

Appendix: Financial soundness indicators⁵⁸

Table 1: Domestic Banks

Unit: %

Items	Year (end of year)	2016	2017	2018	2019	2020	2021
Asset size							
Assets to GDP*		260.61	264.95	270.89	275.32	284.89	277.41
Earnings and profitability							
Return on assets (ROA)		0.66	0.66	0.68	0.70	0.58	0.58
Return on equity (ROE) (Pretax)		9.23	9.03	9.34	9.49	7.84	8.14
Return on equity (ROE) (After tax)*		7.94	7.80	8.09	8.11	6.82	7.11
Net interest income to gross income		60.04	60.03	59.33	56.59	59.95	62.11
Non-interest expenses to gross income		52.01	52.74	51.55	51.30	53.93	53.88
Gains and losses on financial instruments to gross income		11.37	14.85	11.23	18.78	17.06	12.93
Employee benefits expenses to non-interest expenses		56.29	56.75	57.15	56.76	57.05	58.36
Spread between lending and deposit rates (basis points)		1.37	1.36	1.35	1.32	1.22	1.24
Spread between the highest and the lowest interest rates of interbank O/N lending*		0.18	0.13	0.13	0.11	0.12	0.22
Asset quality							
Non-performing loans to total loans		0.27	0.28	0.24	0.22	0.22	0.17
Provision coverage ratio		503.45	490.59	573.67	650.30	623.74	781.47
Capital adequacy							
Regulatory capital to risk-weighted assets		13.33	14.17	13.99	14.07	14.84	14.80
Tier 1 capital to risk-weighted assets		10.97	11.78	11.86	12.08	12.79	12.97
Common equity Tier 1 capital to risk-weighted assets		10.50	11.19	11.19	11.32	11.84	11.96
Non-performing loans net of provisions to equity		-2.49	-2.18	-1.86	-1.78	-0.51	0.09
Leverage ratio		6.29	6.42	6.56	6.71	6.82	6.46

⁵⁸ In consideration of the IMF 2019 *Financial Soundness Indicators Compilation Guide (FSI Guide)*, two categories of indicators comprising life insurance companies and bills finance companies have been added to the financial soundness indicators while the category market liquidity has been removed since 2020. Thus, the number of indicators increased from 42 to 58. The time series data of removed and pre-adjusted indicators are available on the CBC's website (<https://www.cbc.gov.tw/en/cp-486-862-AE8D1-2.html>). For more details about explanatory notes for the compilation of financial soundness indicators, please refer to the CBC *Financial Stability Report* May 2021 (<https://www.cbc.gov.tw/en/cp-970-140474-7ae08-2.html>).

Table 1: Domestic Banks (cont.)

Unit: %

Items	Year (end of year)	2016	2017	2018	2019	2020	2021
Liquidity							
Customer deposits to total loans		137.25	138.76	135.75	137.27	142.04	144.30
Liquid assets to total assets		10.55	9.75	9.46	9.05	9.44	9.74
Liquid assets to short-term liabilities		14.98	13.37	13.36	12.53	13.19	13.37
Liquidity coverage ratio		125.81	134.54	133.89	134.82	141.60	136.60
Net stable funding ratio		-	-	132.44	132.71	136.51	138.56
Credit risk concentration							
Loan concentration by economic activity*		69.48	71.29	70.94	71.43	71.95	72.04
Large exposures to tier 1 capital**		-	-	-	-	8.60	8.06
Gross asset positions in financial derivatives to regulatory capital*		11.27	5.69	6.38	6.53	8.75	4.32
Gross liability positions in financial derivatives to regulatory capital*		11.58	7.02	8.64	7.66	9.36	4.51
Geographical distribution of loans to total loans*							
Domestic economy*		80.21	80.62	80.33	79.49	80.96	81.23
Advanced economies*		13.79	13.30	13.49	14.01	12.66	12.45
Emerging economies							
Emerging Asia*		4.75	4.91	5.12	5.42	5.31	5.30
Emerging Europe*		0.08	0.06	0.04	0.04	0.02	0.02
Latin America and the Caribbean*		0.54	0.48	0.44	0.40	0.37	0.31
Middle East and Central Asia*		0.24	0.31	0.27	0.35	0.42	0.47
Sub-Saharan Africa*		0.39	0.33	0.32	0.29	0.26	0.22
Credit of private sector to GDP*		140.73	146.27	150.92	155.13	160.16	159.52

Table 1: Domestic Banks (cont.)

Unit: %

Items	Year (end of year)	2016	2017	2018	2019	2020	2021
Sensitivity to market risk							
Net open position in foreign exchange to capital		4.21	3.95	3.78	3.20	3.45	3.58
Foreign-currency-denominated loans to total loans		20.80	20.35	20.14	20.67	18.80	18.06
Net open position in equities to capital		21.73	21.42	22.51	24.56	26.93	31.71
Foreign-currency-denominated liabilities to total liabilities		29.49	26.31	29.21	26.57	26.53	25.80

Notes: 1. Items with "*" and "**" are new indicators starting from 2020 with data traced back to 2016 and 2020 respectively.

2. Figures for "Spread between lending and deposit rates" exclude the data of preferred deposits rates of retired government employees and central government lending rates.

3. Non-performing loans net of provisions to equity:

(1) For data before 2019, specific provisions for credit losses refers to minimum provisions that a bank should allocate for classified loans and liabilities on guarantees in accordance with *Regulations Governing the Procedures for Banking Institutions to Evaluate Assets and Deal with Non-performing/Non-accrual Loans*.

(2) Beginning 2020, specific provisions for credit losses, based on the IFRS 9, refers to the provisions for expected credit losses of financial assets whose credit is impaired.

4. Figures for "Net stable funding ratio" are published from 2018.

5. Credit concentration:

(1) For the data before 2019, large exposures prior refer to the total amount of credit exposures to the first 20 private enterprises at domestic banks (after integration).

(2) Beginning 2020, large exposures are revised to the total amount of credit exposures to an enterprise at domestic banks (after integration) exceeding 10% of its Tier 1 capital.

6. Figures with "r" are revised data, which is based on GDP updated by DGBAS.

Table 2: Life Insurance Companies

Units: %

Items	Year (end of year)	2016	2017	2018	2019	2020	2021
Assets to GDP		126.51	136.03	143.22 r	155.44 r	160.39	153.58
Return on assets (ROA)		0.50	0.50	0.33	0.55	0.67	1.19
Return on equity (ROE) (pretax)		9.98	9.42	6.82	10.24	9.27	14.83
Return on equity (ROE) (after tax)		9.86	9.92	7.81	9.65	9.38	13.78
Risk based capital (RBC) ratio		301.25	304.90	268.43	292.54	299.13	335.17
Equity to investment assets		5.57	6.20	4.60	7.29	8.80	9.10

Notes: 1. FSIs of life insurance companies are newly added from 2020 with data traced back to 2016.

2. Investment assets include financial assets such as cash, bank deposits, loans, securities, derivatives, and non-financial assets for investment.

3. Figures with "r" are revised data, which is based on GDP updated by DGBAS.

Table 3: Bills Finance Companies

Units: %

Items	Year (end of year)	2016	2017	2018	2019	2020	2021
Assets to GDP		5.62	5.75	5.52	r 5.31	r 5.58	4.85
Return on assets (ROA)		1.13	1.06	0.96	0.99	1.18	1.27
Return on equity (ROE) (pretax)		9.14	8.80	8.00	8.05	9.33	9.78
Return on equity (ROE) (after tax)		7.66	7.46	6.72	6.67	7.56	8.01
Capital adequacy ratio		13.90	13.93	13.63	13.37	13.38	13.27
0-30 day maturity gap to assets (NTD)		-23.76	-24.27	-26.66	-21.39	-18.01	-16.80

Notes: 1. FSLs of bills finance companies are newly added from 2020 with data traced back to 2016.

2. Figures with "r" are revised data, which is based on GDP updated by DGBAS.

Table 4: Non-financial Corporate Sector

Units: %, times

Items	Year (end of year)	2016	2017	2018	2019	2020	2021
Total liabilities to equity							
TWSE-listed companies		98.33	100.07	99.48	104.61	107.85	106.85
OTC-listed companies		82.52	82.73	82.36	88.55	89.88	98.81
Return on equity							
TWSE-listed companies		14.38	15.81	14.92	12.62	14.60	23.01
OTC-listed companies		10.39	10.44	13.02	12.23	13.95	17.78
Net income before interest and tax / interest expenses (times)							
TWSE-listed companies		13.18	13.60	11.18	9.35	15.70	34.58
OTC-listed companies		12.59	12.88	16.23	15.99	21.99	30.23
Foreign liabilities to equity**							
TWSE-listed companies		-	-	-	-	32.48	32.62
TPEX-listed companies		-	-	-	-	20.11	21.64

Notes: 1. Data of TWSE-listed and OTC-listed companies are from TEJ.

2. Item with "**" is a new indicator to be disseminated from 2020 onward and the reference date of figures in 2021 is the end of September 2021.

Table 5: Household Sector

Unit: %

Items	Year (end of year)					
	2016	2017	2018	2019	2020	2021
Household debt to GDP	81.57	83.43	r 85.11	r 86.70	r 89.04	87.69
Debt service and principal payments to total disposable income	46.32	46.67	45.23	r 46.13	r 46.54	46.14
Household debt to total disposable income*	1.37	1.37	r 1.36	r 1.39	r 1.46	1.44

Notes: 1. Figures for "total disposable income" are the sum of household disposable income, rent expense and interest expense.

2. Figure for "total disposable income" for 2021 is a CBC estimate.

3. Item with "*" is a new indicator starting from 2020 with data traced back to 2016.

4. Figures with "r" are revised data, which is based on GDP and total disposable income updated by DGBAS.

Table 6: Real Estate Market

Unit: index, %

Items	Year (end of year)					
	2016	2017	2018	2019	2020	2021
National housing price index*	99.09	100.60	100.80	104.14	108.17	117.50
Residential real estate loans to total loans	29.35	29.82	29.73	29.44	32.04	32.52
Commercial real estate loans to total loans	16.60	17.54	17.78	17.73	19.37	19.69

Note: Item with "*" is a new indicator starting from 2020 with data traced back to 2016.