

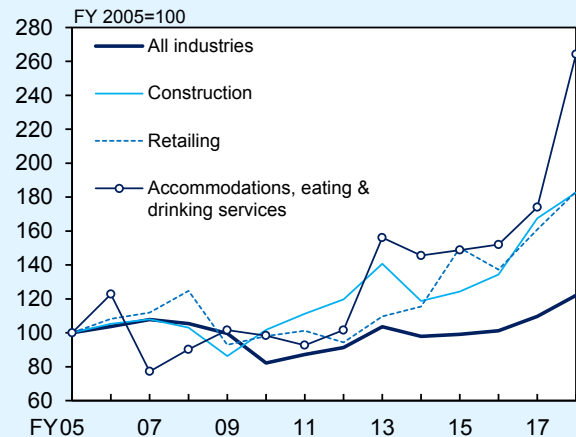
(Box 4) Recent Efforts by Firms to Raise Productivity

With labor shortages becoming more acute, labor-intensive sectors such as "retailing" and "accommodations, eating and drinking services" in particular face upward pressure on personnel expenses. Nevertheless, firms have maintained their cautious stance toward raising prices and increases in sales prices have been moderate (Box 3).

However, if firms simply do not raise prices, this will squeeze their profits and, in some cases, may lead them to make losses. Therefore, firms have been making efforts to absorb upward pressure of costs on prices by raising productivity through labor-saving and efficiency-improving investment, making use of the progress in digital technology in recent years and streamlining existing business processes.⁴⁵ In fact, in sectors such as "construction," "retailing," and "accommodations, eating and drinking services," where labor shortage is especially acute, software investment has increased greatly (Chart B4-1).

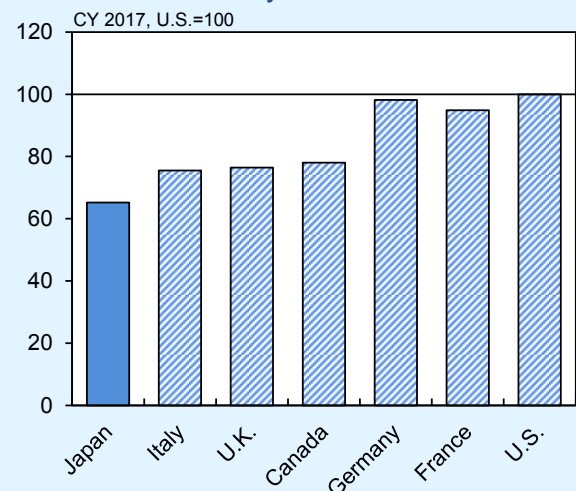
Why do firms prioritize raising productivity rather than prices? One reason is that the productivity of Japanese firms is relatively low and there is large room to raise productivity, mainly in the nonmanufacturing sector. In fact, Japan's labor

Chart B4-1: Software Investment (*Tankan*)



Source: Bank of Japan.
 Note: Figures up through fiscal 2017 are actual results. Figures for fiscal 2018 are forecasts from the June 2018 survey.

Chart B4-2: International Comparison of Labor Productivity: Level

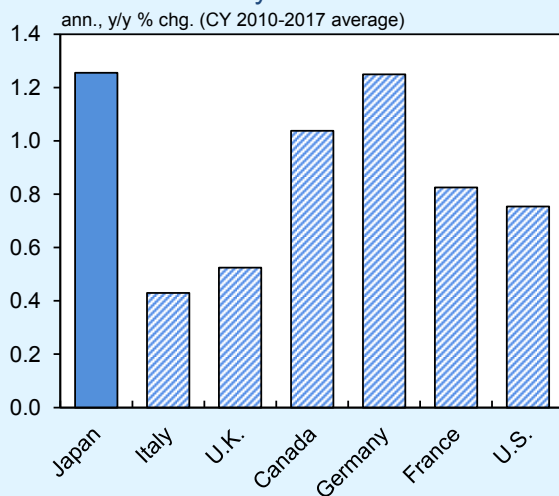


Source: Conference Board.
 Note: Figures are real labor productivity per hour denominated by PPP exchange rates.

⁴⁵ Regarding the fact that firms are absorbing upward pressure on prices by raising labor productivity, see Box 3 in the July 2017 Outlook Report and the annex paper to the *Regional Economic Report*, "Hi seizōgyō o chūshin to shita rōdō seisansei kōjyō ni muketa torikumi" [Efforts toward improving labor productivity in mainly the nonmanufacturing sector] released in December 2017 (available only in Japanese). Judging from the real wage gap, it appears that the situation described in these reports still exists.

productivity remains at only 60 to 70 percent of the U.S. level (Chart B4-2). Partly because firms accelerated their efforts to raise productivity in response to acute labor shortage -- in a situation where room for productivity improvements remained large -- productivity growth in Japan in the 2010s was the highest among the G7 economies (Chart B4-3).

Chart B4-3: International Comparison of Labor Productivity: Growth Rate



Source: Conference Board.
 Note: Figures are growth rates of real labor productivity per hour.