Exploding Welfare Uses in Japan:
A New Look through Long-term Time Series Data
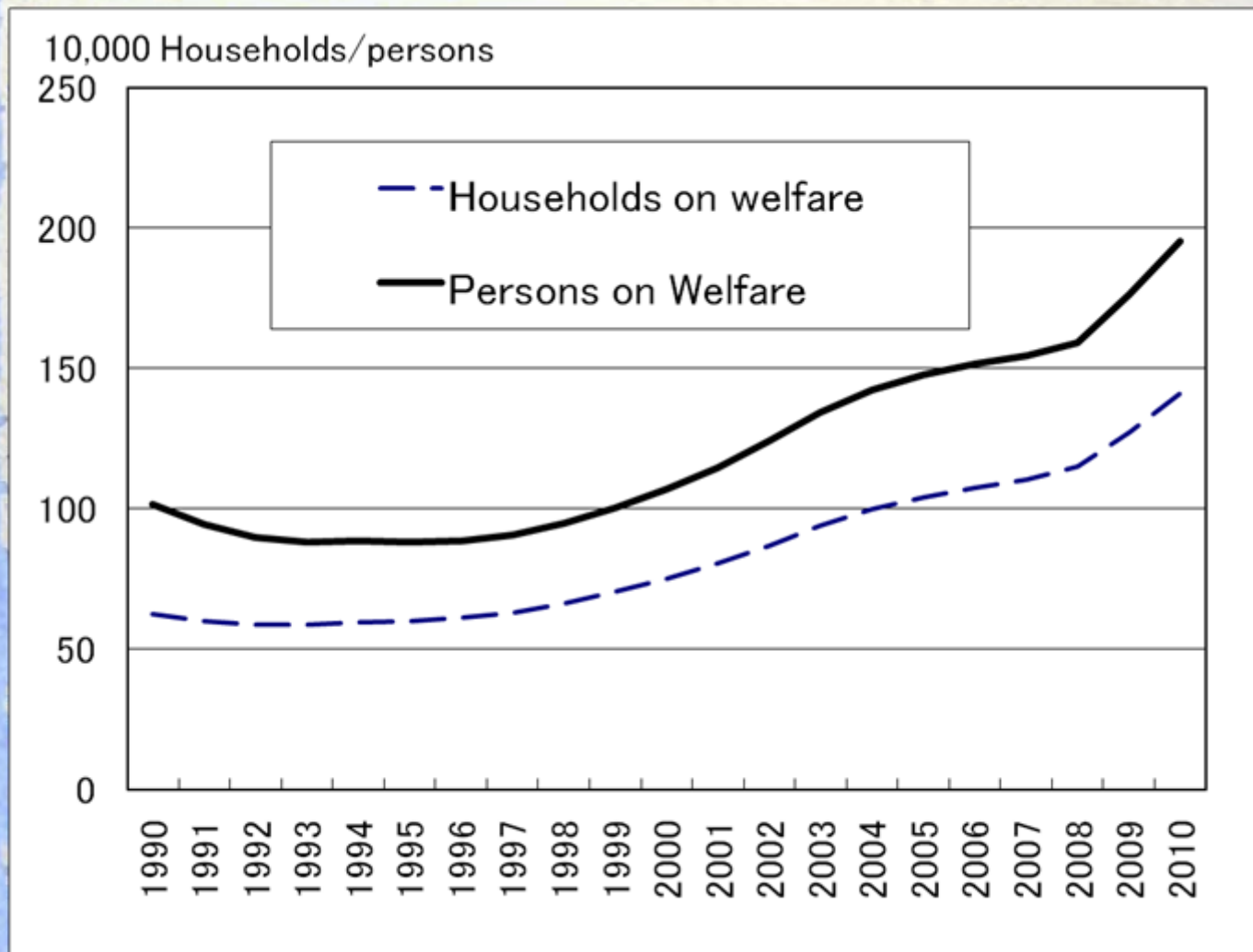
Wataru Suzuki

Gakushuin University, Tokyo, Japan

Yanfei Zhou

Japan Institute for Labour Policy and Training, Tokyo, Japan

Fig.1 Number of Households/persons on Welfare (1990-2010)

Notes: (1) Monthly averaged values. (2) Forecasted values for 2010.

Motivation of the Research

- Disclose the relative importance of permanent / temporary shocks on welfare use in order to predict its future trend.

- Understanding reasons for the exploding welfare caseloads since 1992 in Japan.

An **important** fact

- Although elderly households are still the major claimers of welfare benefit,

  welfare use of workable households has been growing at a dominantly high pace in 2000s…Even when economy recovers and unemployment rate drops, welfare use of workable households keeps rising.

- Adding to the aging factor, the workable households factor also persistently drives up welfare caseloads.

4

Tab.1 Types of Households on Welfare (2005-2010)

	2005	2006	2007	2008	2009	2010
Total	1,041,508	1,075,820	1,105,275	1,148,766	1,274,231	1,409,067
		(3.3%)	(2.7%)	(3.9%)	(10.9%)	(10.6%)
Elderly H.H.	451,962	473,838	497,665	523,840	563,061	603,119
		(4.8%)	**(5.0%)**	(5.3%)	(7.5%)	(7.1%)
Disabled & illness H.H.	389,818	397,357	401,088	407,095	435,956	465,111
		(1.9%)	(0.9%)	(1.5%)	(7.1%)	(6.7%)
Single-mother H.H.	90,531	92,609	92,910	93,408	99,592	108,740
		(2.3%)	(0.3%)	(0.5%)	(6.6%)	(9.2%)
Other H.H.	107,259	109,847	111,282	121,570	171,978	227,336
(Mostly workable H.H.)		**(2.4%)**	**(1.3%)**	**(9.2%)**	**(41.5%)**	**(32.2%)**

Notes: (1) Monthly averaged values. (2) Forecasted values for 2010.

What did we do?

Decomposing the shift of Welfare use into two parts:
(1)change due to permanent shock and

(2)change due to temporary shock.

If permanent shock dominants, the increasing workable households on welfare should be regards as not only the effect of recent economic slump (Lehman Shock etc.) but also an outcome of some persistent system transition (e.g. enlarged generosity on welfare approvals).

HOW TO DECOMPOSE WELFARE USE?

Using a bivariate vector autoregression (BVAR), Blanchard and Quah (1989) propose an elegant way to decompose GNP into its temporary and permanent components. We borrow their approach.

In sum, we consider a joint behavior of welfare use (Y) and unemployment rate (Z) under the following 3 assumptions.

(1) There are two types of disturbances affecting Y and Z.
(2) The first has no long-run effect on both. The second only has a long-run effect on Y.
(3) These two disturbance are uncorrelated at all leads and lags.

We interpret the first disturbance as "temporary shock" (business cycle, etc.), and the second one as "permanent shock" (aging, welfare system transitions etc.).

Data: Long-term time series sequences (Apr.1960-Mar.2011)
Original sequences (Fig. 2), Trend & break removed sequences (Fig.3)

Fig.2 Monthly Shift of Unemployment Rate and Welfare Use
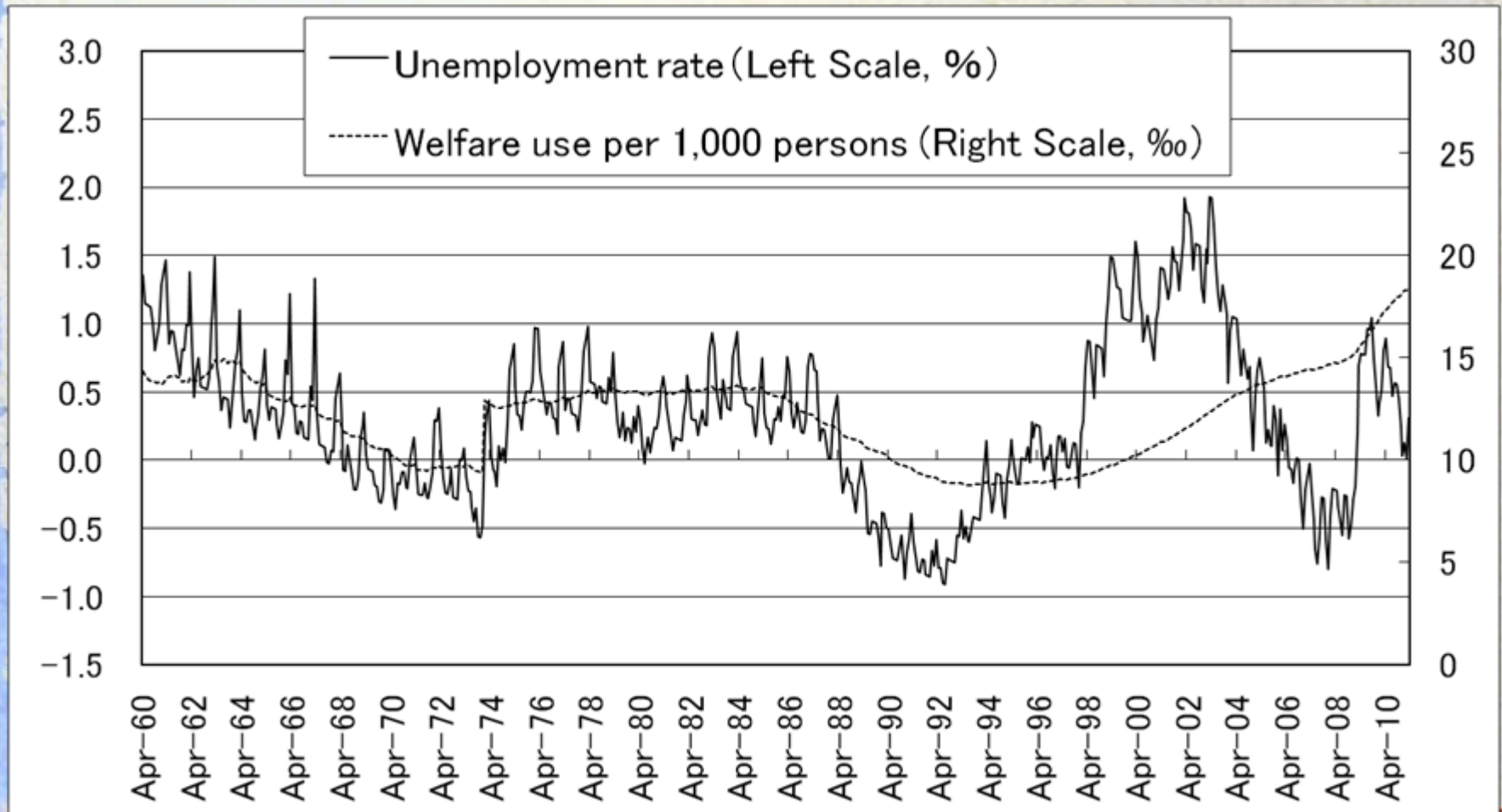## (Original Sequences, 04/1960-03/2011)
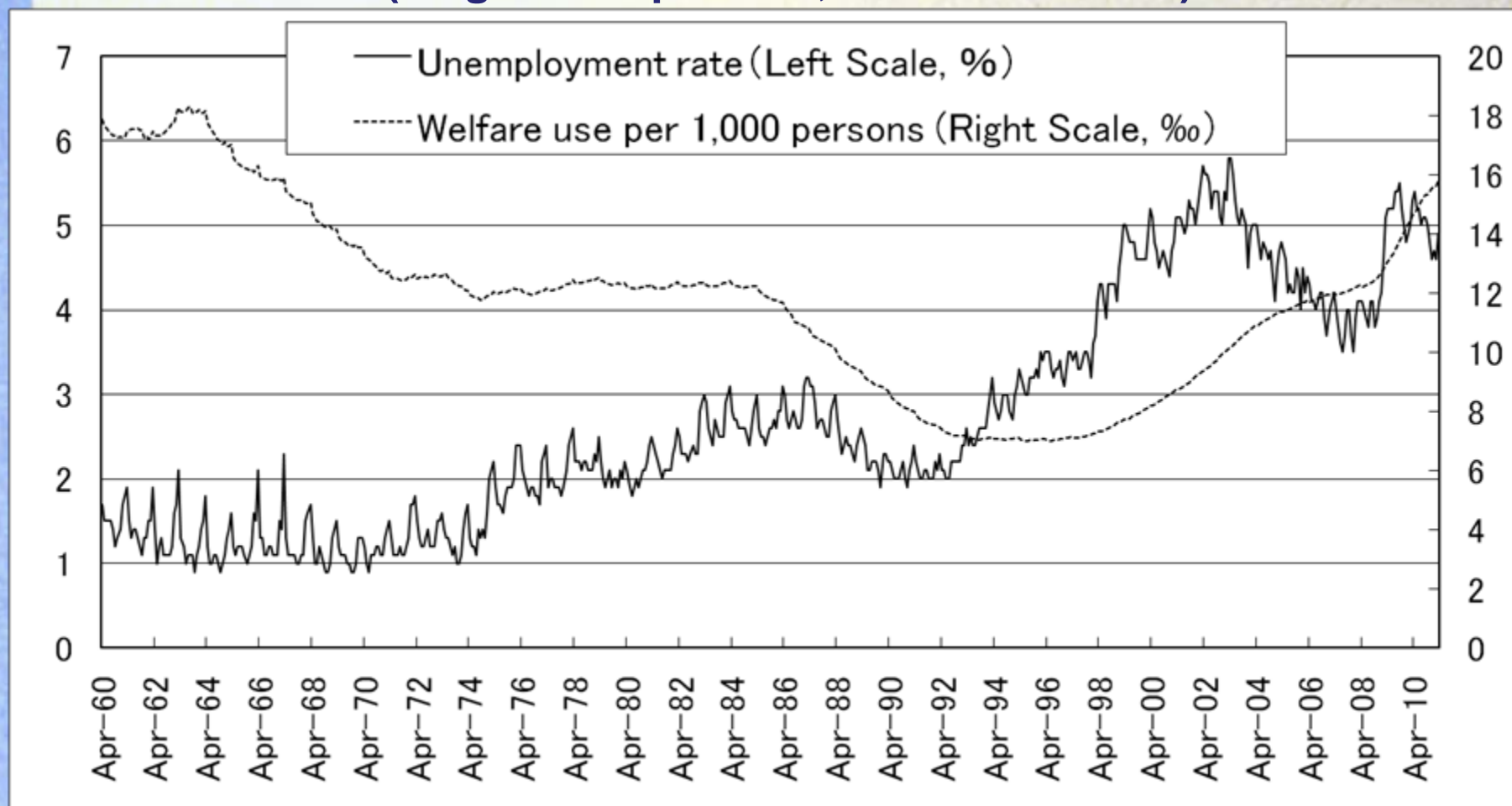
Non-stationary sequences:
unemployment rate seems to be moving reversely with welfare use.

Fig.3 Monthly Shift of unemployment rate and Welfare Use

(Time-trend & oil-shock break removed stationary sequences, 04/1960-03/2011)

Stationary sequences:
Two variables seem to be moving in the same direction (- late 1980s')

MAJOR FINDINGS

1) "Permanent shock" plays a central role in explaining the unexpected welfare uses growth. e.g. 82.5% for one month ahead forecast, and 94.6% for 120 months ahead forecast (Tab.2).

2) Impulse of the "permanent shock" on welfare use increases steadily over time, to reach a peak after four years (47 months) and a plateau thereafter (Fig.4).
   Impulse of the "temporary shock" fades gradually, but It takes 64 months for it to reach zero.

Tab. 2 Variance decomposition of welfare use

Horizon (Months)	Standard Err.	Percentage of variance due to permanent shock	Percentage of variance due to Temporary shock
1	0.15	82.5	17.5
6	0.41	85.1	14.9
12	0.65	85.4	14.6
24	1.08	86.5	13.5
36	1.43	88.1	11.9
48	1.71	89.7	10.4
60	1.94	91.0	9.0
84	2.31	92.9	7.1
120	2.67	94.6	5.4

Fig. 4 Impulses of permanent and temporary shocks on welfare use
(trend & break removed stationary sequences)
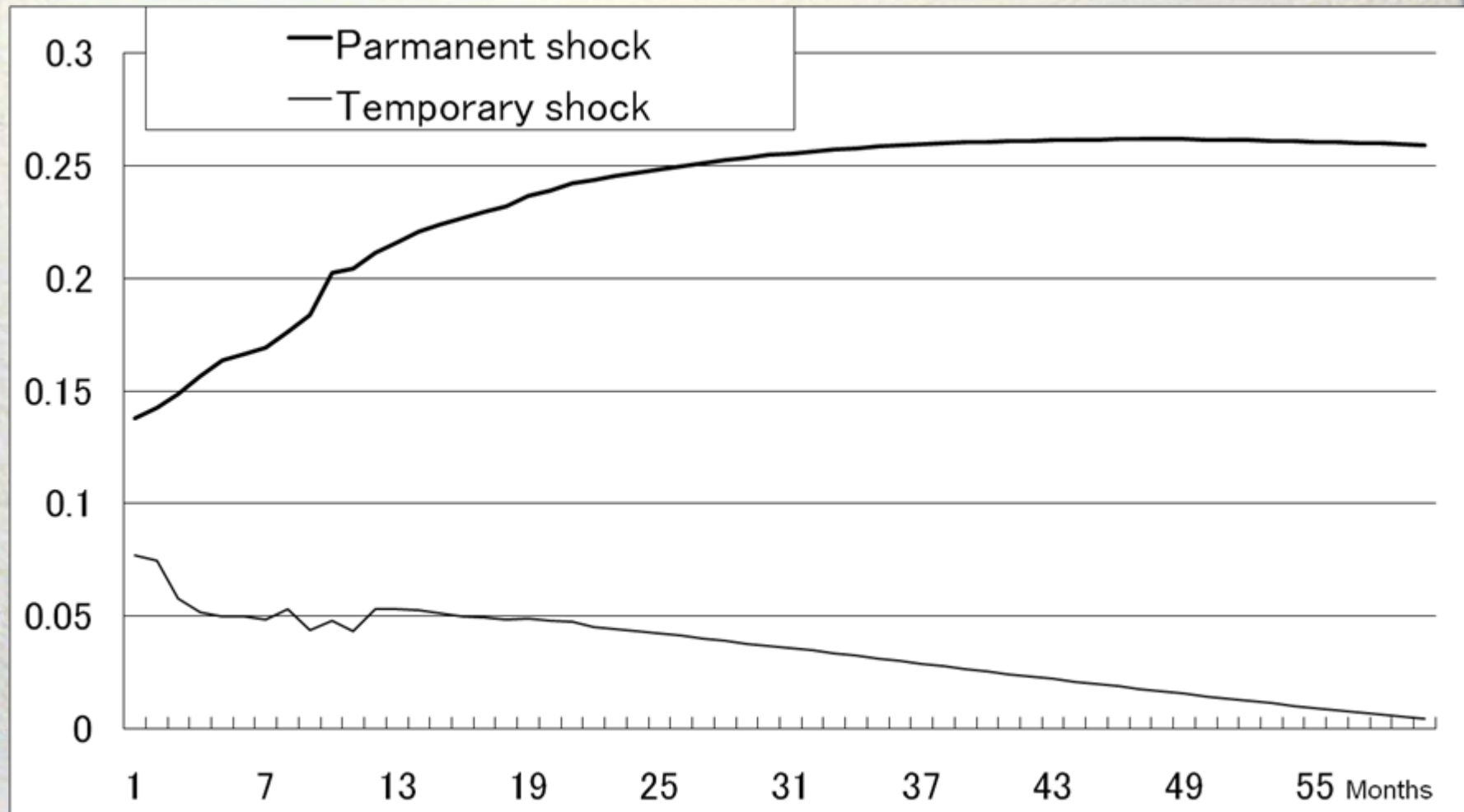
MAJOR FINDINGS (CONTINUED)

- Welfare uses have been turning from a declining to an increasing trend since 1992. Actual welfare uses exceeded forecasted values notably after 1999 and this forecast error is expanding thereafter (Fig.5) .

- A historical decomposition of the forecast error shows that the impact of "permanent shock" was strengthened significantly after Apr.1998, reaching a peak in May 2003. Impact of "permanent shock" was once weakened during the period of June 2003 and Mar.2008, but re-strengthened after Apr. 2008 (Fig.6).

13

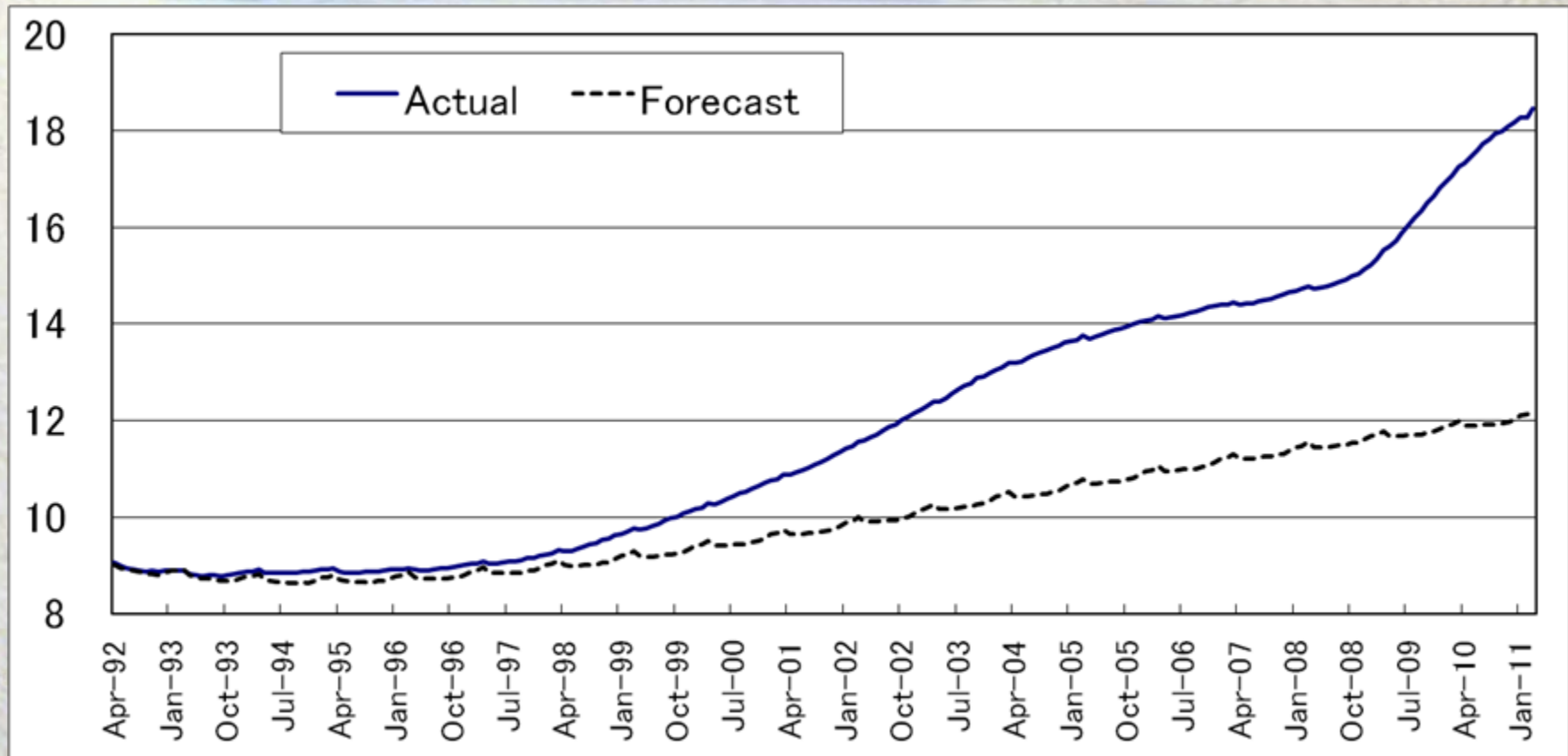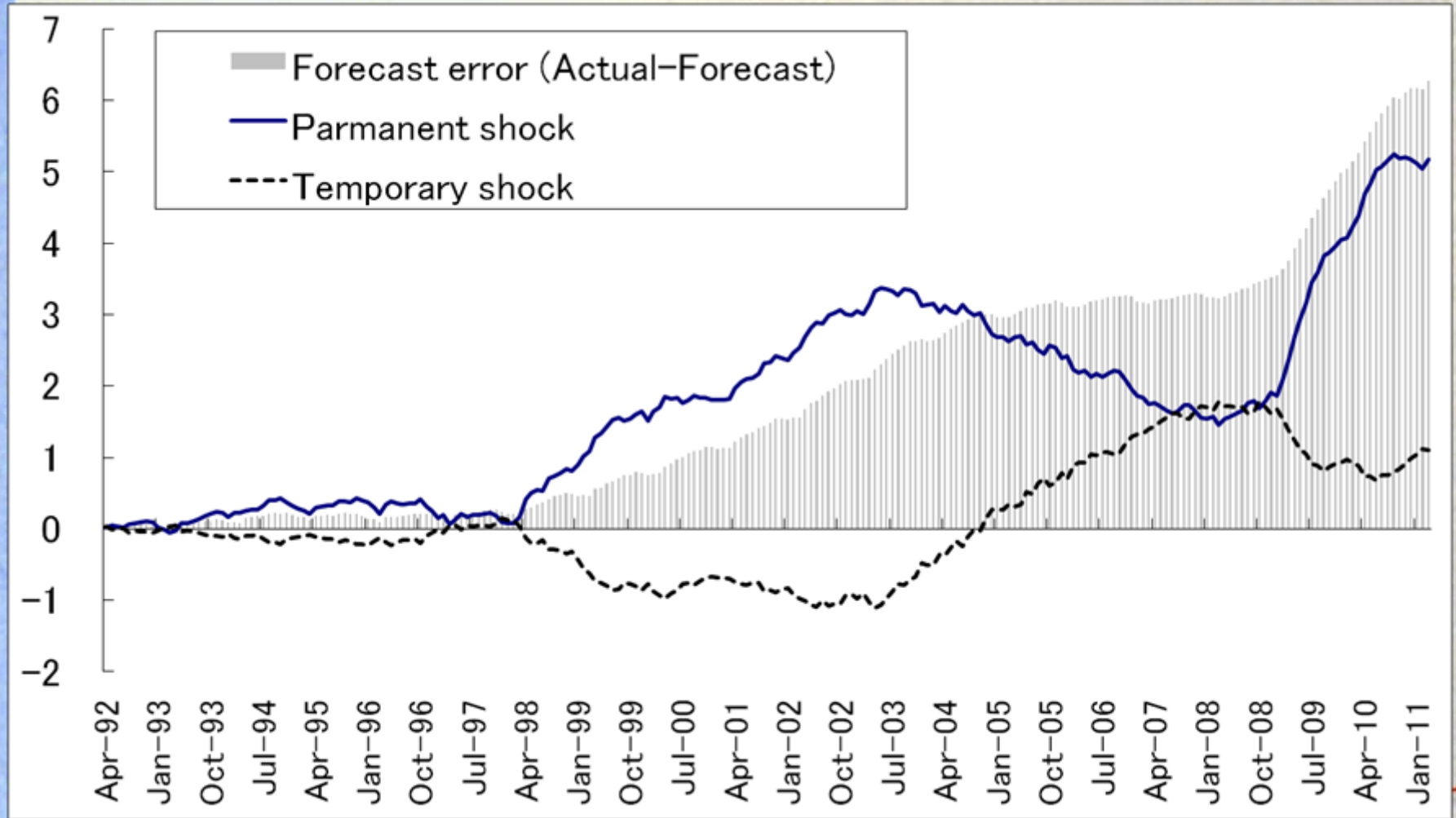# Fig.5 The Gap between Actual Values and Baseline Forecasts of Welfare Use

Fig.6 Historical Decomposition of Forecast Error

(Trend & break removed stationary Sequences)

WHAT DOES THE "PERMANENT SHOCK" REFER TO?

Possibility 1: Population aging.

Unlikely to explain the once weakened power of "permanent factor" between 2003 and 2008.

Possibility 2: Welfare system transition.

Very likely to explain, because the power strengthened (or weakened) periods of "permanent shock" are overlapping with more generous (or severe) welfare approval stance of MHLW(Tab. 3).

Tab.3 Major Events and Policy Shifts

	Major Events	**Policy shifts**
1998-2003	**Increasing number of the homeless and Upward social concerns. The homeless get welfare approval much more easily.**	**Expanding policy supports to the homeless to secure a residence, which is a prerequisite for getting welfare approval.**
2003-2008	**Criticism of exploding welfare uses: Severe eyes on bogus claims of welfare and tighter welfare approval**	MHLW notice "Handbook for proper management of welfare system" (03/2006) MHLW notice "Actions against misuses of welfare by Yakuza"(03/2006)
09/2008	**Lehman shock-Massive Dismissing of dispatched workers**	
2008-2009	Village of dispatched workers in Hibiya Park (12/2008-01/2009) **Surging social and political pressures which promote more generous welfare approval**	MHLW notice "Positive actions against the declining job market" （12/2008) MHLW notice "Intensive support for laid-off and homeless persons"(03/2009)
09/2009	**Change of Regime from the LDP to the Democratic Party**	
2009-present	**Further Generosity on welfare approval under Demoratic Party administration**	MHLW notice "Improving Welfare administration on poor persons under the Urgent Employment Measures"(10/2009) MHLW notice "Special attention on support for the jobless poor" (12/2009)

17

CONCLUSIONS

• Since "permanent shock" plays a central role in explaining the unexpected growth of welfare use, a reverse of the trend will not be easy.

• Nevertheless, the policy stance of MHLW do affect the strength of "permanent shock". Will Japanese government adopt or have to adopt a stricter welfare approval stance in the coming future? It remains an open question.

References

Blanchard, Oliver and Danny Quah(1989) "The Dynamic Effects of Aggregate Demand and Supply Disturbances."*American Economic Review* 79, pp.655-673

Suzuki,Wataru. and Yanfei Zhou(2007) "Welfare Use in Japan: Trends and Determinants," *Journal of Income Distribution* 16(3-4), pp.88-109

THE END