In Japan, a Ritual Suicide Strikes a Chord

“A Japanese manager shocked the nation when he committed hara-kiri in a protest of the corporate restructuring that is starting to take place across the country. Moments before he slashed his stomach with a 14-inch fish-slicing knife, Masaharu Nonaka had been in heated talks with the president of Bridgestone Corp., one of the world's largest tire makers. The case is extreme, but Nonaka's ritual suicide strikes a deep chord in Japan, which is suffering from record levels of unemployment and a recessionary economy.” NYT. 3/27/99.

Japan Warming Up to Prime Minister.
He (Keizo Obuchi) was dismissed as having "all the pizazz of a cold pizza."

A $200 billion stimulus program to distribute shopping coupons to people across the country in a desperate effort to get them to spend money.

“There are mixed signs about whether all this may have halted Japan's economic slide, and there is still vigorous debate about whether the sparkle ahead in the tunnel is sunlight or an oncoming locomotive. Obuchi has made no serious moves to restructure the economy in basic ways, and critics say that restructuring is the only way to revive Japan's fortunes in the long run.” NYT 4/1/99

What would happen to National Income (GDP)?
Aggregate Demand Curve:

\[ Y = a + bY(1 - t) + G + I + X - mY(1 - t) \]

Collect all the terms with \( Y \) onto the left hand side of the equals sign:

\[ Y - bY(1 - t) + mY(1 - t) = a + G + I + X \]

\[ Y[1 - b(1 - t) + m(1 - t)] = a + G + I + X \]

Collecting the \((1 - t)\) terms together inside the brackets: (remembering that a minus \( \times \) minus is a plus):

\[ Y[1 - ((1 - t)(b - m))] = a + G + I + X \]

\[ Y = a + G + I + X / [1 - ((1 - t)(b - m))] \] (1)

Multiplier = \( 1/[(1 - t)(b - m)] \) (2)

We can use this model to explore the predicament in Japan at the present time. Data from the Penn World Tables and the Bank of Japan.

Estimate various aspects of the model:

1. Consumption function: \( C = a + bY(1 - t) \)
2. Assume that \( t = 0.25 \). This is made a little difficult as with most western economies the tax rate varies with income. For this basic model assume a uniform rate.
3. Import function: \( M = mY(1 - t) \)

Estimates are:

1. Consumption function (allowing for lifetime consumption patterns):
   \[ C = 210644 + 0.359Yd \]
2. Import function:
\[ M = 0.223Yd \]

Average values (figures in thousands) for the 1950-92 period (at 1985 prices):
\[
I = 28121800 \\
G = 7596400 \\
X = 18073300
\]

Putting values into equation (1) to get predicted \( Y \) (GDP):
\[
\text{Pred } Y = 48475892 \\
\text{Actual } Y \text{ (average 1950-92)} = 81885900
\]

This makes some sense. For nearly all of the post-war period the Japanese economy was in a growth (boom) state. Taking the average level of investment expenditure and exports understates the role the 2 factors played in letting the Japanese economy continue to grow without inflationary pressure.

What happens if we use the model to predict GDP (national income) in the last quarter of 1997?

**Autonomous consumption (a) stays the same.**

Average values (figures in thousands) for the 1997.4 period (at 1985 prices):
\[
I = 44211000 \\
G = 14402600
\]
X = 655250000

Pred Y = 642702011
Actual Y (1997.4) = 479855000

Actual is below predicted GDP. If predicted GDP is thought of as potential GDP, then there is a recessionary gap.

Does the 200 billion dollar scheme help?

Increase 200000000 by 1.114 (the figure for the multiplier). Note that the vouchers are for Japanese goods, but after that the income multiplier will affect all parts of the model.

Increase from the vouchers = 200000000 \times 1.114 = 222800000
Add 479855000 = 702655000

The vouchers will take GDP above the estimated potential value (642702011) causing an inflationary gap if everyone spends their vouchers.

The vouchers will have different spending potential for different people depending on their incomes. Someone earning a low income will go to the trouble of collecting them and spending them. Some of the very high income individuals will not bother.
How many of the population should spend their vouchers so that actual and potential GDP are equal?

Let's take: $642702011 - 479855000 = 162847011$ (the difference between the potential and actual GDP).

Divide the amount that the economy need by the multiplier to find the initial required injection of funds into the income system: $162847011/1.114 = 146182236$.

Divide this amount by the total amount of the vouchers being issued to get the percentage of people who will actually need to spend them: $146182236/200000000 = 0.731$.

Just over 73 percent of the population need to spend their vouchers if potential and actual GDP are to coincide.
A few caveats about our model:

a. The estimated parameters are based on the figures for 1950-1992. These may no longer be relevant. Known as the ‘Lucas critique’ (for which he received the Nobel prize). We will deal with this when we take a look at expectations.

b. We have said nothing about the money market side of the model, or whether the supply side can have an influence.

c. What if everyone does indeed spend the vouchers. The economy has an inflationary gap. This can cause further problems if the Government then tries further measures to counteract this.

d. We have assumed that everything is static. There may already be an export led recovery, independent of Government policy, so that the amount of vouchers will be too much. Likewise, the economy may have declined even further. There are lags between recognition and implementation that make policy initiatives difficult to construct.