

# Panel Presentation: The Present State of Statistical Reform

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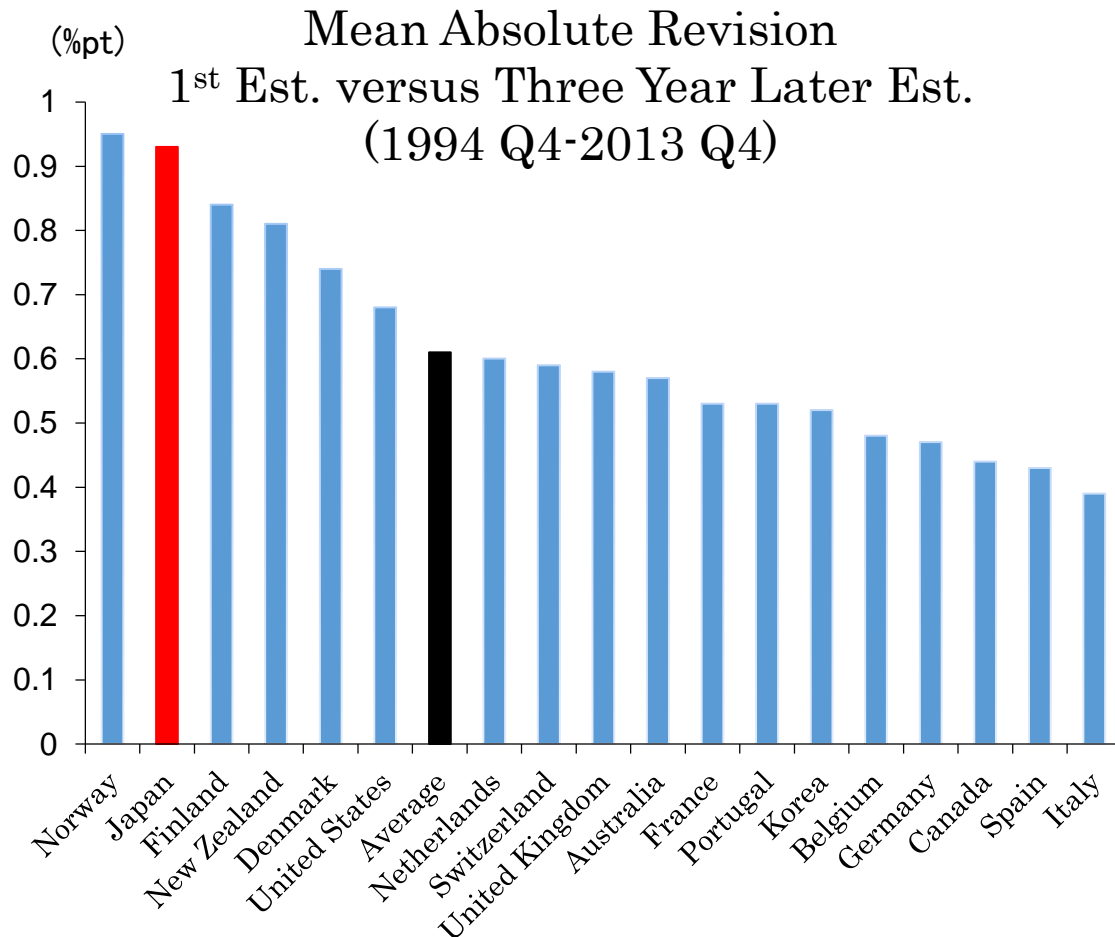
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# The Issues that lead to a sweeping statistical reform now under way in Japan

- Question: Does the GDP (we now have in Japan) properly measure and predict the business cycle accurately, given the possibly important changes in economic structure due to the impact of the financial crisis, digitalization of the economy, changes in demography, and so on?
- Unfortunately, the answer was NO in public perception at the end of 2016, when the Council on Economic and Fiscal Policy raised these and related issues and the Statistical Reform Promotion Council was established in response.

# Case in Point: Reliability of QE in Question

- QE's Large Revisions



- “Misguiding 1<sup>st</sup> QE”

- During the global financial crisis, the 1<sup>st</sup> QE was subsequently revised wildly with changing signs.

Period	2007 Q3_1	2008 Q3_1	2009 Q1_2	2009 Q2_2	2009 Q3_1	2010 Q3_2	2010 Q4_1	2011 Q3_1	2013 Q2_2
2007/July - Sep.	2.6	2.3	0.8	-1.3	-2.3	-0.6	-0.9	-1.1	-1.4
2008/July - Sep.		-0.4	-2.5	-5.1	-6.5	-4.6	-5.0	-5.2	-4.0
2009/Jan. - Mar.			-15.2	-12.4	-12.2	-19.9	-20.1	-17.7	-15.0
2009/Apr. - June				2.3	2.7	11.3	10.8	8.4	6.7
2009/July - Sep.					4.8	-1.2	-1.9	-2.3	0.4

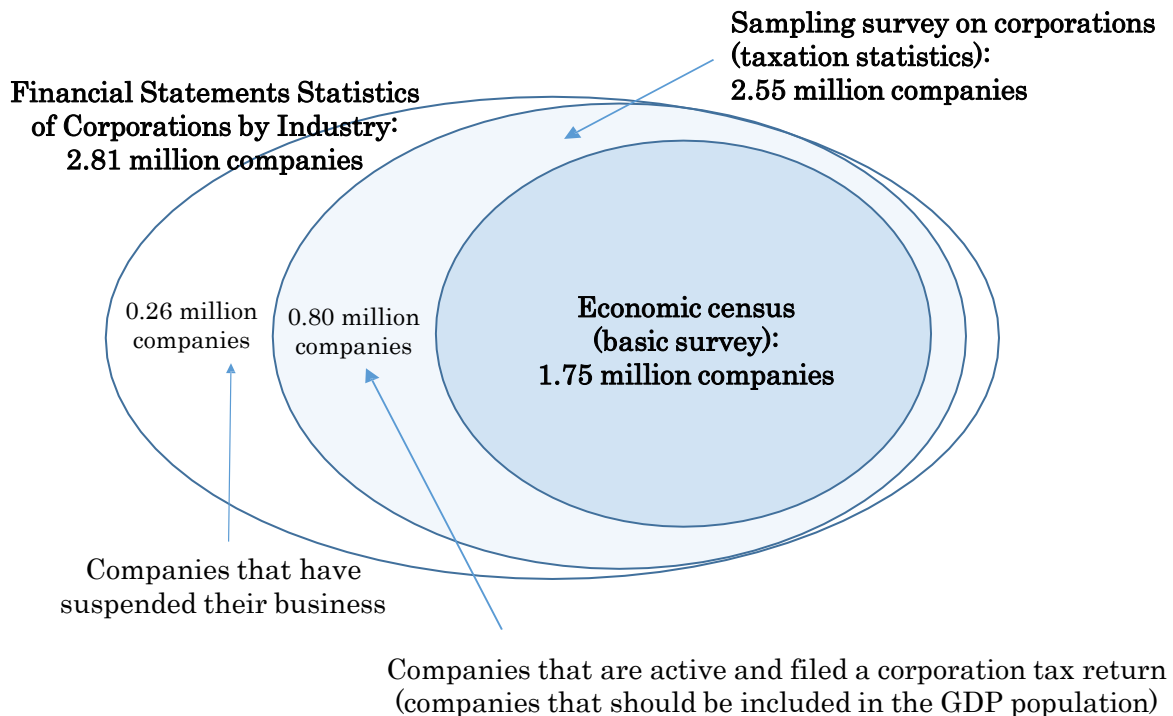
Source: Zwijnenburg, Jorrit (2015): “Revisions of quarterly GDP in selected OECD countries,”  
*OECD Statistical Brief*.

Author’s tabulation. Source: Cabinet Office.

# Case in Point: Economic Activities May Not Be Captured by Existing GDP Figures

- “Coverage” Problem of Primary Statistics used in GDP Estimates

Difference in the population name list depending on statistical survey (companies)



- Activities Missing in GDP

- Repair (reform and renewal) activities are not covered by a Primary Statistics “Survey on Construction Work Started”, thus missing in GDP.
- Sideline activities (esp. real estates services) of many firms are not adequately captured by Primary Statistics.
- New economic activities especially using internet are inadequately represented in GDP (such as some of internet commerce, the sharing economy and free-to-charge services) .

# Progress Made from the End of 2016 to Date (1)

- Wholesale Approach: Reforming Primary Statistics and GDP Estimation Procedure at the Same Time
- This necessarily leads to the institutional reform to overcome extreme fragmentation of the current statistical system in Japan. The Statistics Law is substantially amended for the second time, which enables the Statistics Commission to become “HQs” of the statistical reform.  
(However, in practice, it is a long way to go both in time and areas ... )
- Although the reform is not confined in economic statistics, the pivot of the reform is GDP estimation.

# Progress Made from the End of 2016 to Date (2)

- Combination of practical (“nuts and bolts”) improvement and structural (principal) improvement
- Practical improvement in primary statistics: measures are planned or already taken to reduce “artificial” volatility in data collection and compilation (e.g., “rotation sampling” in monthly labor surveys and “overlapped sample results” in corporate statistics [Financial Statements Statistics of Corporations by Industry])
- Practical improvement in GDP compilation: making Bench-Mark, Annual, and Quarterly Estimation “seamless” as possible to reduce purely procedural volatility
- Emphasis on Transparency (esp. “re-constructability”), though it is hard to achieve ...

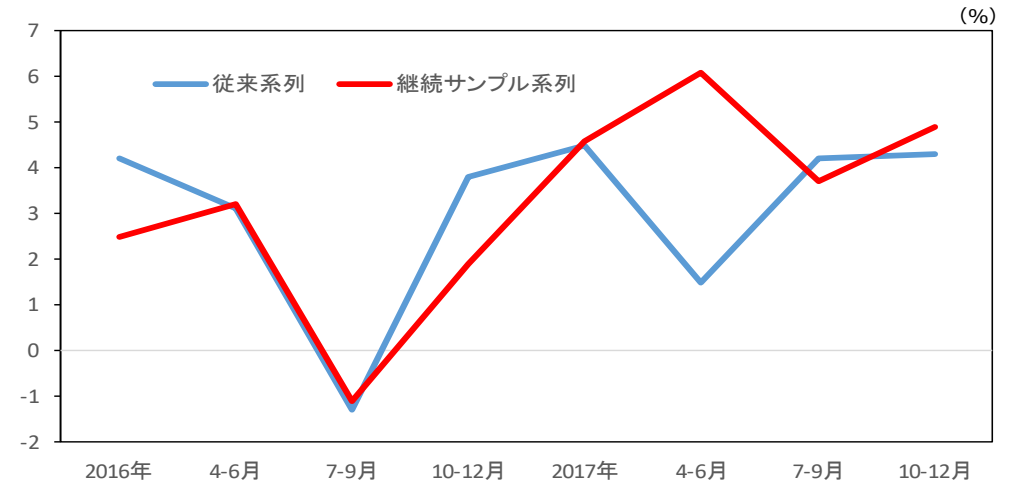
# Practical Improvements

- Blue: All Samples
- Red: “Overlapped Samples”
- In Corporate Statistics [Financial Statements Statistics of Corporations by Industry], **capital investment figures are stronger in overlapped samples** (rate of change calculated for the same sample firms) **than in all samples** (whose sample firms change over time).
- **The volatility in the rate of change in wages is smaller for the overlapped sample group than the conventional all-samples group.**

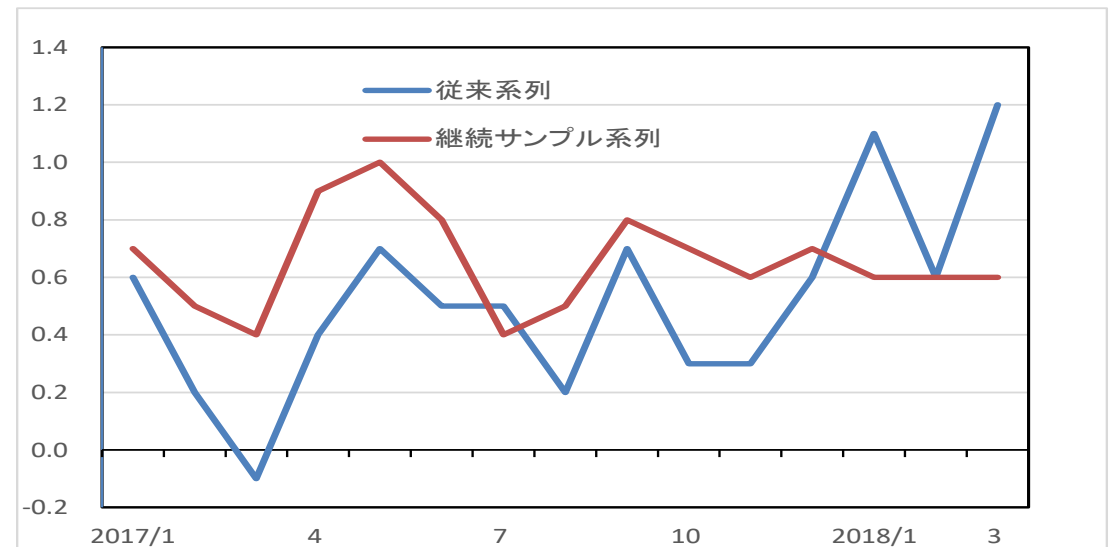
Capital Investment Figures of Corporate Statistics

[Financial Statements Statistics of Corporations by Industry:]

(全産業)



Monthly Labour Statistics: Scheduled Cash Earnings



# Progress from the end of 2016 to Date (3)

- Combination of practical (“nuts and bolts”) improvement and structural (principal) improvement
- Structural improvement in primary statistics: measures are to be taken to capture unaccounted economic activities (e.g., to conduct new survey on reform and repair activities, to improve establishment frame base continuously using administrative data ...)
- Structural improvement in GDP statistics: (a good lead of measuring wholesale service deflators by the Bank of Japan, a new attempt to base detailed GDP figures on annual “business survey framework”, to revise products and services classification system, ...)



# (1) Improvements in Nominal GDP Measurement

1. The level and (and possibly growth rate as well) of nominal GDP might be adjusted upwardly because of the statistic reform.

- Recent corrections of nominal GDP by annual estimates  
→ observe large upward revisions of GDP for past two years and particularly in 2015 as captured by high growth rate

	Trillion yen		
the time of revision	GDP(2014)	GDP(2015)	GDP(2016)
the end of 2016	② +4.4	① +7.3	--
the end of 2017	③ +0.2	② +1.5	① +1.2

(Note ) The annual estimate corrections at the end of 2016 exclude the effect of introducing 2008SNA. ①, ② and ③ represent the first, the second and the third annual estimate, respectively.

# (1) Improvements in Nominal GDP Measurement (cont.)

2. Many improvements will be achieved at the timing of the next standard revision of SNA (the end of CY2020). The coverage of establishment frame database is planned to be extended at the end of CY2022. Reforms for the nominal GDP are planned to be concentrated over the next 5 years.

- The perspective of the period when GDP reflects the accuracy improvements of basis statistics

period	Improvement of accuracy of basic statistics	GDP	The magnitude of impact
The middle of 2020	2(4) Reevaluate the progress rate of construction work	?	?
The end of 2020 (the next standard revision of SNA)	2(2) Economic Census : Improve the treatment of consumption tax and the complement for missing values	↑	n.a. (partly improved at the end of 2017)
	3(3) Account for the reform and renewal of buildings as investment	↑	+ 7 billion yen roughly (2015)
	3(4) Extend the coverage of real estate transaction	↑	n.a.
The early 2020's	2(5) Financial Statements Statistics of Corporations by Industry: Capture R&D and aggregate statistics earlier	?	?
The annual estimate of the end of 2022	4(2) Extend the coverage of establishment frame database + Improve Economic Census	↑	n.a.

## (2) Price Indices for Services and thus real GDP Are a Long Way to Go.

- Price indices are expected to take more time to improve than ones of the nominal values.
- Only **the price index of the wholesale service and CPI (quality-adjusted housing rents)** are expected to be launched for now. **Construction price index on output basis**, whose impact is expected to be large for GDP, and others are still “under consideration.”

(The probable time frame of the accuracy improvements of price indices for services)

Period of introduction	tasks	Direction of change	Progression status
The middle of 2019	Incorporate the wholesale service into Corporate Service Price Index	↑	Expected for Implementation
Summer 2021	Introduce CPI (quality controlled housing rent by time deterioration)	↑	The analysis is completed to assess its implementation.
Uncertain	<b>Introduce construction price index on output basis</b>	<b>↑</b>	<b>The analysis just starts.</b>
	Introduce price index of retail service	?	The analysis is planned to start.
	Evaluate the quality of medical, care and educational services and construct those price indices	?	Under the analysis
	Measure the quality of other services left	?	Still up in the air