



The total of major banks, regional banks, and *shinkin* banks covered in this *Report* is as follows (as at March 31, 2017).

Major banks comprise the following 10 banks: Mizuho Bank; The Bank of Tokyo-Mitsubishi UFJ; Sumitomo Mitsui Banking Corporation; Resona Bank; Saitama Resona Bank; Mitsubishi UFJ Trust and Banking Corporation; Mizuho Trust and Banking Company; Sumitomo Mitsui Trust Bank; Shinsei Bank; and Aozora Bank. Regional banks comprise the 64 member banks of the Regional Banks Association of Japan (Regional banks I) and the 41 member banks of the Second Association of Regional Banks (Regional banks II). *Shinkin* banks are the 255 *shinkin* banks that hold current accounts at the Bank of Japan.

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Background

The Bank of Japan issues the *Financial System Report* semi-annually with the objectives of assessing the stability of Japan's financial system from a macroprudential perspective and enhancing the communication of financial stability issues with concerned parties. The *Report* provides a regular and comprehensive assessment of the financial system.

The *Financial System Report Annex Series* supplements the *Financial System Report* by providing more detailed analysis and insight into a selected topic on an ad hoc basis. This paper covers the financial results of Japan's banks for fiscal 2016.

Abstract

The characteristics of the financial results of Japan's banks for fiscal 2016 are summarized in three points below.

First, net income declined for all types of banks; major banks, regional banks, and *shinkin* banks. Main factors are the decline in net interest income through the shrinking domestic lending margins and realized losses on U.S. Treasury bondholdings due to the rise in U.S. long-term interest rates mainly among major and regional banks. On the other hand, low and stable credit cost ratios and the widening of the extent to which realized gains exceeded losses on stockholdings, including sales of strategic stockholdings at major and regional banks, have supported the level of net income.

Second, operating profits from core business, which show core profitability, decreased for all types of banks and the declining trend accelerated somewhat in regional and *shinkin* banks. This is attributable to a) a decline in net interest income through shrinking domestic lending margins and b) a decline in fees and commissions associated with sales of financial instruments such as investment trusts and insurance products.

Third, financial institutions have maintained their financial soundness as a whole. With regard to the generation of credit cost, credit cost ratios remained low at major banks as the occurrence of loan-loss provisions to certain domestic large firms was outweighed by the decline in the occurrence of loan-loss provisions to overseas exposure to the commodity sector. Credit cost ratios continued to be restrained at regional and *shinkin* banks. Meanwhile, the amount of capital continued to increase mainly at major banks, due to the accumulation of retained earnings.

Contents

- I. Outline of Financial Results of Japan's Banks for Fiscal 2016
 - A. Profits and Losses
 - B. Profit Levels from a Long-Term Perspective
 - C. Balance Sheets
- II. Financial Results of Japan's Major Banks and Regional Banks for Fiscal 2016
 - A. Core Profitability
 - 1. Net Interest Income
 - 2. Interest Rate Spreads on Loans and Loans Outstanding
 - 3. Interest Rate Spreads on Securities
 - 4. Net Non-Interest Income
 - B. Realized and Unrealized Gains/Losses on Securities Holdings
 - 1. Realized Gains/Losses on Securities Holdings
 - 2. Unrealized Gains/Losses on Securities Holdings
 - C. General and Administrative Expenses
 - **D.** Credit Costs and Non-Performing Loans
 - 1. Credit Costs
 - 2. Non-Performing Loans
 - 3. Loan-Loss Provisions
 - E. Capital Adequacy Ratio
- Box 1: Core profitability at major financial groups
- Box 2: Movements in major banks' profit structure
- Box 3: Feature of capital policy at major financial groups

III. Financial Results of Japan's Shinkin Banks for Fiscal 2016

A. Core Profitability

- 1. Net Interest Income
- 2. Interest Rate Spreads on Loans and Loans Outstanding
- 3. Interest Rate Spreads on Securities
- 4. Net Non-Interest Income
- 5. General and Administrative Expenses

B. Realized and Unrealized Gains/Losses on Securities Holdings

- 1. Realized Gains/Losses on Securities Holdings
- 2. Unrealized Gains/Losses on Securities Holdings

C. Credit Costs and Non-Performing Loans

- 1. Credit Costs
- 2. Non-Performing Loans
- 3. Loan-Loss Provisions

D. Capital Adequacy Ratio

Box 4: Core profitability at regional financial institutions

Reference: Developments in Financial Markets

Glossary

I. Outline of Financial Results of Japan's Banks for Fiscal 2016¹

A. Profits and Losses

Net income for fiscal 2016 at major financial groups was about 2.6 trillion yen, having declined from the previous year (down by 4.0 percent). The main factors are the decline in net interest income through the shrinking domestic lending margins, a decrease in sales of investment trusts and insurance products, and the extent to which realized gains exceeded losses on bondholdings decreased due to the realized losses on U.S. Treasury bondholdings. On the other hand, the widening of the extent to which realized gains exceeded losses on stockholdings due to sales of strategic stockholdings etc., and low level credit cost ratios, supported the level of net income.

Meanwhile, net income for fiscal 2016 at major banks (on a non-consolidated basis) was about 2.0 trillion yen, a larger decline from the previous year (down by 12.5 percent) compared to that of major financial groups. As for details regarding the difference in net income of major financial groups and major banks, see Box2².

I-A-1: Main profit and loss items at major financial groups and banks

100 mil. yen, %

	Maj	or Financial Gro	ups	Major Banks (non-consolidated)			
	FY2016	y/y chg.	y/y % chg.	FY2016	y/y chg.	y/y % chg.	
Net interest income	50,158	▲ 3,288	▲ 6.2	37,887	▲ 1,398	▲ 3.6	
Net non-interest income	54,046	+ 2,944	+ 5.8	24,523	+ 799	+ 3.4	
General and administrative expenses	▲ 68,253	▲ 2,297	+ 3.5	▲ 37,466	▲ 759	+ 2.1	
Operating profits from core business				24,943	▲ 1,358	▲ 5.2	
Realized gains/losses on bondholdings	1,074	▲ 3,320	▲ 75.6	992	▲ 3,267	▲ 76.7	
Realized gains/losses on stockholdings	4,869	+ 1,023	+ 26.6	5,102	+ 1,975	+ 63.2	
Credit costs	▲ 3,991	+ 401	▲ 9.1	▲ 1,603	▲ 184	+ 13.0	
(Credit cost ratio)				(5bp)	(+0bp)	+ 10.0	
Others	▲ 2,008	▲ 861	+ 75.1	▲ 3,872	▲ 2,897	+ 296.9	
Net income before income taxes	35,895	▲ 5,398	▲ 13.1	25,562	▲ 5,731	▲ 18.3	
Tax-related expenses	▲ 7,830	+ 3,581	▲ 31.4	▲ 5,841	+ 2,909	▲ 33.2	
Net income	26,140	▲ 1,102	▲ 4.0	19,721	▲ 2,821	▲ 12.5	

Notes

Sources: Published accounts of each financial group; BOJ.

^{1.} Regarding credit costs, negative numbers represent a rise in costs while positive numbers represent an increase in reversals.

^{2.} Some items that do not have numbers based on financial groups are calculated by banks' numbers on a non-consolidated basis

¹ Figures provided in Chapter I and II are calculated on a non-consolidated basis unless otherwise noted.

² Net interest income for major banks resulted in a rather small decline (down by 3.6 percent), which was caused by a bank's special factor (receiving dividends from subsidiary).

Net income for fiscal 2016 at regional banks was about 1.0 trillion yen, 14.8 percent decline from the previous year. Similar to major financial groups, the shrinking domestic lending margins, decrease in sales of investment trusts and insurance products, and realized gains/losses on bondholdings plunged to negatives due to the realized losses on U.S. Treasury bondholdings, which led to the decline in net interest income. On the other hand, the increase of the amount to which realized gains exceeded losses on stockholdings supported the level of net income.

<u>Net income at shinkin banks</u> was about 0.3 trillion yen, down by 16.6 percent from the previous year. With regard to the realized gains/losses on securities holdings, the decrease in the amount to which realized gains exceeded losses on bondholdings remained rather small, while the drop in the amount to which realized gains exceeded losses on stockholdings pressured the net income to decline.

I-A-2: Main profit and loss items at regional banks and shinkin banks

100 mil. yen, %

	Regional l	oanks (non-cons	oildated)	Shinkin banks			
	FY2016	y/y chg.	y/y % chg.	FY2016	y/y chg.	y/y % chg.	
Net interest income	37,431	▲ 1,330	▲ 3.4	15,581	▲ 573	▲ 3.5	
Net non-interest income	5,442	▲ 559	▲ 9.3	740	▲ 80	▲ 9.7	
General and administrative expenses	▲ 30,145	+ 43	▲ 0.1	▲ 13,360	+ 88	▲ 0.7	
Operating profits from core business	12,731	▲ 1,843	▲ 12.6	2,960	▲ 565	▲ 16.0	
Realized gains/losses on bondholdings	▲ 366	▲ 1,071	▲ 152.0	801	▲ 38	▲ 4.5	
Realized gains/losses on stockholdings	2,095	+ 510	+ 32.1	338	▲ 288	▲ 45.9	
Credit costs	▲ 529	▲ 43	+ 8.9	▲ 223	+ 262	▲ 54.1	
(Credit cost ratio)	(2bp)	(+0bp)	+ 4.9	(3bp)	(▲ 4bp)	▲ 55.2	
Others	▲ 605	▲ 780	▲ 445.1	▲ 234	▲ 96	+ 69.1	
Net income before income taxes	13,327	▲ 3,227	▲ 19.5	3,642	▲ 723	▲ 16.6	
Tax-related expenses	▲ 3,671	+ 1,555	▲ 29.8	▲ 873	+ 170	▲ 16.3	
Net income	9,655	▲ 1,672	▲ 14.8	2,769	▲ 553	▲ 16.6	

Note: 1. Regarding credit costs, negative numbers represent a rise in costs while positive numbers represent an increase in reversals.

Source: BOJ.

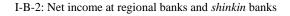
Tax-related expenses for fiscal 2016 at all major banks, regional banks and *shinkin* banks declined, reflecting the decline in net income before income taxes. With regard to major financial groups, the generation of tax effect by a financial group led to the decline in tax-related expenses.

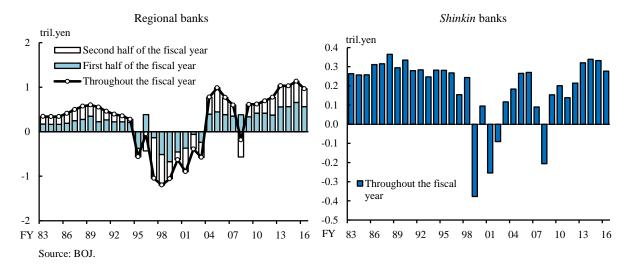
B. Profit Levels from a Long-Term Perspective

<u>Net income for fiscal 2016</u> was maintained at decent levels for all <u>major financial groups</u>, <u>major banks</u>, <u>regional banks</u>, and <u>shinkin banks</u> from a longer-term perspective.

Major financial groups Major banks tril.yen tril.yen 5 4 Second half of the fiscal year ☐ Second half of the fiscal year First half of the fiscal year First half of the fiscal year 4 Throughout the fiscal year Throughout the fiscal year 2 3 2 0 1 -2 0 -1 -4 -2 -3 -6 FY 83 FY 06 11 12 13 14 86 92 95 98 01 04 10 13 16 Source: BOJ.

I-B-1: Net income at major financial groups and major banks





In the meantime, with regard to the movements of core profitability, operating profits from the core business at major banks declined 5.2 percent in fiscal 2016 for the second consecutive year, mainly because of a decline in net interest income. At regional banks and *shinkin* banks, operating profits from the core business followed a declining trend, down 12.6 percent and 16.0 percent from the previous year, respectively, which were larger declines than those of the previous fiscal year. As for the core profitability of major financial groups and regional financial institutions, see Box1 and Box4 respectively.

Shinkin banks Major banks Regional banks □Second half □ Second half tril.yen tril.yen tril.yen 4.5 2.5 of the fiscal 1.0 of the fiscal year year ■Throughout the 4.0 ■First half of fiscal year ■First half of 2.0 0.8 3.5 the fiscal the fiscal 3.0 1.5 0.6 2.5 2.0 1.0 0.4 1.5 1.0 0.5 0.2 0.5 0.0 0.0 0.0 FY 95 98 01 04 07 10 13 16 FY 89 92 95 98 01 04 07 10 13 16 FY 89 92 95 98 01 04 07 10 13 16 Source: BOJ.

I-B-3: Operating profits from core business

C. Balance Sheets

Looking at <u>developments in balance sheets for fiscal 2016</u> at <u>major banks</u>, total assets increased by 14.2 trillion yen as cash and due from banks, including current account balances at the Bank of Japan and loans in the international business sector, increased while securities such as Japanese government bonds (JGBs) and foreign securities decreased. On the liability side, deposits in the domestic business sector increased mainly in corporate deposits.

Regarding total assets at <u>regional banks</u>, they increased by 16.0 trillion yen. Similar to major banks, cash and due from banks including current account balances at the Bank of Japan and loans increased while securities decreased. On the liability side, deposits increased and other liabilities including market funding such as repos and call money also increased.

I-C-1: Main balance sheet items of major banks and regional banks

Major banks

tril.yen

		End of FY 2016	y/y chg.	Change from Sep.2016			End of FY 2016	y/y chg.	Change from Sep.2016	
Loans and bills discounted		307.0	+4.7	+10.9	Dep	posits + NCD	490.5	+26.3	+30.0	
	Domestic business sector	211.2	+1.3	+0.6		Domestic business sector	392.5	+23.0	+18.3	
	International business sector	95.8	+3.4	+10.3		International business sector	98.0	+3.3	+11.7	
Seci	urities	125.5	▲ 18.5	▲ 4.8	Loans from BOJ		27.3	+5.7	+6.3	
	JGBs	49.4	▲ 12.3	▲ 0.6	Due to trust accounts		14.2	▲ 5.7	+2.2	
	Stocks	17.1 +0.1 +0.7		Oth	ner liabilities	120.2	▲ 11.4	▲ 10.7		
	Foreign securities	43.2	▲ 8.2	▲ 5.6	Tot	al liabilities	652.2	+14.9	+27.9	
	h and due n banks	168.7	+26.3	+18.5	Tot	al net assets	32.9	▲ 0.7	▲ 0.8	
Oth	er assets	83.9	+1.8	+2.6			Retained earnings	11.3	+0.5	+0.2
Tot	al assets	685.1	+14.2	+27.1		Net unrealized gains/losses on securities	5.7	+0.0	+0.4	

Regional banks

tril.yen

	End of FY 2016	y/y chg.	Change from Sep.2016			End of FY 2016	y/y chg.	Change from Sep.2016
Loans and bills discounted	243.9	+8.9	+5.4	Dep	osits + NCD	332.5	+7.9	+6.3
Securities	91.7	▲ 4.0	▲ 2.9	Current deposits		166.7	+10.3	+8.8
JGBs	30.4	▲ 5.7	▲ 2.8	Othe	er liabilities	32.0	+7.6	+2.2
Cash and due from banks	39.9	+10.5	+6.3	Tota	d liabilities	364.5	+15.6	+8.5
Other assets	10.4	+0.6	+0.1	Tota	l net assets	21.5	+0.4	+0.3
Total assets	386.0	+16.0	+8.8		Net unrealized gains/losses on securities	3.6	▲ 0.3	▲ 0.0

Source: BOJ.

With regard to <u>shinkin banks</u>, total assets increased by 3.5 trillion yen as cash and due from banks and loans increased while securities slightly decreased.

I-C-2: Main balance sheet items of shinkin banks

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							tin.y cii
		End of FY 2016	y/y chg.			End of FY 2016	y/y chg.
Loans discou	and bills nted	68.8	+ 1.8	Deposits + NCD		137.3	+ 3.1
Securities		42.4	▲ 0.6		Current deposits	48.1	+ 3.3
]	JGBs	8.6	▲ 0.7	Othe	er liabilities	4.2	+ 0.5
Cash and due from banks		36.2	+ 2.3	Total liabilities		141.4	+ 3.6
Other assets		2.8	+ 0.0	Total net assets		8.8	▲ 0.1
Total a	assets	150.2	+ 3.5		Net unrealized gains/losses on securities	0.8	▲ 0.3

II. Financial Results of Japan's Major Banks and Regional Banks for Fiscal 2016

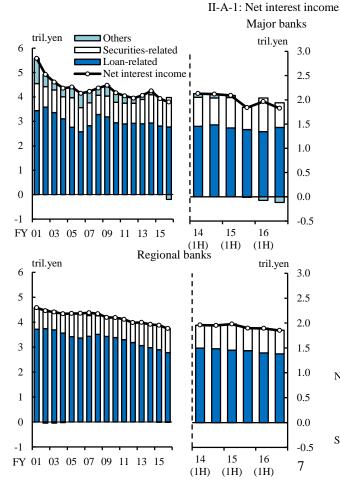
This chapter analyzes banks' core profitability (net interest income, net non-interest income, and general and administrative expenses), credit costs, non-performing loans and capital adequacy ratios. The financial results of *shinkin* banks are summarized in chapter III.

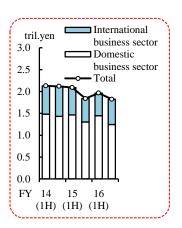
A. Core Profitability

1. Net Interest Income

<u>Net interest income at major banks</u> for fiscal 2016 decreased by 3.6 percent from previous year, as net interest income in both domestic and international business sector declined. Net interest income in the domestic business sector decreased by 2.8 percent from previous year as lending margins continued to shrink. Net interest income in the international business sector decreased by 5.3 percent due to the translation effects of yen appreciation to the foreign currency-denominated profit and the rise in foreign currency funding costs.

<u>Net interest income at regional banks</u> for fiscal 2016 decreased by 3.4 percent from the precious year as the impact of reduced interest rate spreads on loans has been greater than the effect of higher amount of loans outstanding.





Categorized by domestic and international business sector

Note: 1. Loan-related = (average loans outstanding) * (interest rate spreads on loans). Securities-related = (average outstanding securities holdings) * (interest rate spreads on securities).

2. Interest Rate Spreads on Loans and Loans Outstanding

(1) Interest Rate Spreads on Loans

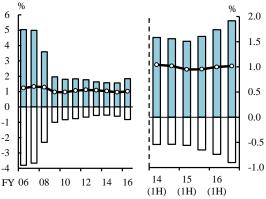
<u>Interest rate spreads on loans in the domestic business sector</u> continued to narrow at both <u>major banks and regional banks</u> due to a deeper decline in interest rates on loans, exceeding the decline in interest rates on interest-bearing liabilities. To look closely at the developments for fiscal 2016, interest rate spreads on loans shrank rather deeply in the first half.

<u>Interest rate spreads on loans in the international business sector</u> at major banks have remained more or less unchanged as both foreign currency funding costs and interest rates on foreign loans increased.

Major banks (domestic business sector) Regional banks (domestic business sector) 2.5 2.5 2.5 2.5 2.0 2.0 2.0 2.0 1.5 1.5 1.5 1.5 1.0 1.0 1.0 1.0 0.5 0.5 0.5 0.0 0.0 0.0 0.0 -0.5 -0.5 -0.5 -0.5 16 FY 04 08 10 12 14 15 FY 04 06 08 10 12 14 16 (1H) (1H)(1H)(1H)(1H) (1H)Interest rate on loans ☐ Funding cost rate Interest rate spreads on loans

II-A-2: Interest rate spreads on loans

Major banks (international business sector)



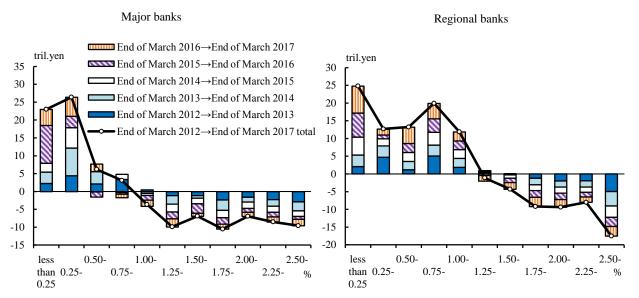
Notes: 1. In calculating the funding cost rate, interest expenses on interest rate swaps are deducted from costs.

2. Semiannual data on the right are annualized.

(2) Loans Outstanding by Lending Rate

Looking at developments in <u>loans outstanding by lending rate</u> (yen loans in the domestic business sector) at both <u>major and regional banks</u>, those with low lending rates increased further. The increase is influenced by the decline in interest rates at the time of interest rate renewal on spread lending such as TIBOR, which are linked to market interest rates.

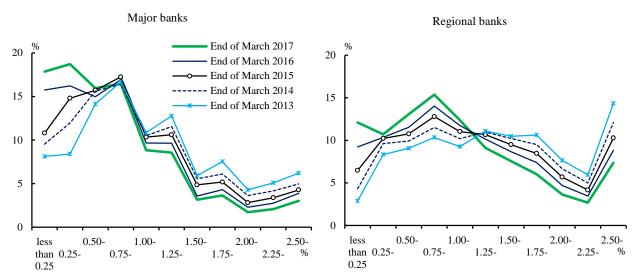
II-A-3: Changes in loans outstanding by lending rate (from the end of March 2012 to the end of March 2017)



Note: 1. The data are for yen loans outstanding in the domestic business sector (excluding loans to the financial sector) based on the amount outstanding at month-end.

Source: BOJ.

II-A-4: Changes in proportion of loans outstanding by lending rate (from the end of March 2013 to the end of March 2017)

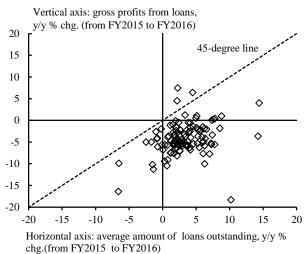


Note: 1. The data are for yen loans outstanding in the domestic business sector (excluding loans to the financial sector) based on the amount outstanding at month-end.

(3) Factors behind Changes in Profits from Lending Activities

Looking at the <u>changes in profits from domestic lending activities (= loans outstanding * interest rate spreads on loans)</u> over the last year, many banks faced a decrease. Although their loans outstanding increased, a reduction in interest rate spreads on loans has continued to have a large impact on profits.

II-A-5: Relationship between changes in loans outstanding and profits from loans (major and regional banks, domestic business sector)

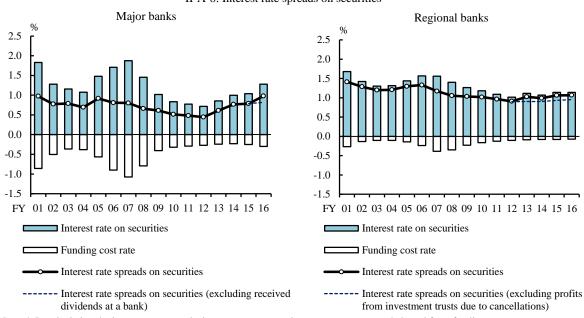


Notes:

- 1. The data include all loans outstanding in the domestic business sector. Thus, it is different from "Principal figures of financial institutions" in that loans to the financial sector and the government such as special account for local allocation and local transfer tax are included and foreign currency-denominated impact loans are excluded.
- Gross profits from loans = (average amount of loans outstanding) * (interest rate spreads on loans).

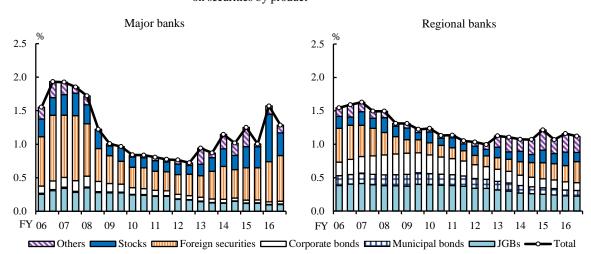
3. Interest Rate Spreads on Securities

<u>Interest rate spreads on securities</u> expanded at <u>major banks</u> for the fourth consecutive year and rose slightly at <u>regional banks</u> for the second consecutive year. A growing share of foreign securities and investment trusts whose yields are relatively higher, and an increase in dividends from strategic shareholdings and ETF, led to the rise in interest rate spreads. Interest rate spreads on securities at major banks are improving, even when excluding the supporting factor of received dividends from subsidiary at a bank.



II-A-6: Interest rate spreads on securities

Note: 1. In calculating the interest rate spreads, interest expenses on interest rate swaps are deducted from funding costs. Source: BOJ.



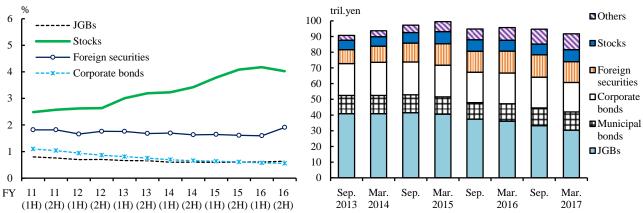
II-A-7: Factor decomposition of change in interest rate spreads on securities by product

Notes:

- 1. The data are calculated on a half-year basis.
- 2. Some banks are excluded due to a lack of time-series data. The data on equity investment trusts are included in "others".
- 3. The rise in interest rate spreads on stocks in the first half of fiscal 2016 reflects received dividends from subsidiary at a bank. Source: BOJ.

II-A-8: Interest rate spreads on securities holdings and amounts outstanding by product (at month-end)

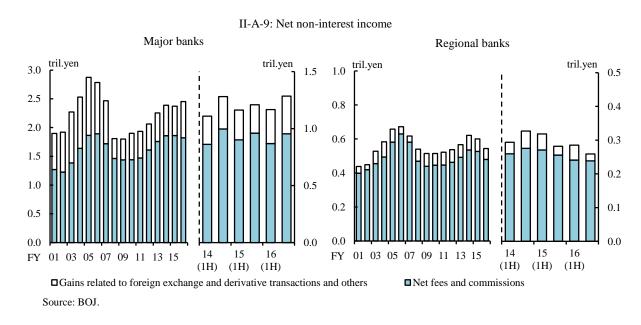
Major banks tril.yen ----- JGBs 6 180 ■ Others 160 Stocks 5 ■ Stocks 140 Stocks (excluding received dividends at 4 120 a bank) Foreign securities ■ Foreign securities 100 3 □ Corporate Corporate bonds 80 bonds 2 60 ■ Municipal bonds 40 1 ■JGBs 20 0 0 FY 11 11 12 12 13 13 14 14 15 15 16 16 Sep. Mar. Mar. Sep. Mar. Sep. Mar. (1H) (2H) (1H) (2H) (1H) (2H) (1H) (2H) (1H) (2H) (1H) (2H) 2017 2013 2014 2015 2016 Regional banks tril.yen ■ Others 6 100 ---- JGBs



Note: 1. The rate is annualized. In calculating interest rates, some banks are excluded due to a lack of time-series data. Interest rate spreads on stocks are calculated by using the 2-quarter moving average to mitigate fluctuations in each quarter's dividends.

4. Net Non-Interest Income

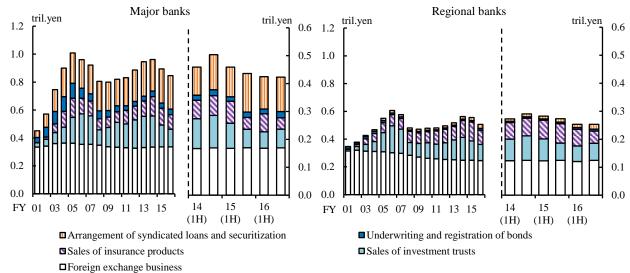
<u>Net non-interest income</u> increased by 3.4 percent over the previous year at <u>major banks</u> and decreased by 9.3 percent at <u>regional banks</u>, moving differently. Fees and commissions for sales of financial products to individuals such as investment trusts and insurance products decreased at both major and regional banks. At major banks, fees from the arrangement of large merger and acquisition (M&A) deals and hybrid financing such as subordinated loans increased³. In addition, income from fees and commissions in the international business sector at major banks remained at a high level.



Looking at the breakdown of <u>income from fees and commissions in the domestic business sector</u>, fees and commissions for sales of investment trusts and insurance products decreased significantly at both <u>major banks</u> and <u>regional banks</u>. Meanwhile, fees and commissions for syndicated loans, securitization and underwriting and registration of bonds increased from activities such as large M&A transactions and hybrid financing, mainly at major banks.

³ Hybrid financing is a financing instrument with characteristics of both debt and equity. Recently, financing through subordinated loans by corporate firms is increasing.



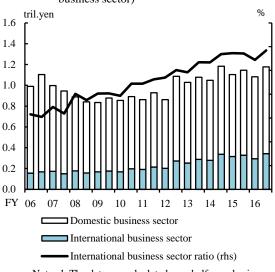


Note: 1. Among items of income from fees and commissions, the 5 items listed above are counted. Source: BOL

Income from fees and commissions in the international sector at major banks continued to increase, mainly due to a lift in fees and commissions associated with deposits and lending, such as the arrangement of syndicated loans. Although, with regard to the rate from the previous year, it remained more or less the same by virtue of calculation effects due to appreciation of the Japanese yen.

30

II-A-11: Income from fees and commissions at major banks (by domestic and international business sector)



Note: 1. The data are calculated on a half-year basis. Source: BOJ.

major banks FY15 FY16 tril.yen 35 0.4 0.6tril.yen 0.6tril.yen 25 0.3 0.2 0.0 08 12 06 07 10 11 13

■ Securities-related

□Foreign exchange

Agency

II-A-12: Income from fees and commissions in

the international business sector at

Notes:

1. The data are calculated on a half-year basis.

■ Deposits and lending

Others

■ Trust-related

Guarantees

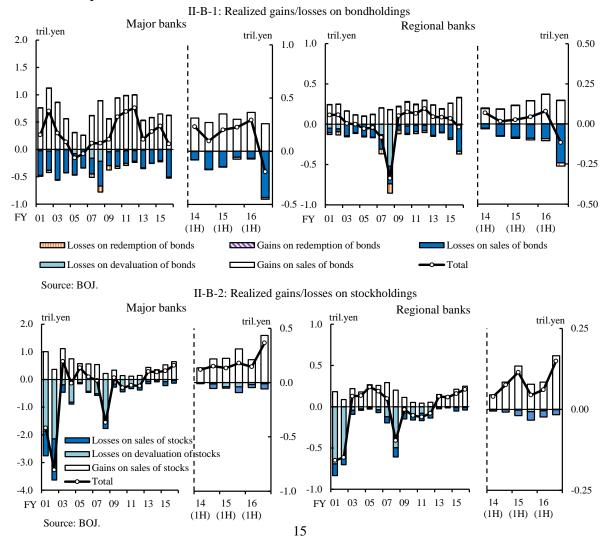
2. Though the figures are categorized based on each bank's internal definition, "deposits and lending" includes income from fees and commissions related to the arrangement of syndicated loans, commitment lines, securitization, and M&A transactions.

B. Realized and Unrealized Gains/Losses on Securities Holdings

1. Realized Gains/Losses on Securities Holdings

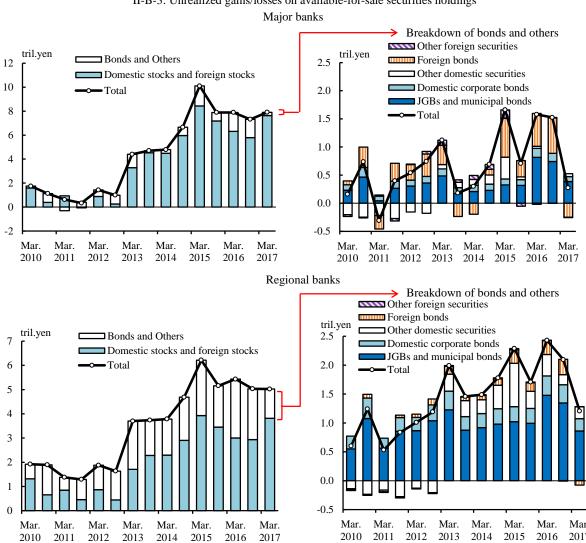
With regard to <u>realized gains/losses</u> on bondholdings, the extent to which gains exceeded losses declined significantly from the previous year at <u>major banks</u> and plunged to negative at <u>regional banks</u> due to the realized substantial losses on U.S. Treasury bondholdings. To look closely at the developments during fiscal 2016, both major and regional banks accelerated the sales of JGBs to realize gains on the first half. In the second half, substantial losses realized from the loss-cutting sales of U.S. Treasury bondholdings due to the rise in U.S. long-term interest rates.

As for <u>realized gains/losses</u> on <u>stockholdings</u>, the extent to which gains exceeded losses at major banks increased significantly from the previous year at both <u>major and regional banks</u>. To look closely at the developments during fiscal 2016, gains from sales of stocks decreased in the first half as stock prices declined compared to the previous year. In the second half, reductions in strategic holdings and sales of ETFs to realize gains proceeded while stock prices remained stable.



2. Unrealized Gains/Losses on Securities Holdings

Looking at unrealized gains/losses on available-for-sale securities holdings as of the end of March 2017, the extent to which unrealized gains exceeded losses has remained high, at about 8 trillion yen at major banks and about 5 trillion yen at regional banks. Looking more closely at its breakdown, the extent to which unrealized gains in bondholdings over losses declined significantly due to unrealized gains on domestic bonds decreased from reducing JGBs and, as such, and the extent to which unrealized gains of foreign bonds over losses plunged to negatives due to the rise in long-term U.S. interest rates. On the other hand, the extent to which unrealized gains in stockholdings over losses expanded due to high stock prices countering the effect of reducing strategic shareholdings. At regional banks, the extent to which unrealized gains in stockholdings expanded whereas unrealized gains in bondholdings over losses declined, similar to major banks.



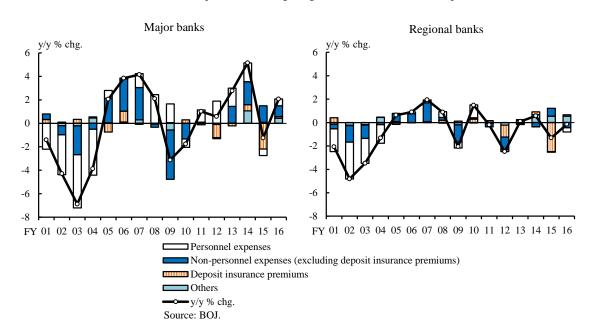
II-B-3: Unrealized gains/losses on available-for-sale securities holdings

Notes: 1. Breakdown of bonds and others are shown on the right at both major and regional banks. "Other domestic securities" and "other foreign securities" include investment trusts and funds

2. The data are calculated on a half-year basis.

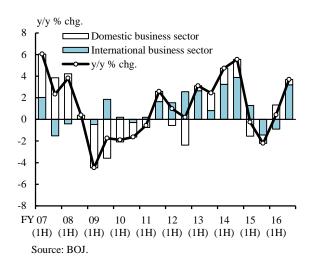
C. General and Administrative Expenses

General and administrative expenses increased slightly at <u>major banks</u>, mainly against the background of the international business sector continuing to rise. At <u>regional banks</u>, however, general and administrative expenses remained unchanged on a year-on-year basis. In the meantime, OHR (= overhead costs/gross operating profits), which continued to rise at both major banks and regional banks, was about 60% at major banks and was about 70% at regional banks, mainly due to the decrease in gross operating profits (see Box 1).



II-C-1: Factor decomposition of change in general and administrative expenses

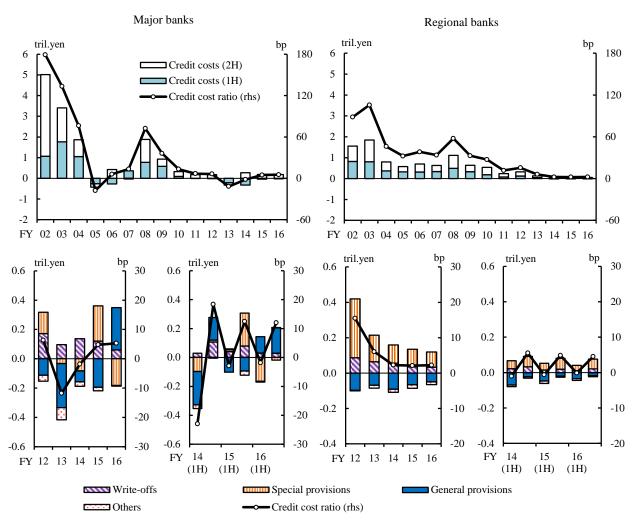
II-C-2: Factor decomposition of change in domestic and international business sectors at major banks



D. Credit Costs and Non-Performing Loans

1. Credit Costs

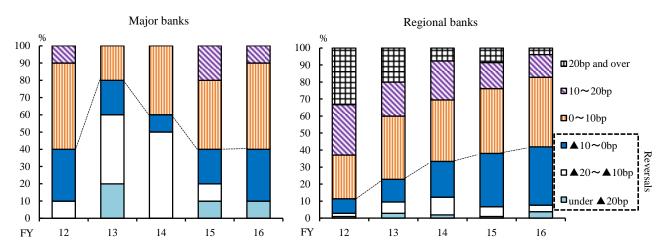
Looking at <u>credit costs</u>, the amount of credit costs remained at a low level, mainly due to a significant decrease in loan-loss provisions related to overseas resource-related exposures, while <u>major banks</u> recorded credit costs in reversals in the second half of fiscal 2016 related to domestic exposure to some large companies. Credit costs at regional banks have recently remained stable at a low level.



II-D-1: Credit costs and credit cost ratios

Note: 1. The lower charts show the breakdown of credit costs at major banks and regional banks, respectively. Figures calculated on a half-year basis are annualized.

The <u>credit cost ratio</u> (credit costs/total loans outstanding) was 5 basis points at <u>major banks</u> and 2 basis points at <u>regional banks</u>. Looking at major banks, while the number of banks with credit costs reversed remained unchanged, the share of banks with credit costs greater than 10 basis points declined. For regional banks, the number of banks with credit costs reversed continued to increase. In addition, the share of banks with credit costs greater than 10 basis points has been decreasing.



II-D-2: Credit cost ratio distribution

Note: I. Proportion of the number of banks by credit cost ratio. Source: BOJ.

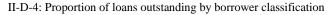
2. Non-Performing Loans

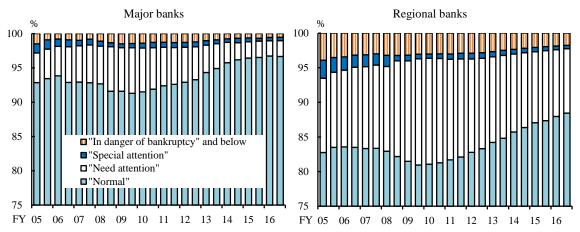
<u>Non-performing loan (NPL) ratios</u> continued to follow a moderately declining trend at both <u>major banks</u> and <u>regional banks</u>, and reached their lowest level since fiscal 2001 when the relevant data were first recorded.

Looking at both <u>major banks</u> and <u>regional banks</u>, the <u>NPL ratios for normal loans</u> continued to increase.

II-D-3: Non-performing loans outstanding and non-performing loan ratios

Regional banks Major banks tril.yen tril.yen 30 10 30 10 Special attention □Doubtful 25 25 8 ■ Bankrupt or de facto bankrupt 20 Non-performing loan ratio (rhs) 20 6 15 15 10 10 5 0 FY 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 FY 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 Source: BOJ.

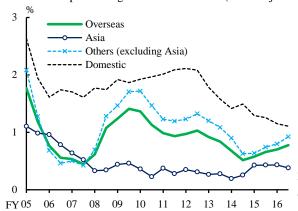




Notes: 1. The data are calculated on a half-year basis.

2. The data are calculated on a write-off basis.

II-D-5: Non-performing overseas loan ratios (three major banks)



Note: *1*. The data are calculated on a half-year basis. Source: Published accounts of each bank.

3. Loan-Loss Provisions

(1) Loan-Loss Provision Ratios

The average <u>loan-loss provision ratio</u> for all exposures at <u>major banks</u> continued on a declining trend following an increase after the Lehman shock, but was more or less unchanged in fiscal 2016 from the previous year. While the pace of decline in the loan-loss provision ratio for normal loans -- which account for a large proportion of all loans -- moderated, loan-loss provisions for domestic exposures to some large companies increased. By contrast, at <u>regional banks</u>, the decline in the loan-loss provision ratio for normal loans (representing a fall in actual loan losses) has continued, and the average loan-loss provision ratio dropped further.

All exposures Normal and need attention Special attention and in danger of bankruptcy 50 2.5 0.3 10 Major banks 2.0 40 Regional banks 0.2 1.5 30 1.0 0.1 20 0.5 2 0.0 FY 04 06 08 10 12 14 16 06 08 10 12 14 16 FY 04 FY 06 08 10 12 16 Normal (major banks) Special attention (major banks) --- Normal (regional banks) -- Special attention (regional banks) In danger of bankruptcy (major banks) Need attention (major banks)(rhs)

II-D-6: Loan-loss provision ratios

Notes: 1. The data include loans in which the discounted cash flow method is applied.

2. The loan-loss provision ratio is calculated as loan-loss provisions divided by the total amount of claims (not the uncovered amount of claims).

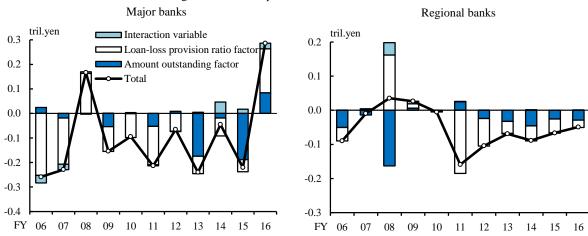
Need attention (regional banks)(rhs)

----- In danger of bankruptcy (regional banks)

(2) Outstanding Amount of Loan-Loss Provisions

Looking at the outstanding amount of loan-loss provisions, general provisions at major banks increased significantly, mainly because relatively high loan-loss provision ratios were applied to some "need attention" loans. Special provisions, however, began to decrease substantially at major banks, partly due to the upgrading of exposures to some large companies. Both general provisions and special provisions continued to follow a moderately declining trend at regional banks.

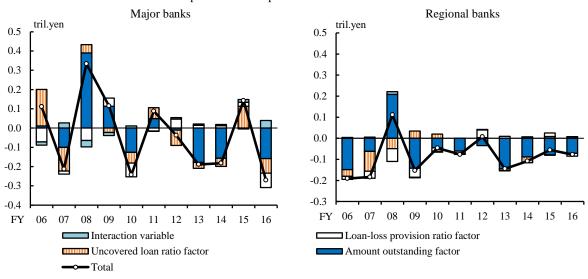
II-D-7: Factor decomposition of change in outstanding amount of general loan-loss provisions



Note: *I*. The total factor decomposition for each factor: amount outstanding and loan-loss provision ratio, which are calculated by borrower classification.

Source: BOJ.

II-D-8: Factor decomposition of change in outstanding amount of special loan-loss provisions

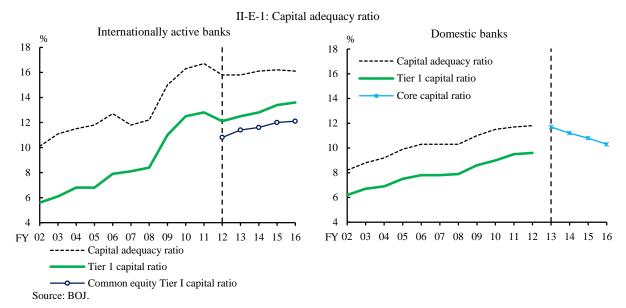


Note: 1. The total factor decomposition for each factor: amount outstanding, loan-loss provision ratio, and uncovered loan ratio, which are calculated by borrower classification.

E. Capital Adequacy Ratio

Turning now to the capital adequacy ratio (on a consolidated basis), the common equity Tier 1 capital ratio (CET1 capital ratio) of <u>internationally active banks</u> has been on an upward trend through the accumulation of retained earnings (see Box3 for details on the characteristics of capital policies at major banks).

At <u>domestic banks</u>, the capital adequacy ratio declined slightly, mainly because risk-weighted assets increased. In addition, capital decreased because the arrangement for phasing in the Basel III requirements was gradually removed (the proportion of instruments that can be included in capital was reduced).



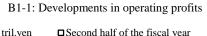
II-E-2: Capital components and risk-weighted assets Internationally active banks Domestic banks tril.yen tril.yen tril.yen tril.yen 70 350 35 175 30 150 60 300 25 125 50 250 20 100 40 200 150 15 30 75 10 50 20 100 5 25 10 0 -25 FY 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 FY 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 Tier 1 capital Tier 2 capital (subordinated debts) Tier 2 capital (others) ☐ Deductions and regulatory adjustment Common equity Tier 1 (CET1) capital Other Tier 1 capital Tier 2 capital Core capital -Capital Risk-weighted assets (rhs)

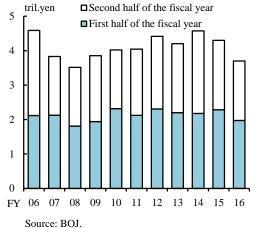
Note: 1. The numerator of capital adequacy ratio at domestic banks since fiscal 2013 is referred as the "core capital" in order to distinguish the "capital" definition in the current Financial Services Agency public notice from that in the former public notice (the same applies to Chart III-D-2).

Box 1: Core profitability at major financial groups

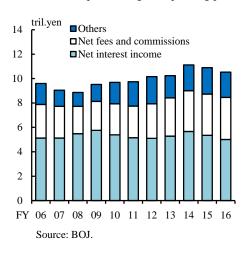
Looking at financial results at major financial groups for fiscal 2016, operating profits, which show core profitability, dropped a somewhat large 14% from the previous year⁴, whereas net income decreased only slightly by 4% from the previous year. In addition, gross operating profits continued to decrease, partly due to the decline in net interest income, and partly due to the sluggishness of net fees and commissions against the background of the decrease in sales of investment trusts and insurance products. Under these circumstances, OHR (= overhead costs/gross operating profits) has increased significantly at major financial groups.

As for ROA based on pre-tax profits, profitability continued to decrease in recent years on the background that ample room for a recovery in loan portfolios is narrowing, after the period in which profitability recovered to some extent because both the decrease in credit costs and the increase in net fees and commissions surmounted net interest income with the declining trend.





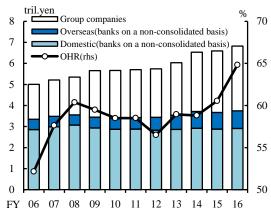
B1-2: Developments in gross operating profits



in analysis here. On the other hand, the indicator of that on a non-consolidated basis is operating profits from core business, which are calculated by excluding the influences of general provisions and realized gains/losses on bondholdings from operating profits, with a view to focusing on banks' relatively traditional businesses and excluding temporary factors.

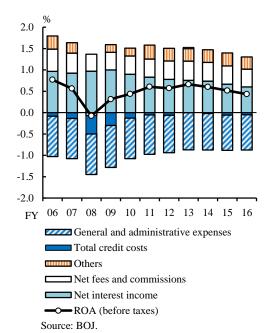
As an indicator of core profitability for financial groups including trust banks and securities companies, operating profits, which are widely published and utilized in major banks' groups, are used

B1-3: General and administrative expenses and OHR



Note: *1*. OHR = overhead costs / gross operating profits. Source: BOJ.

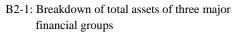
B1-4: Factor decomposition of change in ROA before taxes



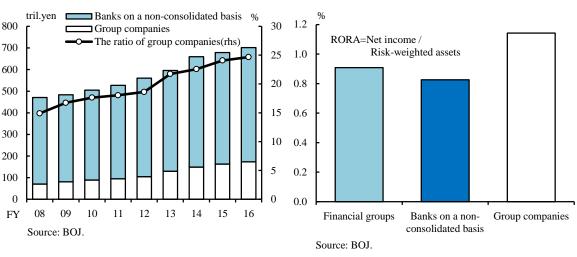
Box 2: Movements in major banks' profit structure

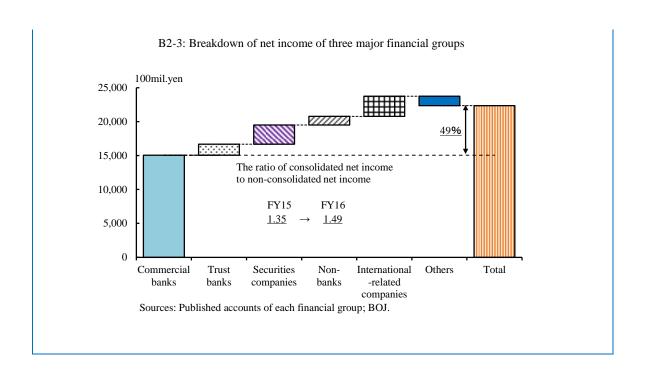
Income from group companies other than commercial banks covered the decline in non-consolidated income from banks to some extent at fiscal 2016 for major financial groups. In fact, when the net income for major banks on a non-consolidated basis is compared to the net income for financial groups on a consolidated basis, the former has declined a rather large 12.5 percent from the previous year, whereas the latter has only declined slightly with a 4.0 percent decrease from the previous year.

For details on the profit structure among the three major financial groups, the difference between income on a consolidated basis and that calculated on a non- consolidated basis has continued to expand with the amount of assets having risen in group companies other than their commercial banks (with high profitability relative to risk-weighted assets). That is, each group has been expanding their businesses in trust banks and securities companies, as well as strengthening their businesses in non-banks including consumer finance companies and leasing companies. As a result, the ratio of consolidated net income to non-consolidated net income (= consolidated basis / non-consolidated basis) at financial results in fiscal 2016 has increased to 1.49 times from 1.35 times in the previous year.



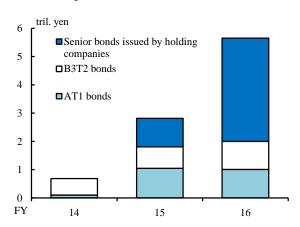
B2-2: RORA among three major financial groups





Box 3: Feature of capital policy at major financial groups

At major financial groups, as common equity Tier 1 capital ratios (CET1 capital ratios) continues to rise, they have been reinforcing their loss absorbing capacity, including cumulating capital bases other than CET1 in order to cope with various regulations such as leverage ratio regulations and TLAC requirements^{5,6}. Specifically, new forms of capital instruments such as additional Tier 1 perpetual subordinated bonds (AT1) and Tier 2 subordinated bonds (B3T2) which are reflected as capital base under Basel III framework are continuously issued⁷. In addition, issuances of senior bonds by holding companies to secure the loss absorbing capacity at the time of default are increasing recently.



B3-1: Issuances of subordinated bonds and senior bonds by holding companies which are eligible under Basel III

Notes: 1. The data is the sum of Mitsubishi UFJ Financial Group, Sumitomo Mitsui Financial Group and Mizuho Financial Group.

2. Converted to yen as at the end of each fiscal year.

Sources: Bloomberg, published accounts of each financial group.

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⁵ Leverage ratio regulation is an indicator complementary to the risk-based capital adequacy ratio regulation. It requires certain amount of capital base depending on the amount of non-risk based exposures added from on-balance and off-balance sheet.

⁶ TLAC (Total Loss Absorbing Capacity) regulation is one of the measures to tackle with the "Too big To Fail" issue. It requires a certain level of loss absorbing capacity for global systematically important banks (G-SIBs) in preparation for the time of default.

⁷ These instruments are designed to absorb loss before the issuer's (= financial institutions') legal default through conversion to equity or write-down. AT1 bonds are absorbed to loss when their issuers' capital adequacy ratios fall below certain levels, and the same for B3T2 bonds when supervisory authorities recognize the issuer to be at the point of non-viability.

III. Financial Results of Japan's Shinkin Banks for Fiscal 2016

This chapter analyzes *shinkin* banks' core profitability (net interest income, net non-interest income, and general and administrative expenses), as well as their credit costs, non-performing loans, and capital adequacy ratio.

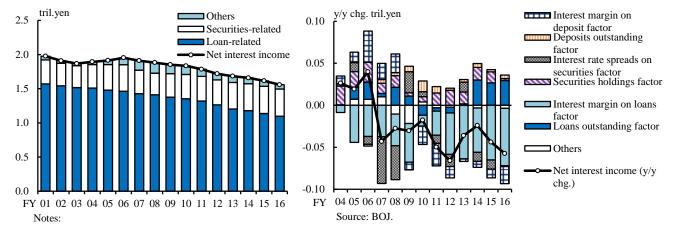
A. Core Profitability

1. Net Interest Income

<u>Net interest income</u> has been on a declining trend due to the impact of reduced interest rate spreads on loans being larger than that of an increase in loans outstanding.

III-A-1: Net interest income

III-A-2: Factor decomposition of change in net interest income (change from a year earlier)



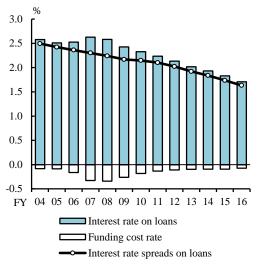
- "Others" includes interest income on deposits at the Shinkin Central Bank and at the Bank of Japan.
- Loan-related = (average loans outstanding) * (interest rate spreads on loans). Securities-related = (average outstanding securities holdings) * (interest rate spreads on securities).
 Source: BOJ.

2. Interest Rate Spreads on Loans and Loans Outstanding

(1) Interest Rate Spreads on Loans

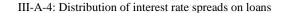
<u>Interest rate spreads on loans</u> have continued to narrow due to a decline in lending rates. The distribution of interest rate spreads also indicates that they have continued to shrink on the whole.

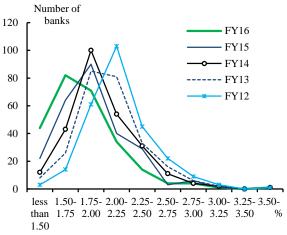
III-A-3: Interest rate spreads on loans



Note: 1. In calculating the funding cost rate, interest expenses on interest rate swaps are deducted from costs.

Source: BOJ.





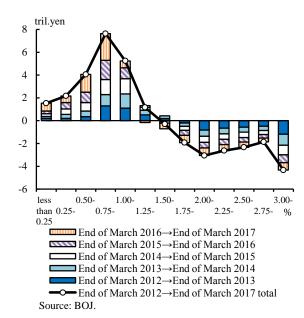
Note: 1. In calculating the funding cost rate, interest expenses on interest rate swaps are deducted from costs.

Source: BOJ.

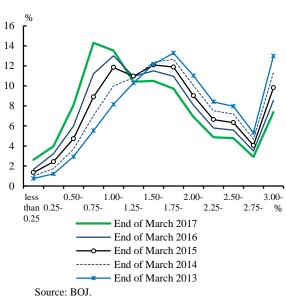
(2) Loans Outstanding by Lending Rates

Looking at developments in loans outstanding, those with low lending rates have continued to increase.

III-A-5: Changes in loans outstanding by lending rate (from the end of March 2012 to the end of March 2017)

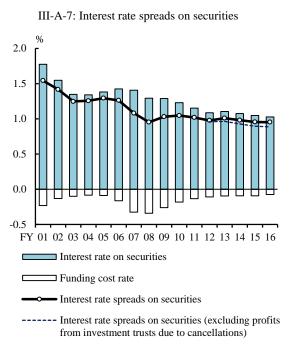


III-A-6: Changes in proportion of loans outstanding by lending rate (from the end of March 2013 to the end of March 2017)

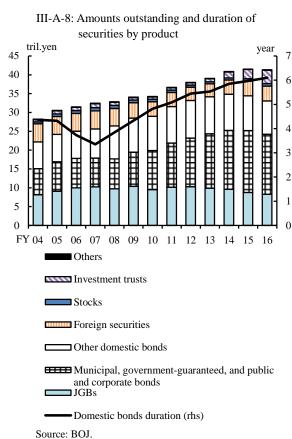


3. Interest Rate Spreads on Securities

<u>Interest rate spreads on securities</u> remained more or less unchanged as a whole. Although an increase in outstanding investment trusts and extended domestic bond duration contributed to an expansion of interest rate spreads, the decline in yields of domestic bonds, which account for a large part of banks' portfolios, contributed to lowering interest rate spreads.

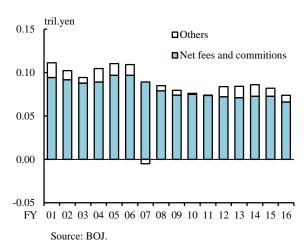


Note: 1. In calculating the funding cost rate, interest expenses on interest rate swaps are deducted from costs.



4. Net Non-Interest Income

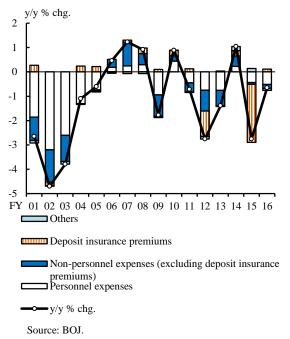
<u>Net non-interest income</u> decreased due to the decline in sales of investment trusts and insurance products.



III-A-9: Net non-interest income

5. General and Administrative Expenses

As for general and administrative expenses, both personnel expenses and non-personnel expenses decreased.



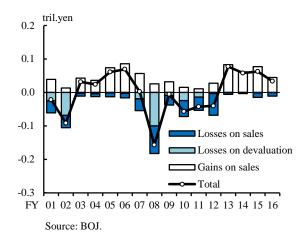
III-A-10: Factor decomposition of change in general and administrative expenses

B. Realized and Unrealized Gains/Losses on Securities Holdings

1. Realized Gains/Losses on Securities Holdings

Looking at <u>realized gains/losses</u> on <u>stockholdings</u>, gains exceeded losses by a smaller amount than in the previous year. For <u>those on bondholdings</u>, however, the extent to which gains exceeded losses was generally flat.

III-B-1: Realized gains/losses on stockholdings



0.2

0.0

-0.2

Mar.

2011

Mar.

0.1 tril.yen
0.1 0.0 -0.1 -0.2

FY 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

Mar.

Mar.

2011 2012 2013 2014

Mar.

Mar.

Mar.

2015 2016 2017

Mar.

Gains on redemption

- Total

■ Losses on devaluation

Losses on redemption

Losses on sales

☐Gains on sales

Source: BOJ.

III-B-2: Realized gains/losses on bondholdings

2. Unrealized Gains/Losses on Securities Holdings

Mar. Mar.

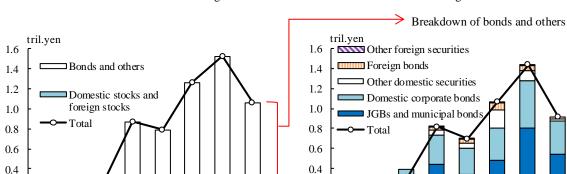
2012 2013 2014 2015

Mar.

Mar.

2016 2017

Looking at <u>unrealized gains/losses</u> on available-for-sale securities holdings as of the end <u>of March 2017</u>, the extent to which gains exceeded losses fell mainly on bondholdings, due to a decrease in outstanding amount of domestic bonds.



III-B-3: Unrealized gains/losses on available-for-sale securities holdings

Note: 1. "Other domestic securities" and "other foreign securities" include investment trusts and funds. Source: BOJ.

0.2

0.0

-0.2

Mar.

2010

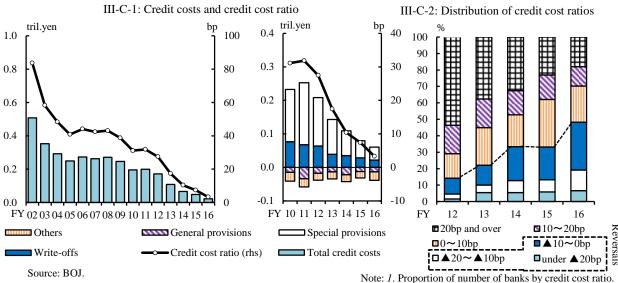
Mar.

C. Credit Costs and Non-Performing Loans

1. Credit Costs

<u>Credit costs</u> continued to follow a moderately declining trend and were the lowest since fiscal 2002 when the relevant data were first recorded.

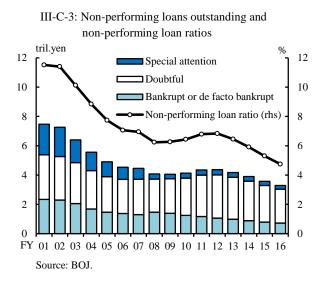
Looking at individual *shinkin* banks, the number of banks with credit costs that were reversed increased.



Note: 1. Proportion of number of banks by credit cost ratio Source: BOJ.

2. Non-Performing Loans

<u>Non-performing loan (NPL) ratios</u> continued to decline moderately and reached their lowest point since fiscal 2001 when the relevant data were first recorded.



classification

100 %
95 90 85 80 90 10 11 12 13 14 15 16

"In danger of bankructcy" and below
"Special attention"

"Need attention"

III-C-4: Proportion of loans outstanding by borrower

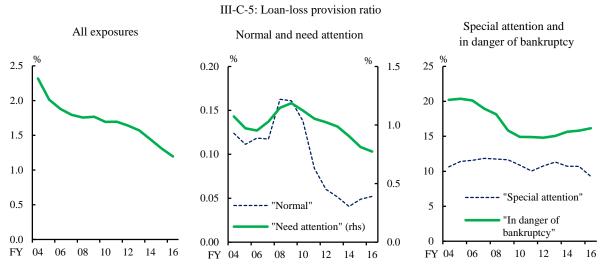
Note: *1*. The data are calculated on a write-off basis. Source: BOJ.

3. Loan-Loss Provisions

(1) Loan-Loss Provision Ratio

The average <u>loan-loss provision ratio</u> for all exposures continued to decline due to improved loan portfolio quality (an improvement in the proportion of loans outstanding by borrower classification).

Looking at loan-loss provisions by borrower classification, the loan-loss provision ratio was low in the majority of borrower classifications. Factors behind this included the low number of corporate bankruptcies from a long-term perspective.



Notes: 1. The data include loans in which the discounted cash flow method is applied.

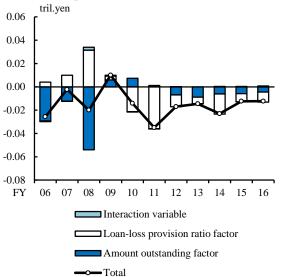
The loan-loss provision ratio is calculated as loan-loss provisions divided by the total amount of claims (not the uncovered amount of claims).

Source: BOJ.

(2) Outstanding Amount of Loan-Loss Provisions

As for general provisions, both a decline in the loan-loss provision ratio for "need attention" loans and a decrease in the outstanding amount of those contributed to the decline in loan-loss provisions. As for special provisions, both the ratio of uncovered claims to all claims and the loan-loss provision ratio rose slightly for two consecutive years. Nevertheless, special provisions decreased because of a decline in the outstanding amount of loans requiring special provisions.

III-C-6: Factor decomposition of change in the outstanding amount of general loan-loss provisions



Note: 1. The total factor decomposition for each factor: amount outstanding and loan-loss provision ratio, which are calculated by borrower classification.

Source: BOJ.

14

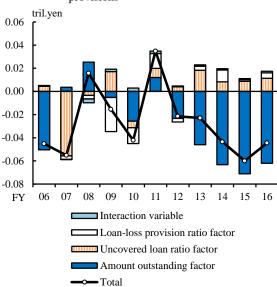
12

10

8

6

III-C-7: Factor decomposition of change in the outstanding amount of special loan-loss provisions



Note: 1. The total factor decomposition for each factor: amount outstanding, loan-loss provision ratio, and uncovered loan ratio, which are calculated by borrower classification.

Source: BOJ.

D. Capital Adequacy Ratio

<u>The capital adequacy ratio</u> has slightly decreased. While the amount of capital increased, mainly due to the accumulation of retained earnings, risk-weighted assets increased.

Capital adequacy ratio

Tier 1 capital ratio

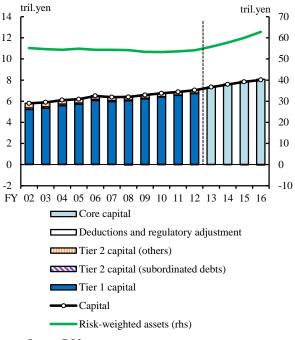
III-D-1: Capital adequacy ratio

Core capital ratio

FY 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16

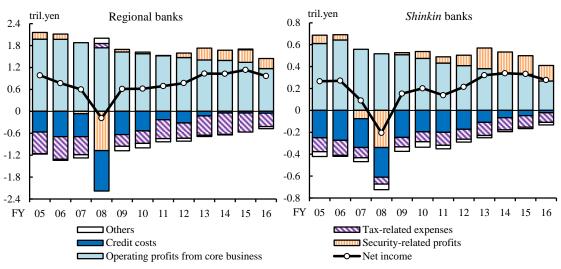
Source: BOJ.

III-D-2: Capital components and risk-weighted assets



Box 4: Core profitability at regional financial institutions

Operating profits from core business, which show core profitability, has slightly deepened its decline rate from the previous year as indicated in the main text. The decline in core profitability is supplemented by the decline in credit costs and the increase in securities-related profits, which helps net income at regional financial institutions to remain at a decent level.

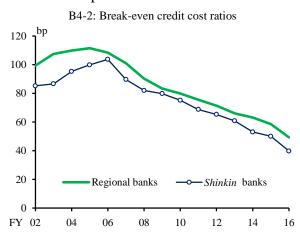


B4-1: Developments in net income and its breakdown

Note: 1. Post-fiscal 2012 profits from investment trusts due to cancellations are included in securities-related profits, not in operating profits from core business.

Source: BOJ.

Under such circumstances, the breakeven credit cost ratios, one of the indicators to capture the loss-absorbing capacity of financial institutions, has been declining. This illustrates that if credit costs increase due to a change in the economic environment, there is less room to sustain with core profit as a whole.



Note: *I*. Break-even credit cost ratios are the ratios above which credit costs exceed pre-provision net revenue (excluding trading income) = (operating profits from core business / amount of loans outstanding).

Looking more closely at individual financial institutions, financial institutions with relatively higher profitability have been observed with smaller declines in lending margins and interest on securities by comparison, and a larger contribution in cost reduction. Some of these financial institutions have newly developed relatively higher risk loans, diversified securities investments to improve interest rates on investment, and conducted further cost cutting measures on personnel expenses and equipment costs than ever before. Moreover, some of them reinforce fees and commissions businesses, such as arranging merger and acquisition (M&A) deals, and succession of firms with special expertise to increase non-interest income.

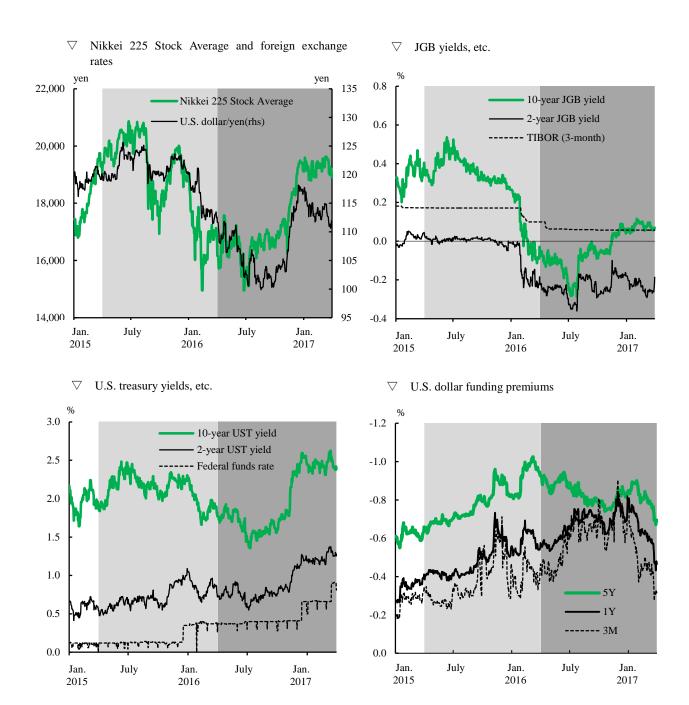
Regional banks Shinkin banks y/y % chg. y/y % chg. 30 20 20 10 0 0 -10 -20 -20 -30 -40 -40 -50 -60 -60 -70 -80 Group1 Group2 Group3 Group4 Group1 Group2 Group3 Group4 Others Others General and administrative expenses General and administrative expenses Fees and commissions related to M&A and syndicated loans, etc. ■ Net fees and commissions ☐☐☐ Interest payments on deposits Interest payments on deposits Interest income on securities ■ Interest income on securities and deposits Loans outstanding Loans outstanding Interest rate on loans ■ Interest rate on loans Operating profits from core business Operating profits from core business Notes: 1. Four groups are lined up from top to bottom based on quartiles of ratios of operating profits from core

B4-3: Movements of operating profits from core business and their factors for fiscal 2016

Notes: 1. Four groups are lined up from top to bottom based on quartiles of ratios of operating profits from core business for fiscal 2016 from the previous year.

Operating profits from core business exclude profits from investment trusts due to cancellations and income and cost of derivatives contract.

Reference: Developments in Financial Markets



Notes: 1. Latest data as at end-March 2017. U.S. dollar funding premiums indicate the additional interest costs on U.S. dollar LIBOR in financing U.S. dollar funds collateralized by yen funds. 3M dollar funding premiums, which are expressed in opposite signs, show U.S. dollar funding costs on U.S. dollar LIBOR spreads through currency and foreign exchange swaps. Both 1Y and 5Y dollar funding premiums are U.S. dollar/yen cross-currency basis swaps.

2. The lightly shaded areas show the data in fiscal 2015. The darker shaded areas show the data in fiscal 2016. Source: Bloomberg.

Glossary

Financial statements of financial institutions

Net income = operating profits from core business + realized gains/losses on stockholdings + realized gains/losses on bondholdings - credit costs \pm others (such as extraordinary gains/losses)

Operating profits from core business = pre-provision net revenue (PPNR) (excluding trading income) = net interest income + net non-interest income – general and administrative expenses

Net interest income = interest income – interest expenses

Net non-interest income = net fees and commissions + profits on specified transactions + other operating profits – realized gains/losses on bondholdings

Realized gains/losses on stockholdings = gains on sales of stocks – losses on sales of stocks – losses on devaluation of stocks

Realized gains/losses on bondholdings = gains on sales of bonds + gains on redemption of bonds - losses on sales of bonds - losses on redemption of bonds - losses on devaluation of bonds

Credit costs = loan-loss provisions + write-offs + losses on credit sales – recoveries of write-offs

Credit cost ratio = credit costs / total loans outstanding

Capital adequacy ratios of internationally active banks

Common equity Tier 1 (CET1) capital ratio = CET1 capital / risky assets

CET1 capital comprises common equities and retained earnings.

Risky assets are financial institutions' risk-weighted assets.

Tier 1 capital ratio = Tier 1 capital / risky assets

Tier 1 capital includes CET1 capital and equities such as preferred equities that meet certain conditions.

Total capital adequacy ratio = Total capital / risky assets

Total capital includes Tier 1 capital and subordinated bonds that meet certain conditions.

Capital adequacy ratios of domestic banks

Core capital ratio = core capital / risky assets

Core capital includes common equities and retained earnings as well as equities such as preferred equities that meet certain conditions.

Risky assets are financial institutions' risk-weighted assets.