

### Research Focus

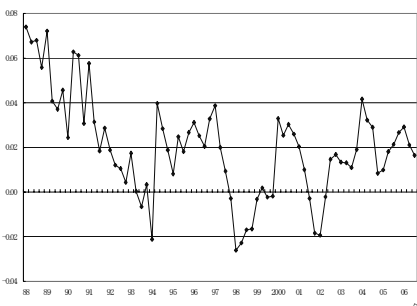
#### Stagnation dynamics and Japan's long-run stagnation

Yoshiyasu Ono\*

Japan's economy has been facing serious stagnation since the stock-price 'bubble' burst in the early 1990s. Japanese governments have been moving back and forth between demand- and supply-side responses. They sometimes chose Keynesian expansionary policies and at other times adopted neo-classical contractionary policies under the name of 'structural reform'. The Hashimoto and Koizumi administrations typically pursued the latter approach, but Japan's economic performance was particularly bad under them. Recent research using a dynamic stagnation model in which labour input is explicitly taken into account, examines the effects on employment and consumption of various structural-reform policies and compares them with those that obtain under the conventional neoclassical model or the Keynesian model.

There were three time periods in which the economic growth rate was negative in Japan. The first was in 1993-94 under Prime Minister Hosokawa, the second was in 1997-98 under Prime Minister Hashimoto, and the third was in 2001-02 under Prime Minister Koizumi (see figure 1). During these periods the unem-

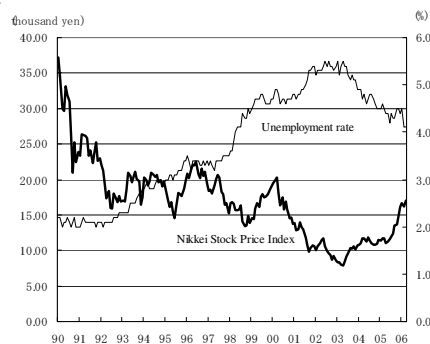
Figure 1: Real GDP Annual Growth Rate (Quarterly, Jan-March/1988 - July-Sept/2006)



Source: National Accounting, Cabinet Office.

ployment rate rapidly increased (see Figure 2) and various banking crises occurred. During their terms as Prime Minister, Hashimoto and Koizumi insisted that economic stagnation was caused by various supply-side inefficiencies. Therefore, they urged firms to dismiss surplus employees, promoted the exit of inefficient firms, and cut fiscal spending, especially the controversial public works-related budget, to reduce the government size. They believed these policies were necessary for Japan to recover the efficiency of its economy. However, the size of the Japanese government was in fact one of the smallest among OECD countries. Moreover, it was hard to believe that the Japanese supply side, which was once believed to be one of the most efficient in the world in the 1980s, suddenly became the most inefficient in the 1990s and generated stagnation.

Figure 2: Unemployment Rate and Stock Price (Jan 1990 - March 2006, Monthly)



Sources: Unemployment rate - Ministry of Internal Affairs and Communications.

Stock price- Bank of Japan.

### Indonesian Project

The Steering Committee of the Australia-Indonesia Governance Research Partnership meets on 13 March to assess the next round of applications for research funding. A large number of high quality projects relating to the economy, politics, law and public administration have been received from teams of Australian and Indonesian researchers. Successful applicants will be announced shortly after 13 March at: [www.crawford.anu.edu.au/AIGRP](http://www.crawford.anu.edu.au/AIGRP)

### Honorary Degree

15 March, The ANU Chancellor, Dr Allan Hawke, will confer an honorary Doctor of Science degree on Mr Ku-Taek Lee, AC, Chairman of POSCO, the Korean steel manufacturing company.

### Events

6 March, *Public diplomacy in Japan and the Asia Pacific*, conference, Canberra

22 March, *The Asian Economic Crisis After 10 Years* (5th H.W. Arndt Memorial Lecture) Professor Max Corden, University of Melbourne, Finkel Lecture Theatre, John Curtin School of Medical Research, ANU. Sponsored by the Division of Economics, Research School of Pacific and Asian Studies, 5.30pm 27 March, *The Micro Foundations of East Asian Economic Integration*, forum, Beijing

11, 13, 17 April, Papua New Guinea Updates, Papua New Guinea

### Crawford Seminars\*

13 March, Gabriele Bammer, National Centre for Epidemiology and Population Health *Integration and Implementation Sciences: new methodology for tackling complex problems*

Keynesians insisted that fiscal expansion created new demand and hence business activity recovered through the multiplier effect. However, the multiplier effect was much smaller than they estimated and hence they were criticised. Recent studies examined neoclassical and Keynesian policies against a dynamic optimisation framework in which persistent stagnation obtains and explored why these policies did not produce the positive effects expected. It was possible to show that the main reason was that people's desire for liquidity holding reduces consumption, causing deflation to arise, which makes holding money more advantageous and further reduces consumption.

In the neoclassical setting, deflation increases real balances and eventually stimulates consumption. However, in the presence of a positive lower boundary of the marginal utility of money, a liquidity trap naturally occurs and preference for holding money compared to consumption does not decrease even though real balances expand. Thus, consumption is never stimulated and an economy falls into a steady state characterised by a persistent demand shortage and deflation.

In this situation supply-side policies that improve efficiency raise the potential productivity and hence make a demand shortage more serious. It should also be noted that the Ricardian equivalence holds, even though a demand shortage persists, since the standard dynamic budget equation is taken into account. Therefore, the Keynesian multiplier effect, which obtains when the budget equation is ignored, does not work.

It has been found that the effects on consumption of various policies implemented under the name of 'structural reform'—such as

an increase in productivity and a decrease in the government size—have the completely opposite effect in the present stagnation model and the neoclassical model. They naturally increase private consumption in the neoclassical framework since it assumes full employment. However, in the presence of a demand shortage that arises under the liquidity trap, these changes expand the deflation gap and make deflation worse. Thus, they make it more advantageous for people to hold money than to consume, and hence a demand shortage expands.

A faster price/wage adjustment is believed by both neoclassical and Keynesian economists to improve business activity by making an economy reach full employment more rapidly. However, in Japan's stagnation setting the adjustment increases deflation and hence encourages people to hold money rather than to consume, causing stagnation to be more serious. This occurred under a process called '*kakaku haka*', meaning price destruction.

It has also been shown that public works spending raises employment and consumption even under a balanced budget. Note that this arises not because the multiplier effect works, but because public works spending reduces the deflationary gap and hence makes it more advantageous for people to consume than to accumulate money. The effect should be much smaller than expected in the Keynesian framework. This may be why the multiplier under fiscal expansion was estimated to be very small.

Finally, the phenomenon of social unrest is analysed. Where social unrest is caused, for example, by the threat of unemployment or by banking crises, people increase their liquidity preference, which encourages them

to hold money rather than to consume. Thus, the demand shortage expands and deflation becomes worse, which further makes it more advantageous for people to reduce consumption.

In sum, the supply-side reforms that were carried out in Japan reduced people's incentive to consume by expanding the demand shortage and increasing deflation and hence worsened stagnation. Such reforms need to be taken under full employment. The recent slow Japanese recovery is not because of structural reforms, but because recovery of people's confidence that the situation would not deteriorate any more. This lowers their liquidity preference and stimulates consumption.

In Japan's stagnation setting, if liquidity preference is small so that people consume enough to realise full employment, the standard neoclassical implications hold. Thus, the Japanese-type stagnation may well occur elsewhere once people lose belief about their own economy and increase liquidity preference.

In most capitalist countries about forty-year stock price cycle is observed, which is supposed to be generated by a generation change. Younger generations without any direct experience of economic 'bubbles' replace older generations and confidence about the economy recovers. Thus, liquidity preference reduces relative to preference for consumption and the next boom would start. Since the Japanese 'bubble' burst in the early 1990s, 17 years have passed – that is, almost a half of the cycle passed. Thus, the Japanese economy may be in a new era now, regardless of various supply-side reforms.

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#### Events contd.

**20 March**, Jon Barnett, University of Melbourne *Vulnerability to climate change in Niue: The biggest global problem for the world's smallest state?*

**27 March**, Rognvaldur Hannesson, The Norwegian School of Economics and Business Administration *Cooperative equilibria in fisheries*

**3 April**, David Vanzetti, Crawford School *Chicken Supreme: How the Indonesian poultry sector can survive Avian Influenza*

\*Seminars are held at 12.30pm in Seminar Room 4, Crawford Building

#### Publications

##### *Asia Pacific Press*

*Power and Pork: the political life of a Japanese politician*, Aurelia George Mulgan

Asia Pacific Press publications can be ordered online at <http://www.siapacificpress.com>, or by contacting Landmark Educational Supplies, Ph: 03 5625 4290, Fax: 03 5625 3756, [book.distribution@elandmark.com.au](mailto:book.distribution@elandmark.com.au)

##### *Pacific Economic Papers*

To view the latest papers, please visit [http://www.crawford.anu.edu.au/research\\_units/ajrc/ajrc\\_pub.php](http://www.crawford.anu.edu.au/research_units/ajrc/ajrc_pub.php)

#### Other

*Democracy & Diversity: Political Engineering in the Asia-Pacific*, a new book by Centre for Democratic Institution Director Ben Reilly and published by Oxford University Press (2006), was launched at the ANU on 6 February 2007.

##### *APEC Economies newsletter mailing list*

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