Japan – Making the Most of Current Tailwinds

Does monetary policy work?

RYUTARO KONO CHIEF ECONOMIST (JAPAN) **BNP Paribas** 22 September, 2017



The bank for a changing world

Is monetary easing and fiscal stimulus appropriate under full employment?

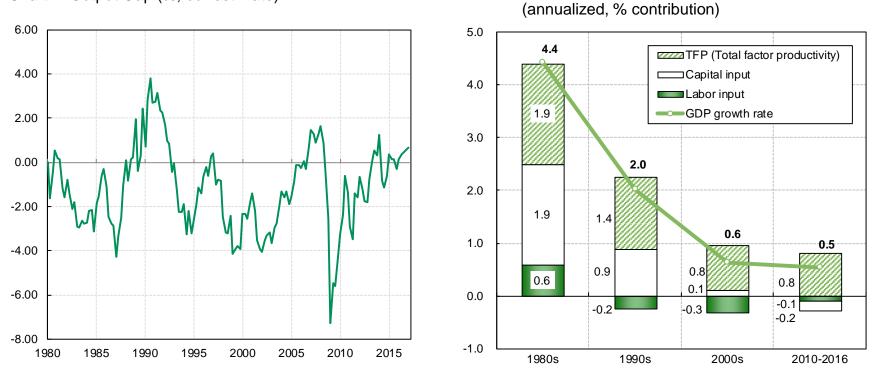


Chart 1: Output Gap (%, our estimate)

Source: Cabinet office, METI, MHLW, MIC, BNP Paribas

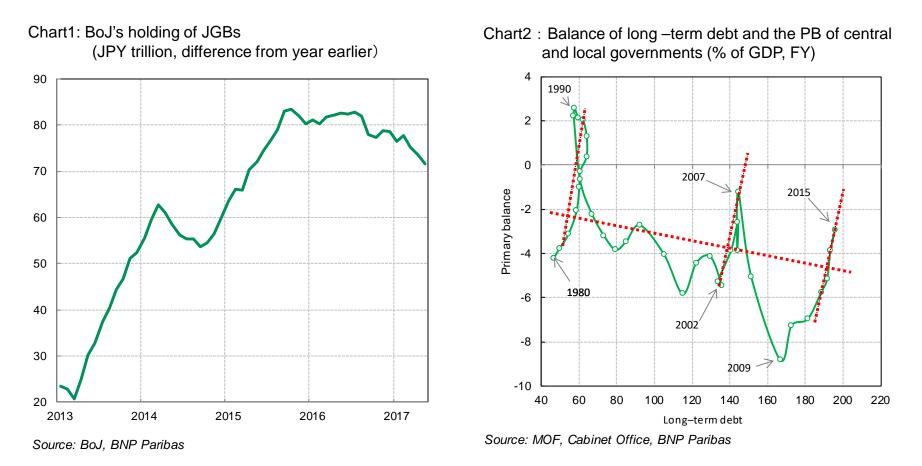
Chart2: Growth accounting framework analysis

- The Japanese economy faces manpower shortages, not deficient aggregate demand.
- Continuing aggressive macro-stabilization polices under full employment could delay the reviving of trend growth.



Source: Cabinet office, METI, MIC, BNP Paribas

Has the introduction of YCC made monetary policy more sustainable?



BoJ's shifting to stealth tapering is a partial success.

Policy has become more sustainable thanks to YCC, but the risk of succumbing to fiscal dominance has also increased.



Has Abenomics raised inflation expectations?

Core CPI (%, y/y, excluding VAT) 4 **0**2013 y = 0.27 x + 1.662014 $R^2 = 0.37$ 3 2Q1 1983~Q4 1995 •2015 2016د 2 ▲H1 2017 文 y = 0.36 x + 1.041 $R^2 = 0.40$ -14-①Q1 1983~Q4 2012 0 -1 y = 0.28 x + 0.37 $R^2 = 0.54$ 3Q1 1996 ~ Q4 2012 -2 -1--3 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 Output gap (% 2-quarter lead)

Chart 1: Phillips curve

Source: Cabinet office, MIC, BNP Paribas

- The Phillips curve has not shifted upward.
- Output gap must improve more than 5% to deliver 2% inflation.



Did aggressive monetary easing influence inflation expectations?

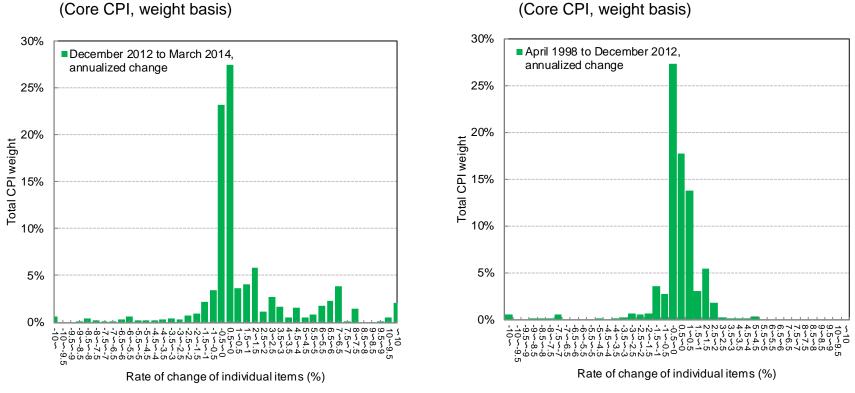


Chart 1: Frequency distribution of price change by item (Core CPI, weight basis)

Source: MIC, BNP Paribas

Source: MIC, BNP Paribas

Chart 2: Frequency distribution of price change by item

- Even when inflation was rising, prices for roughly half of the CPI, centered on services, hardly moved.
- For twenty years, half of the CPI hardly moved, either up or down.

Will wage growth lead to higher inflation?

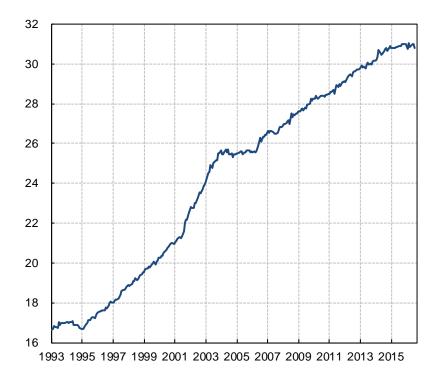


Chart1: Share of non-regular (sa, %)

Source: MHLW, BNP Paribas

Source: Cabinet office, MIC, MHLW, BNP Paribas

Unit labor cost

------CPI (rhs)

Chart2: Unit labour cost (CY2015=100)

- Corporations created a buffer to absorb costs during the period of wage deflation.
- Even if wages pick up, it won't quickly result in price pass-through.

What caused the wage Phillips curve to shift downward?

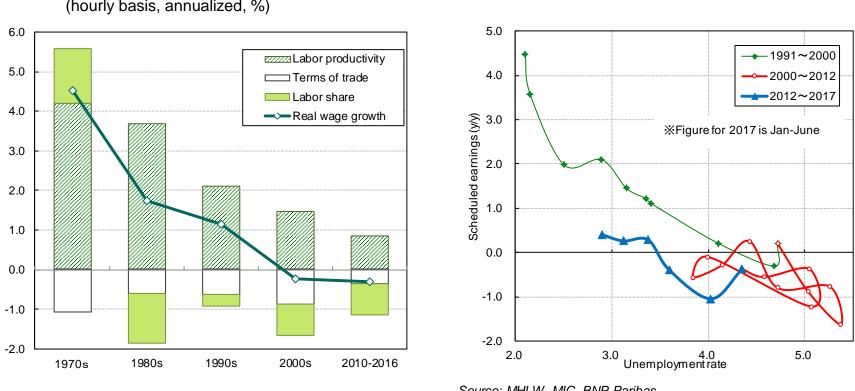


Chart1: Components of real wage growth (hourly basis, annualized, %)

Source: MHLW. MIC, BNP Paribas

Chart2: Wage-version Phillips curve (CY)

- Primary reason for floundering real wages is declining productivity growth.
- Downward shift in the wage Phillips curve reflects not only falling inflation, but also the weakness of real wage growth.

Source: Cabinet office, MIC, BNP Paribas

Will the decline in labor's share keep wages and inflation from rising?

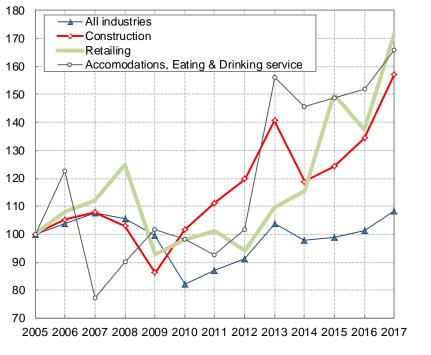
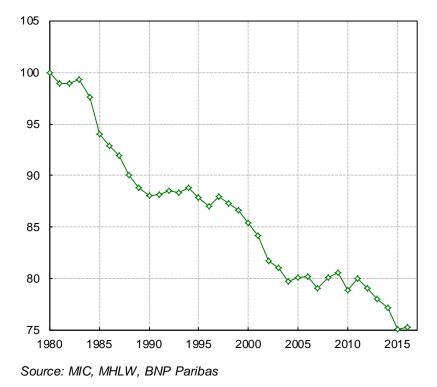


Chart1: Scale of software investment (CY2005=100)

Source: BoJ, BNP Paribas

Chart2: Labor's share of corporate income (CY1980=100)



- If elasticity of substitution exceeds 1, replacing costly labor with cheaper capital will lower labor's share.
- The lack of increase in real wages reflects the decline in labor's share resulting from skill-biased innovation

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