

(Box 2) Recent Developments in the Propensity to Consume

The pace of increase in private consumption has remained moderate compared to the rise in wages and salaries (mainly employees' salary incomes) (Chart 30). However, this does not necessarily mean that households' consumption expenditure has been subdued relative to their income.

An important determinant of consumption behavior at the macro level is not only employees' salary income, but also their disposable income, which is their salary income adjusted for taxes and social insurance contributions as well as social benefits such as pensions. Such adjustments make it possible to grasp more accurately the net income that working households can use for consumption. In addition to the income of working households, such adjustments make it possible to consider developments in the income of pensioners, for example, whose main source of income is social benefits.

However, because the disposable income data in the SNA are released with a lag, it is not possible to grasp developments up to the present.³³ Therefore, using various related statistics, this box presents estimates of disposable income that closely follow the definition of the SNA (Chart

Chart B2-1: Data Used for Estimating Disposable Income

Wages and salaries	Ministry of Health, Labour and Welfare, "Monthly Labour Survey"; Ministry of Internal Affairs and Communications, "Labour Force Survey."
	Figures are calculated by multiplying total cash earnings (from the "Monthly Labour Survey") by the number of employees (from the "Labour Force Survey"). In the estimation of disposable income, figures for total cash earnings from September 2016 are based on continuing observations.
Pension benefits	Japan Pension Service, "Primary Statistics."
	Figures are the total amount of pension benefits provided by the National Pension System and the Employees' Pension Insurance System.
Income tax	Ministry of Finance, "Survey of the Amount of Tax and Stamp," etc.
	Figures are the total amount of withholding income tax and self-assessment income tax, etc. (the amount of local income tax is calculated separately).
Social insurance contributions	Ministry of Finance, "Receipts and Payments of Treasury Funds with the Private Sector," etc.
	Figures are the amount of receipts in the pension special account, which mainly consist of household and employer contributions to the public pension and national health insurance schemes.
Public assistance	Ministry of Health, Labour and Welfare, "Survey on Public Assistance Recipients."
	Figures are based on the number of households receiving public assistance.
Dividends (shares)	Tokyo Stock Exchange, Inc., "Average Yield," "Trading Volume & Value of Stocks by Investor Type"; Bank of Japan, "Flow of Funds Accounts," etc.
	Figures are calculated by multiplying dividend yields by the outstanding amount of listed shares held by households estimated using the "Flow of Funds Accounts" and "Trading Volume & Value of Stocks by Investor Type," etc.
Dividends (investment trusts)	Investment Trusts Association, "Changes in Assets of Publicly Offered Investment Trusts (Market Value)"; Bank of Japan, "Flow of Funds Accounts," etc.
	Figures are calculated by multiplying the total amount of profit distributions of publicly offered investment trusts by the share of investment trusts held by households estimated using the "Flow of Funds Accounts," etc.

Note: In the estimation of disposable income, individual monthly indexes are converted to nominal values and summed up. In the conversion of indexes to nominal values, annual estimates from the SNA for fiscal 2013 are used for dividends. Other than that, annual estimates from the SNA for fiscal 2011 are used. Items such as mixed income are not taken into account.

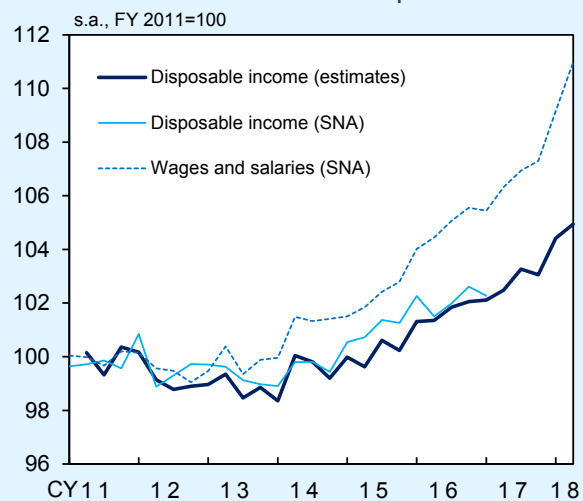
³³ The Cabinet Office has been deliberating with the aim of publishing preliminary figures of household disposable income as a reference series in the course of fiscal 2018, and showed its estimation results (Section meeting of the Statistics Commission for systematically developing National Accounts on October 22, 2018).

B2-1).³⁴

The disposable income estimates generally trace the disposable income figures published in the SNA (Chart B2-2). The widening gap between disposable income and wages and salaries in the past few years mainly reflects (1) a progressive increase in income tax payments as a result of a rise in wages and salaries as well as (2) an increase in the social insurance contributions due to hikes in the contribution amount for pensions. In addition, a widening of the gap since 2018 is partly due to the fact that the latest estimates of SNA wages and salaries by the Bank's staff use figures for total cash earnings based on all observations in the *Monthly Labour Survey*, while the disposable income estimates use figures based on continuing observations.³⁵

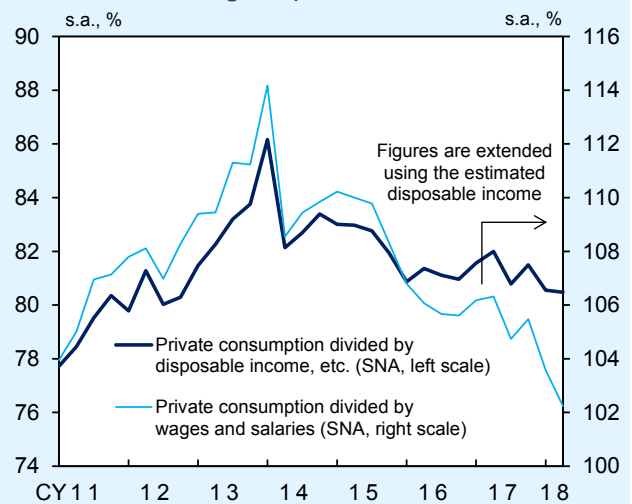
When calculated using the disposable income estimates, the propensity to consume fell considerably after the consumption tax hike in 2014 and since then has been more or less unchanged (Chart B2-3). This indicates that private consumption in the past few years has been increasing moderately, generally in line with disposable income.

Chart B2-2: Estimated Disposable Income



Sources: Cabinet Office; Ministry of Finance; Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications; Japan Pension Service, etc.
 Note: Figures for wages and salaries from 2017/Q2 are based on staff calculations using employee income (= total cash earnings × number of employees).

Chart B2-3: Average Propensity to Consume Using Disposable Income



Sources: Cabinet Office; Ministry of Finance; Ministry of Health, Labour and Welfare; Ministry of Internal Affairs and Communications; Japan Pension Service, etc.
 Notes: 1. Private consumption is consumption of households excluding imputed rent.
 2. "Disposable income, etc." on an SNA basis consists of disposable income and "adjustment for the change in pension entitlements." Figures from 2017/Q2 are based on staff calculations using the disposable income estimates in Chart B2-2.
 3. Figures for wages and salaries from 2017/Q2 are based on staff calculations using employee income (= total cash earnings × number of employees).

³⁴ Due to data limitations, some of the constituent items of disposable income, such as mixed income, are not included in the estimates here.

³⁵ See footnote 19 for the effects of the sample revision of the *Monthly Labour Survey*.