

独立行政法人 経済産業研究所 (RIETI)



第8回RIETIハイライトセミナー

消費税引き上げ後の物価・景気

プレゼンテーション資料

2014年7月2日

渡辺 努

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<http://www.rieti.go.jp/jp/index.html>



JSPS Grants-in-Aid for Creative Scientific Research

Understanding Inflation Dynamics of the Japanese Economy

東大物価指数からみた物価動向

渡辺 努

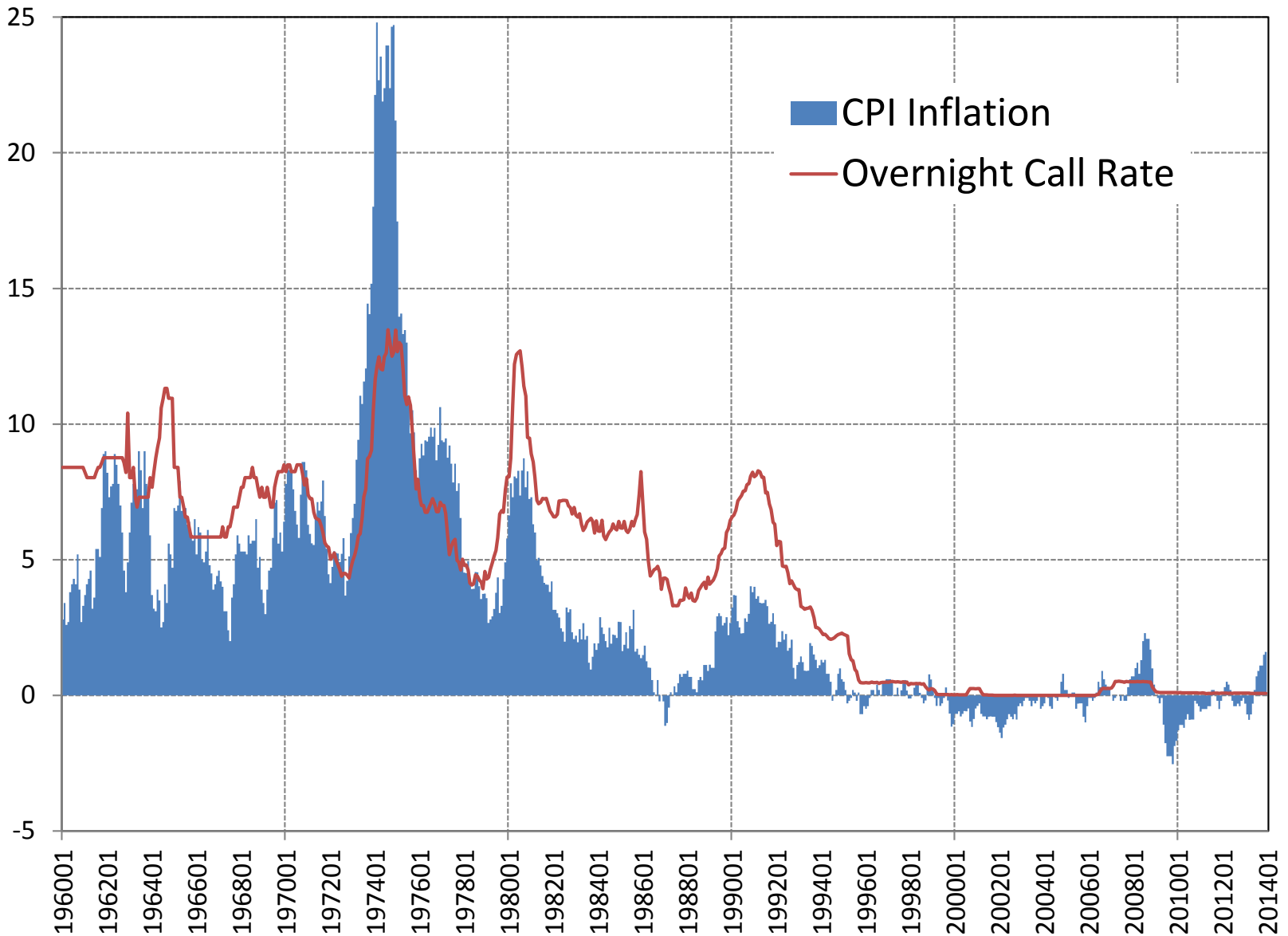
「東大日次物価指数」プロジェクト

http://www.cmdlab.co.jp/price_u-tokyo/

<https://sites.google.com/site/twatanabelab/>

2014年7月2日

Mild but persistent deflation in Japan



Quarterly Consensus Forecast

June 9, 2014

	2013 Q3	Q4	2014 Q1	Q2	Q3	Q4	2015 Q1	Q2	Q3	Q4
Real GDP Y/Y percent	2.4	2.4	2.8	0.7	1.1	1.4	0.3	1.9	1.9	0.9
CPI Y/Y percent	0.9	1.4	1.5	3.3 (1.5)	3.0 (1.2)	2.8 (1.0)	2.9 (1.1)	1.0	1.0	2.3 (1.1)

Note: Numbers in parentheses indicate the inflation rate without consumption tax increases planned in April 2014 and in Oct 2015.

Source: Consensus Economics Inc.

Low responsiveness of inflation to unemployment

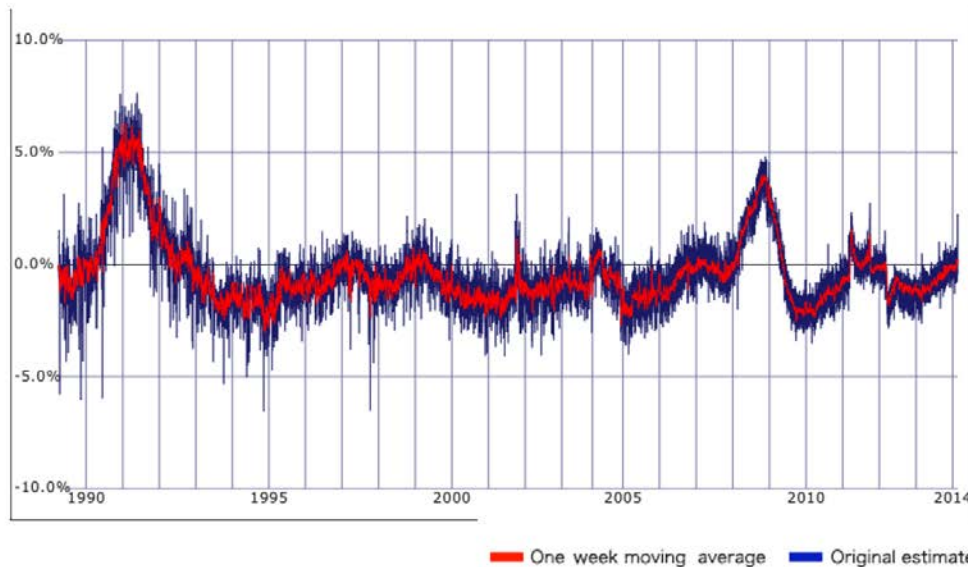


UTokyo Daily Price Project

The Daily Index for the most recent period has been updated on 2014-02-24

Daily Index	Monthly Index	FAQ
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Daily Index > Nationwide



Original estimate:	-0.23%
One week moving average:	0.11%
Year-to-year inflation rate for 2014-02-21	



The current and historical data are downloadable. **Free!**

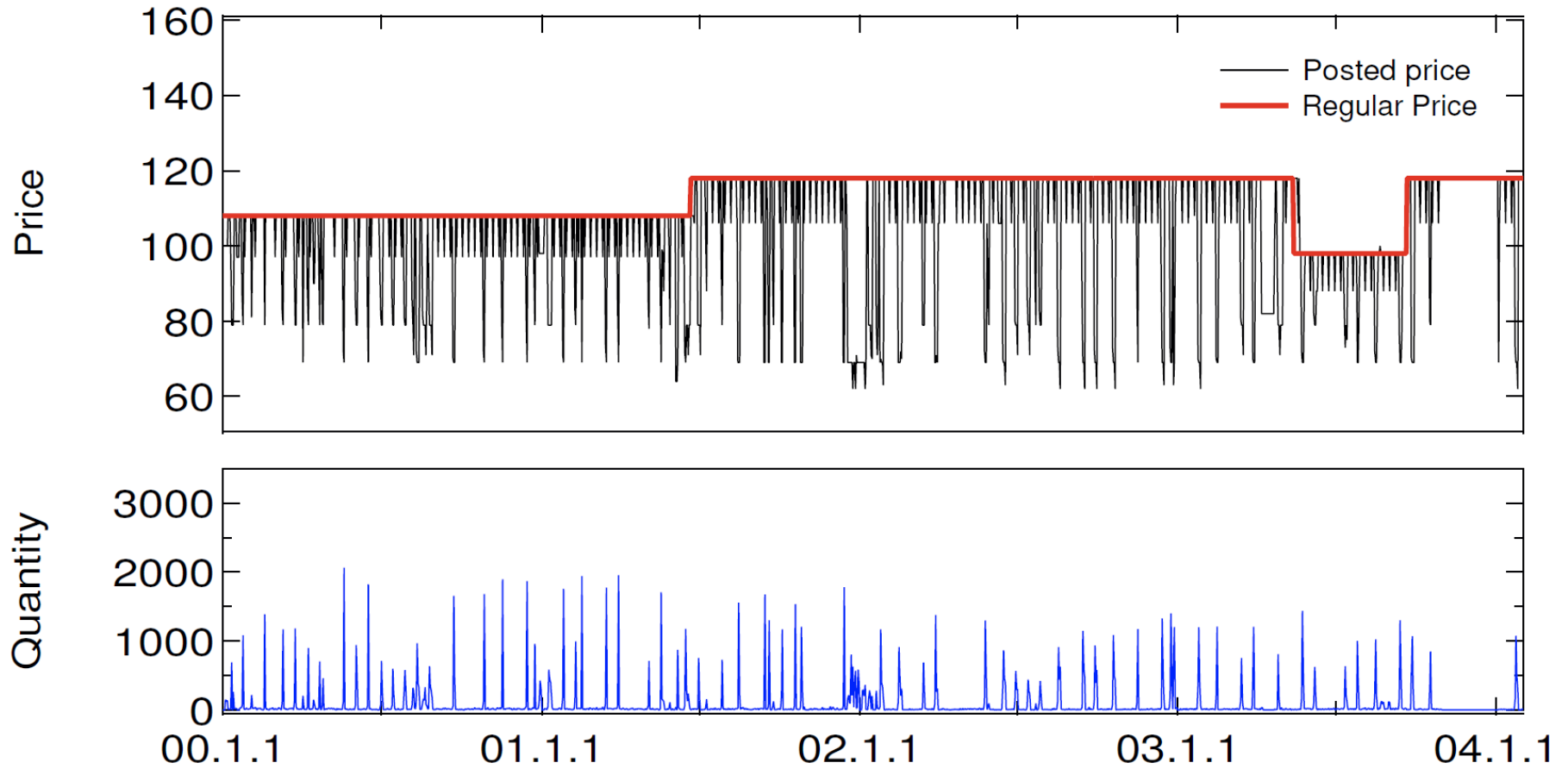
- Prices are collected every day from **300 supermarkets** sampled from all over Japan.
- The number of products is about 300K.
- Updated every day with a **two day lag**.
- Covers **17 percent** of the official CPI.
- Historical daily data is available over the last 25 years.

How is the UTokyo Daily Price Index calculated?

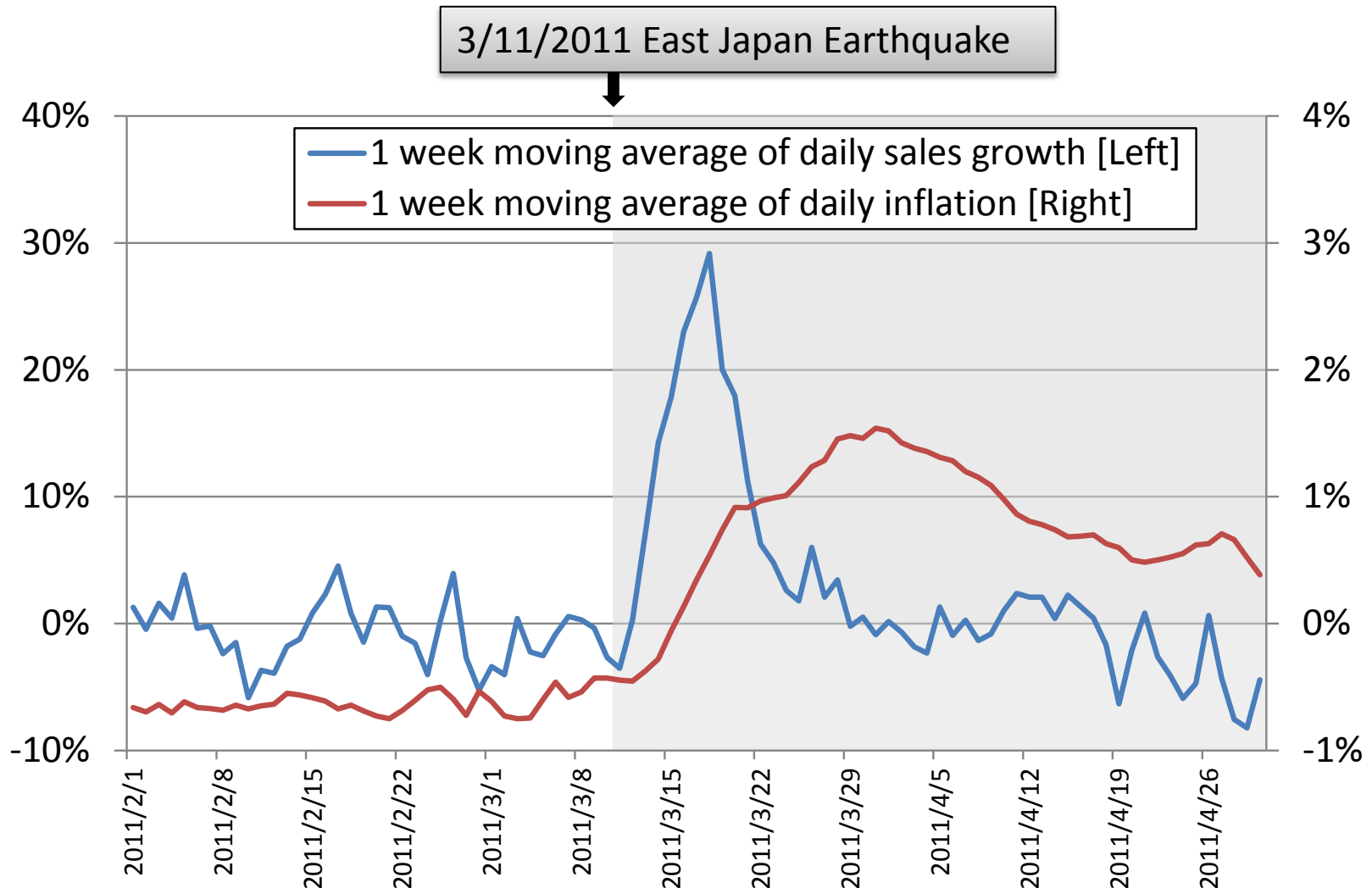
- The UTokyo Daily Price Index is **a daily version of the Törnqvist index**, which is known as one of the superlative price indexes.
 - CPI Manual released by ILO: “Many different kinds of mathematical formulae have been proposed over the past two centuries. While there may be no single formula that would be preferred in all circumstances, **most economists and compilers of CPIs seem to be agreed that, in principle, the index formula should belong to a small class of indices called superlative indices.**” (Consumer price index manual: Theory and practice, 2004, p.2)
- **Price relatives:** The daily inflation rate is calculated as the weighted geometric mean of price relatives across products, which are defined as the price ratios between today (t) and some day in the past ($t-dt$). For example, $dt=365$.
- **Weights:** The weight for a product is given by the average of the sales shares of the product today and the sales share of the same product on the same day of the previous year.

$$\pi_{t,t-dt} = \sum_i \frac{s_{i,t} + s_{i,t-dt}}{2} \ln \left(\frac{p_{i,t}}{p_{i,t-dt}} \right)$$

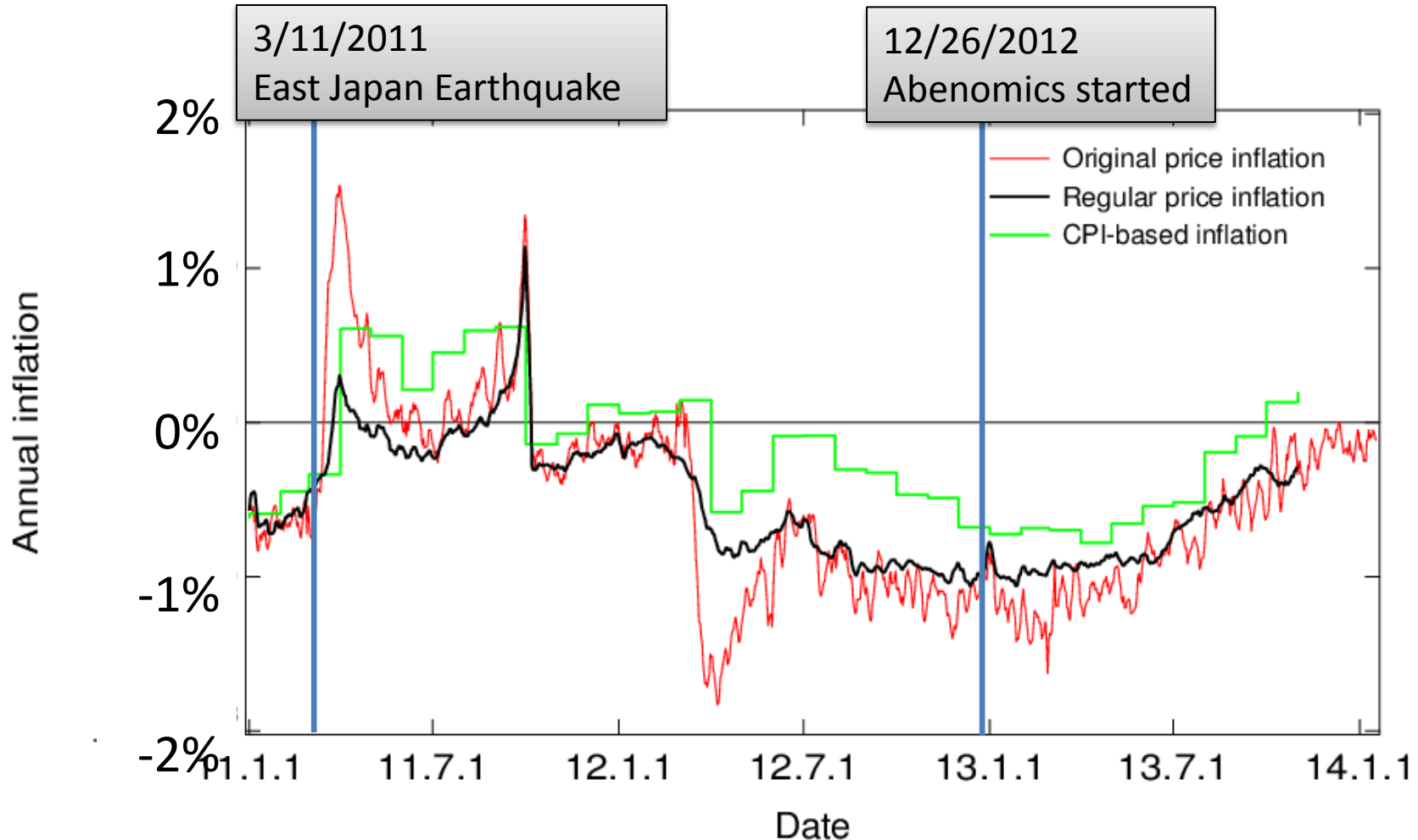
Sales price and quantity sold for a particular product at a particular retailer



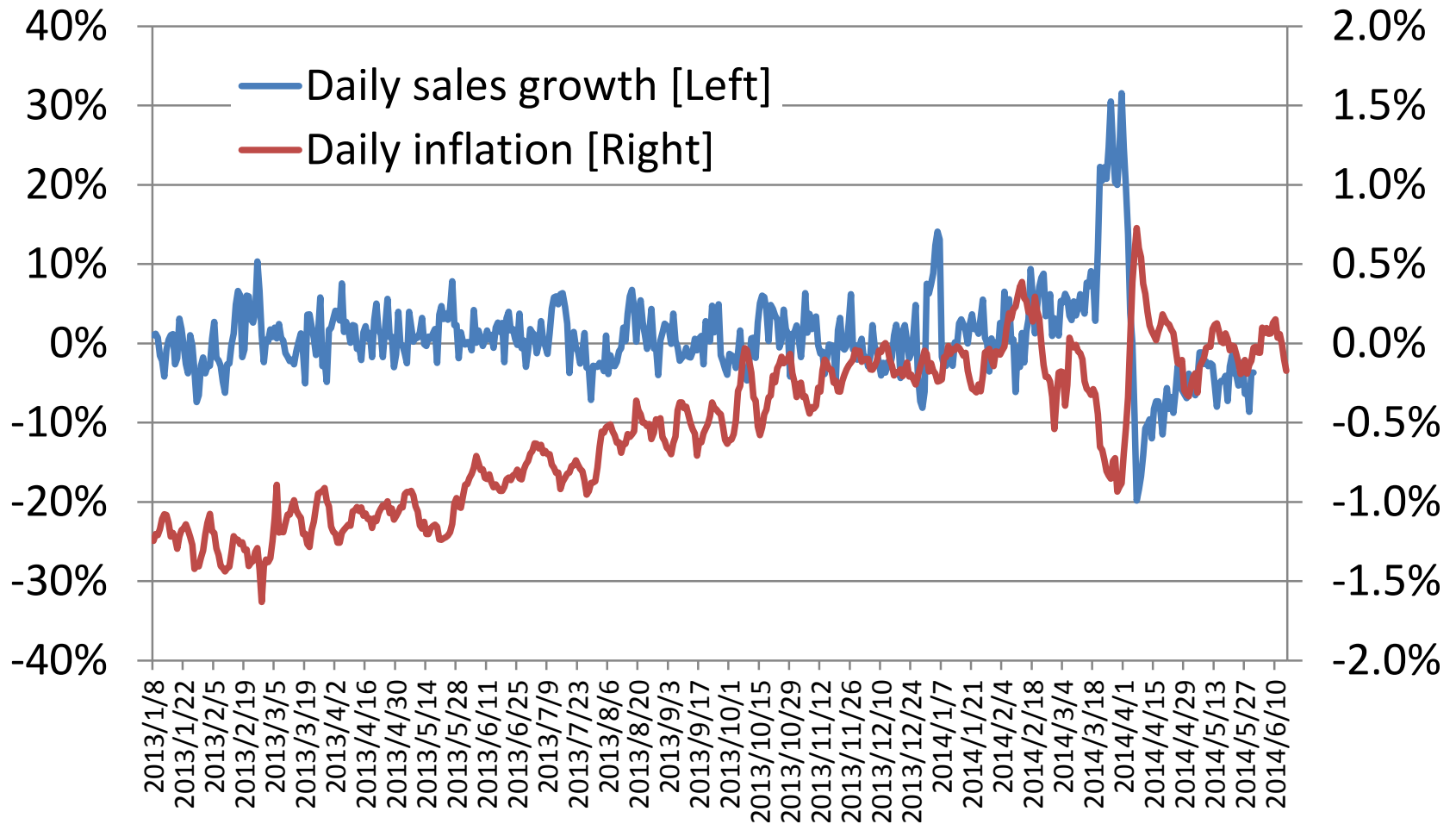
Daily inflation increased by 2 percent immediately after the earthquake and tsunami in March 2011, which is accounted for mainly by changes in the frequency of temporary sales rather than changes in regular prices

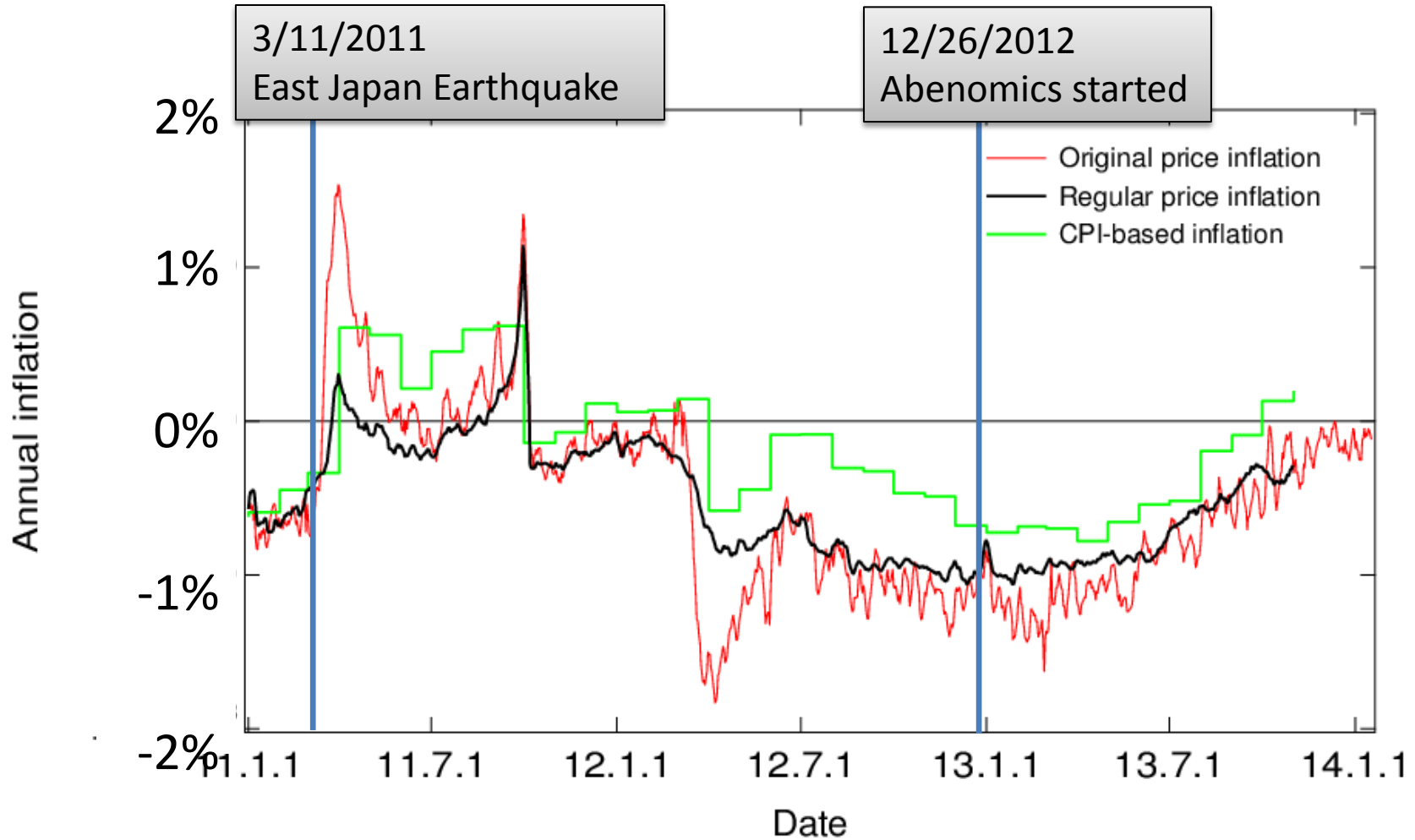


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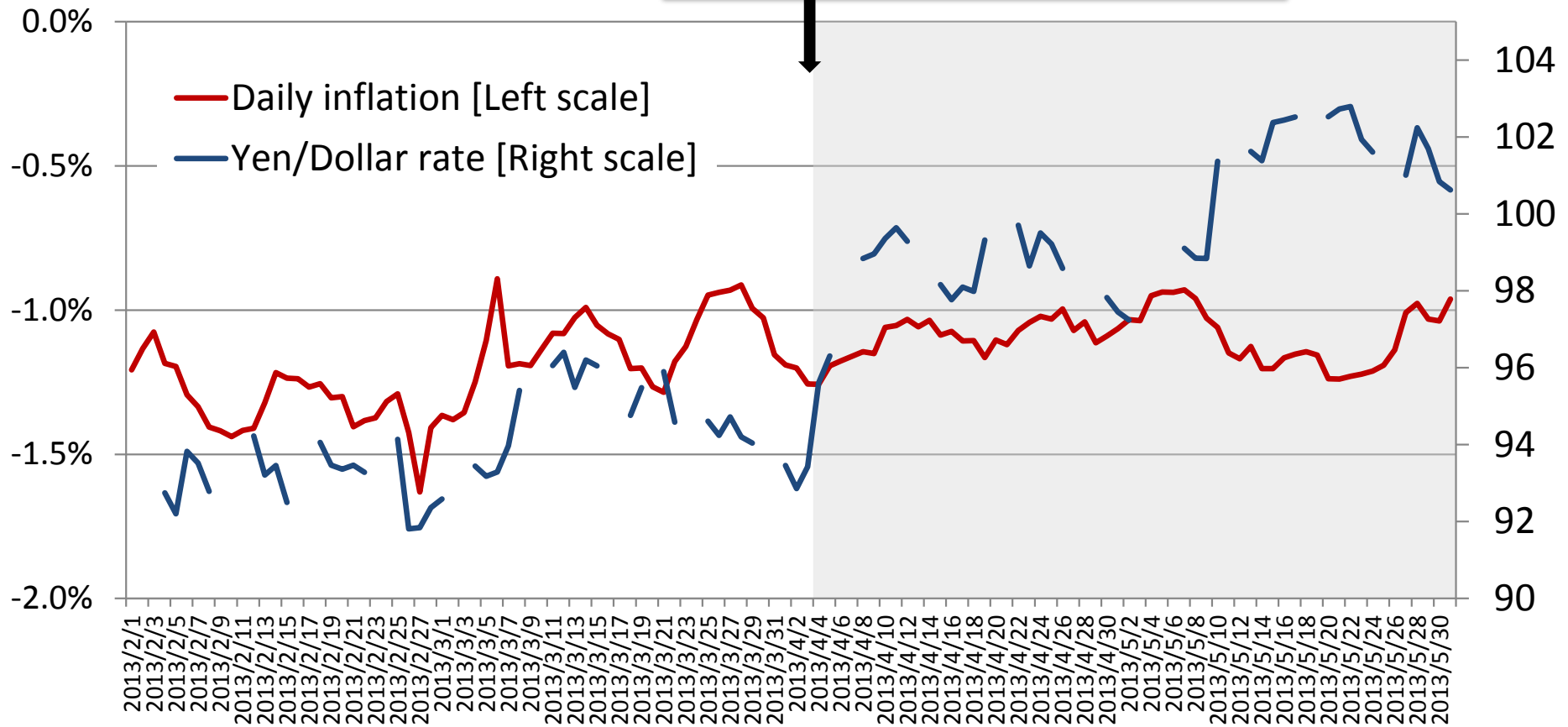
The rate of inflation has increased from -1.5 percent to zero percent since the start of Abenomics



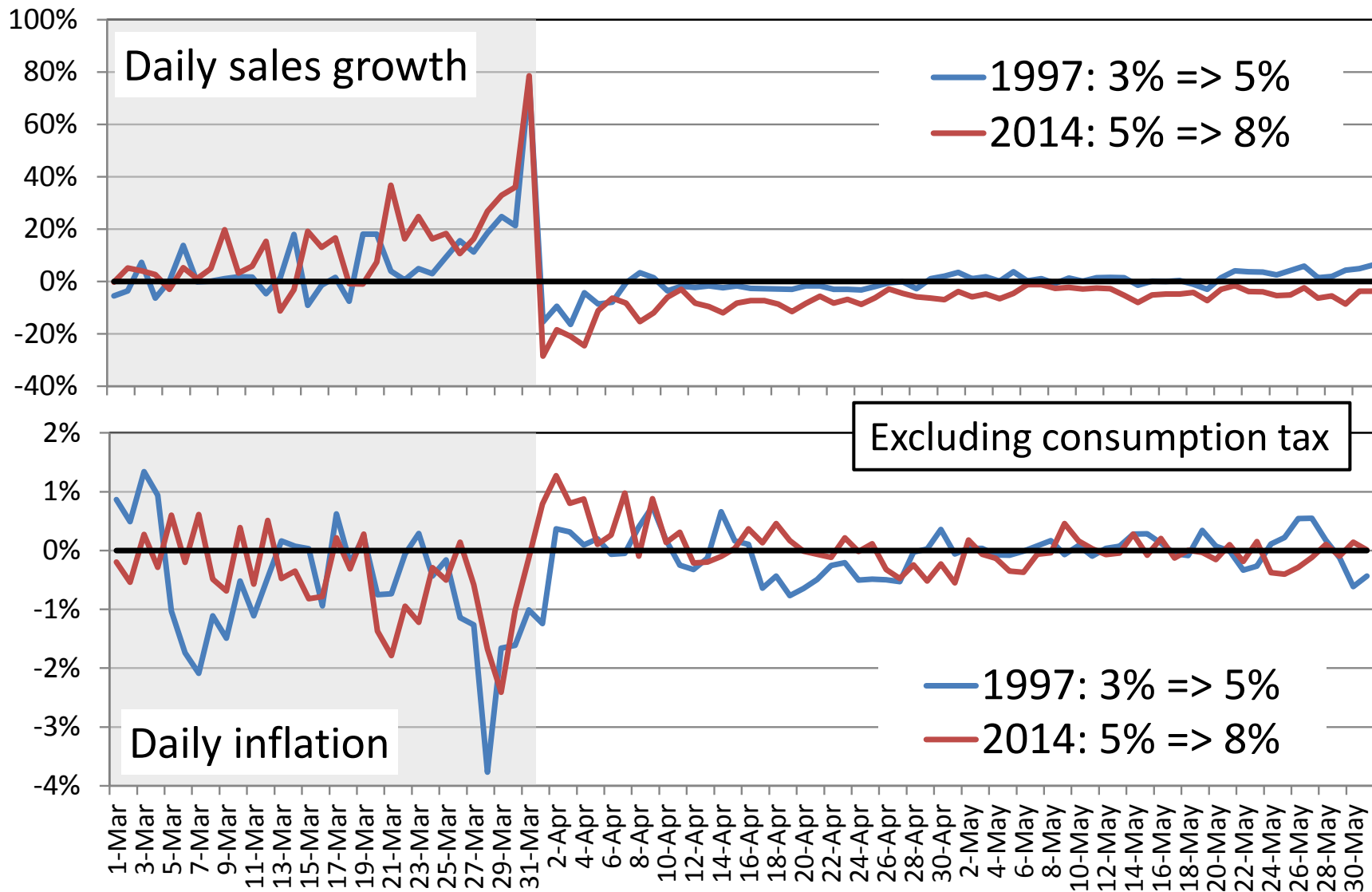


QQE had an immediate impact on the exchange rate but not on the daily inflation

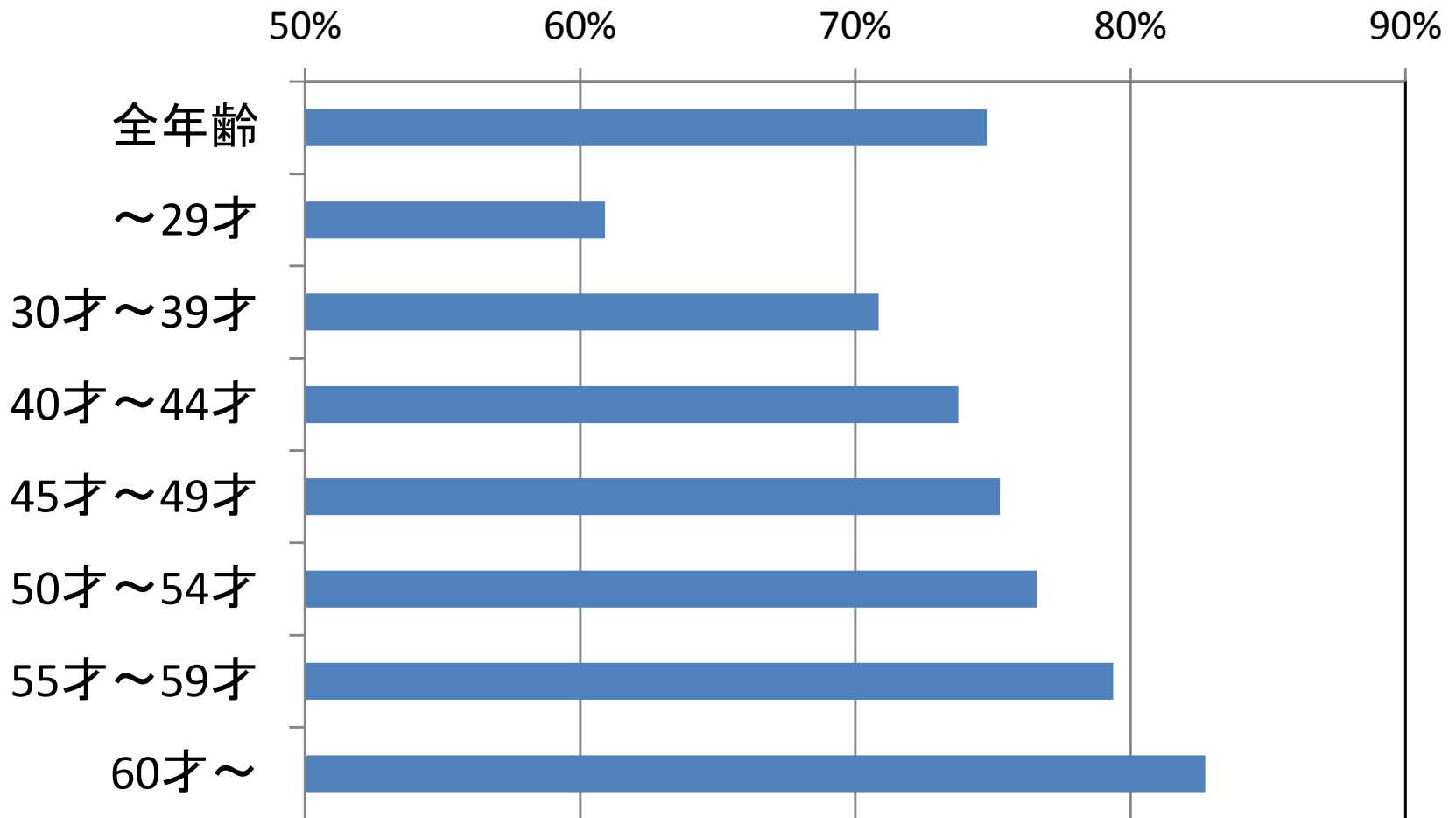
Quantitative and Qualitative Easing started on April 4, 2013



Inflation and sales at the time of consumption tax increase



物価上昇を予想する人の割合 年齢別



物価上昇を予想する人の割合

購読紙別

