver of economic growth and employment.

In the 2012 State of the Union Address, President Barack Obama expressed great expectations toward "American manufacturing" and "U.S. exports". Indeed, despite claims of a "hollowing out", the size of the U.S. manufacturing sector is as large as China's, and possesses highly competitive products such as aircraft and medical equipment. However, considering that the emerging market economies will continue to grow at a fast pace and that their manufacturing sectors will grow further to possess strong competitiveness in higher value–added areas in the not–too–distant future, the U.S. manufacturing sector will eventually face cost–cutting pressures in order to raise their competitiveness. Undoubtedly, the weaker dollar and wage cuts are among the factors spurring the recent trend among manufacturers (i.e. automakers) to shift their production sites back

to the U.S. from overseas as well as the construction of new domestic (= U.S.) production sites, referred to as "in–shoring" or "re–shoring". America may be attempting to increase their exports and production in exchange for lower living standards for its people. This is similar to the conditions giving rise to Japan's prolonged stagnation.

There are concerns that the reduction of the fiscal deficit may lead to budget cuts for education and research & development, thereby lowering the long–term growth of the U.S. economy. Furthermore, if economic conditions continue to be propped up by the enormous fiscal deficit and unprecedented monetary easing, the economy might fail to evolve, financial intermediary functions may degenerate, thus serving as further impediments to growth.

Given an understanding of the complex and varied mechanism resulting in prolonged economic stagnation and considering that some of its precursors are visible, the likelihood of the U.S. economy falling into a "lost decade" similar to Japan's is not negligible. Moreover, no one still has a definite solution on how to emerge out of the quandary.

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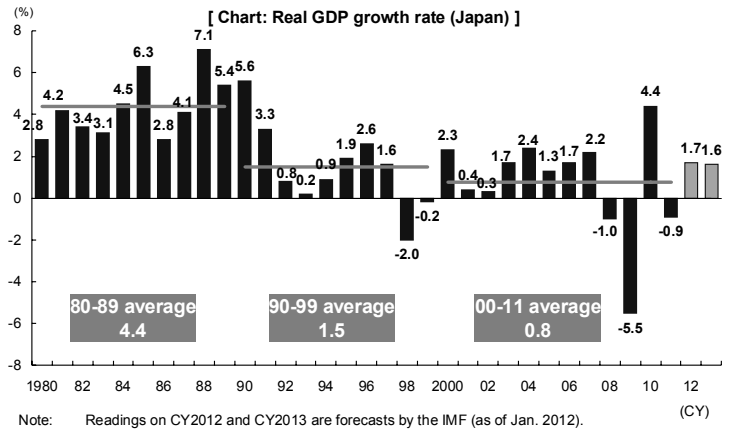
1 Reinhart and Reinhart (2008)

2 Wilcox (2008)

3 Despite the term “post–Bubble prolonged economic stagnation”, the Japanese economy was not necessarily in a continuous recession for a prolonged period. The recession following the collapse of the “Bubble” ended in October 1993. From then onward, the economy continued to recover for 43 months up to May 1997. The economic recovery starting in February 2002 lasted for 73 months and turned out to be the longest economic recovery in the post–WWII period. Having said so, it is also true that the average rate of real economic growth fell sharply after the collapse of the Bubble.



Note: Readings on CY2012 and CY2013 are forecasts by the IMF (as of Jan. 2012).
Sources: Cabinet Office, IMF

4 Oshima (2011)

5 Haltiwanger, Jarmin and Miranda (2011)

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