Accounting Background

(For Analysing the "Precious metals" On Chinese Commercial Bank Balance Sheets)

Before we can discuss the details of the "precious metals" mentioned in the financial statements of the annual reports of the 16 banks, we need to do some studying on accounting structures (study the definitions of a *financial statement, balance sheet,* an *income statement, assets/liabilities, financial assets/liabilities* and *derivative financial assets/liabilities*). This study will prove valuable for future posts as well. The bank balance sheets are an important topic in the Chinese gold market; understanding accounting helps us to illuminate the Chinese gold market.

Financial Statement

Financial statements of banks are divided in three main segments: a balance sheet, an income statement and a cash flow statement.

Balance Sheet

On Investopedia we can read the definition of a balance sheet:

Balance Sheet

A balance sheet is a financial statement that summarizes a company's assets, liabilities and shareholders' equity at a specific point in time. These three balance sheet segments give investors an idea as to what the company owns and owes, as well as the amount invested by shareholders.

The balance sheet adheres to the following formula:

Assets = Liabilities + Shareholders' Equity

A number of ratios can be derived from the balance sheet, helping investors get a sense of how healthy a company is. These include the debt-to-equity ratio and the acid-test ratio, along with many others. The income statement and statement of cash flows also provide valuable context for assessing a company's finances, as do any notes or addenda in an earnings report that might refer back to the balance sheet.

An example would be, ICBC holding 1 tonne of gold in small ICBC brand bars as inventory for retail sales. This gold is an asset of ICBC.

Income Statement

Next to a balance sheet, banks disclose an income statement in their annual reports. From Investopedia we read:

Income Statement

An income statement is a financial statement that reports a company's financial performance over a specific accounting period. Financial performance is assessed by giving a summary of how the business incurs its revenues and expenses It also shows the net profit or loss incurred over a specific accounting period.

Unlike the balance sheet, which covers one moment in time, the income statement provides performance information about a time period.

In example, ICBC buys gold at the SGE worth 1,000,000 RMB and has the metal recast in small 200 gram ICBC brand bars. If ICBC subsequently sells the newly casted bars for in total 1,100,000 RMB, then 100,000 RMB is profit and will be included in the income statement.

Cash Flow Statement

Next are the cash flows, from Investopedia:

Cash flow is the net amount of cash ... moving into and out of a business.

Total aggregated cash flows are measured over the course of a period, for example one year, as with the income statement. But unlike the income statement, it records all things related to cash flows. For example, if ICBC buys a new building worth 10,000,000 RMB, this will affect the balance sheet (cash decrease, asset increase) and the cash flow statement, but not the income statement.

An Asset

From China's Accounting Standard for Business Enterprises: Basic Standard we can read how an asset is defined:

Article 20 An asset is a resource that is owned or controlled by an enterprise as a result of past transactions or events and is expected to generate economic benefits to the enterprise. "Past transactions or events" mentioned in preceding paragraph include acquisition, production, construction or other transactions or events. Transactions or events expected to occur in the future do not give rise to assets.

"Owned or controlled by an enterprise" is the right to enjoy the ownership of a particular resource or, although the enterprise may not have the ownership of a particular resource, it can control the resource.

"Expected to generate economic benefits to the enterprise" is the potential to bring inflows of cash and cash equivalents, directly or indirectly, to the enterprise.

Article 21 A resource that satisfies the definition of an asset set out in Article 20 in this standard shall be recognized as an asset when both of the following conditions are met:

(a) it is probable that the economic benefits associated with that resource will flow to the enterprise;

and

(b) the cost or value of that resource can be measured reliably.

Article 22 An item that satisfies the definition and recognition criteria of an asset shall be included in the balance sheet. An item that satisfies the definition of an asset but fails to meet the recognition criteria shall not be included in the balance sheet.

Financial assets/liabilities

Financial assets/liabilities can be subdivided in several categories, such as *financial assets/liabilities designated at fair value through profit and loss, financial assets/liabilities held for trading* and *derivative financial assets/liabilities*. Financial assets/liabilities are included on the balance sheet and the change in *fair value* of most financial assets/liabilities will appear in the income statement. Not all banks subdivide financial assets/liabilities in the same manner. For example, ICBC lists "financial assets/liabilities held for trading" parallel to "financial assets/liabilities designated at fair value through profit and loss". Other banks only disclose "financial assets/liabilities designated at fair value through profit and loss" as a total. The details on accounting are beyond the scope of this post.

Let's have a look at an example of a financial liability. We'll use plain gold leasing. Suppose ICBC borrows 1 Kg of gold for 1 year and instantly sells the gold at 280 RMB/gram. ICBC will then record a cash asset of 280,000 RMB and a *financial liability held for trading* of 280,000 RMB on its balance sheet. Say, after one month the gold price surges to 380 RMB/gram. For ICBC the cash asset remains at 280,000 RMB, but the bank will increase the carrying amount of the financial liability held for trading to 380,000 RMB. The 100,000 RMB, which is a loss, will go into the income statement. In the income statement there is a separate line for this called *net profit or loss on financial assets or liabilities designated at fair value through profit and loss*.

Below is part of the income statement from ICBC's 2015 annual report.

Consolidated Statement of Profit or Loss

Year ended 31 December 2015 (In RMB millions, unless otherwise stated)

	Notes	2015	2014
Interest income	6	871,779	849,879
Interest expense	6	(363,912)	(356,357)
NET INTEREST INCOME	6	507,867	493,522
Fee and commission income	7	161,670	146,678
Fee and commission expense	7	(18,279)	(14,181)
NET FEE AND COMMISSION INCOME	7	143,391	132,497
Net trading income	8	4,227	1,745
Net loss on financial assets and liabilities designated at fair value			
through profit or loss	9	(5,953)	(10,024)
Net gain on financial investments	10	4,920	1,803
Other operating income, net	11	14,281	15,315
OPERATING INCOME		668,733	634,858
Operating expenses	12	(220,835)	(218,674
Impairment losses on:			
Loans and advances to customers	26	(86,022)	(56,267
Others	15	(971)	(462
OPERATING PROFIT		360,905	359,455

Exhibit 1. Courtesy ICBC. "Consolidated Statement of Profit or Loss" is the income statement. In accounting amounts in between brackets are negative.

Derivative financial assets/liabilities

Derivative financial assets/liabilities on balance sheets must not be commingled with *derivative instruments* such as futures or forwards, of which the notional values are recorded off-balance sheet. Let me show how derivative financial assets/liabilities are acquired.

We'll use futures as an example. Suppose ICBC buys long a SHFE gold futures (1,000 grams) contract at 280 RMB/gram on 1 November 2016 that is to expire in June 2017. The futures contract itself (derivative instrument) is recorded off-balance sheet, but the profit or loss arising from it creates a "derivative financial asset/liability" recorded on the balance sheet and the income statement. At 1 November 2016 the *fair value* of the futures contract is 0 because the future price has not moved yet

so there is no profit or loss. The notional value of the futures contract is 280,000 RMB (1,000*280). On 1 November 2016 ICBC's financial statement would be:

- ICBC's derivative financial asset/liability held for trading on the balance sheet = 0
- Fair value ICBC's derivative financial asset/liability held for trading recorded in the income statement's "net profit or loss on financial assets or liabilities designated at fair value through profit and loss" = 0 RMB
- Notional value of ICBC's derivative financial instrument recorded off-balance sheet = 280,000 RMB

Suppose one month later, on 1 December 2016, the gold price has surged to 380 RMB/gram. ICBC is long gold so it will have a mark-to-market profit of 100,000 RMB. This profit will go into the income statement in "net profit or loss on financial assets or liabilities designated at fair value through profit and loss". At the same time ICBC has created a derivative financial asset held for trading worth 100,000 RMB. (If gold would sink below 280 RMB/gram, ICBC would record a derivative financial liability held for trading.) On 1 December 2016 ICBC's financial statement would be:

- Derivative financial asset held for trading on the balance sheet = 100,000 RMB
- Fair value ICBC's derivative financial assets held for trading recorded in the income statement's "net profit or loss on financial assets or liabilities designated at fair value through profit and loss" = 100,000 RMB
- Notional value of ICBC's derivative financial instrument recorded off-balance sheet = 380,000 RMB

Below you can view a balance sheet and an off-balance sheet account from ICBC's 2015 annual report.

Consolidated Statement of Financial Position

31 December 2015 (In RMB millions, unless otherwise stated)

	Notes	31 December 2015	31 December 2014
ASSETS			
Cash and balances with central banks	20	3,059,633	3,523,622
Due from banks and other financial institutions	21	683,793	782,776
Financial assets held for trading	22	132,838	34,373
Financial assets designated at fair value through profit or loss	23	210,434	312,455
Derivative financial assets	24	78,870	24,048
Reverse repurchase agreements	25	996,333	468,462
Loans and advances to customers	26	11,652,812	10,768,750
Financial investments	27	4,666,691	4,086,409
Investments in associates and joint ventures	29	24,185	28,919
Property and equipment	30	224,426	199,280
Deferred income tax assets	31	21,066	24,758
Other assets	32	458,699	356,101
TOTAL ASSETS		22,209,780	20,609,953
LIABILITIES			
Due to central banks		210	631
Financial liabilities designated at fair value through profit or loss	33	303,927	589,385
Derivative financial liabilities	24	76,826	24,191
Due to banks and other financial institutions	34	2,265,860	1,539,239
Repurchase agreements	35	337,191	380,957
Certificates of deposit	36	183,352	176,248
Due to customers	37	16,281,939	15,556,601
Income tax payable		63,266	60,666
Deferred income tax liabilities	31	995	451
Debt securities issued	38	306,622	279,590
Other liabilities	39	589,073	464,690
TOTAL LIABILITIES		20,409,261	19,072,649

Exhibit 2. Courtesy ICBC. Balance sheet from ICBC's 2015 annual report.

				2015			
	Notional amounts with remaining life of					Fair values	
		Over three	Over				
	Within	months	one year				
	three	but within	but within	Over			
	months	one year	five years	five years	Total	Assets	Liabilities
Exchange rate contracts:							
Forward and swap contracts	1,211,545	1,309,472	139,060	4,290	2,664,367	35,533	(37,722
Option contracts purchased	39,851	65,470	778	-	106,099	1,074	-
Option contracts written	50,866	53,240	283	-	104,389	-	(1,203
	1,302,262	1,428,182	140,121	4,290	2,874,855	36,607	(38,925
interest rate contracts:							
Swap contracts	209,289	373,438	647,015	161,450	1,391,192	26,769	(28,079
Forward contracts	69,289	193,918	322,529	-	585,736	119	(111
Option contracts purchased	5,386	28	8,059	-	13,473	101	-
Option contracts written	5,386	-	7,383	16	12,785	-	(46
	289,350	567,384	984,986	161,466	2,003,186	26,989	(28,236
Commodity derivatives and others	691,028	266,823	44,352	1,460	1,003,663	15,274	(9,665
	2,282,640	2,262,389	1,169,459	167,216	5,881,704	78,870	(76,826

Exhibit 3. Courtesy ICBC. Off-balance sheet account from ICBC's 2015 annual report.

Having said this, the practice of categorizing precious metals assets and liabilities varies from bank to bank in China. Nevertheless, there are excellent observations to make from the financial statements of the banks. This will be quite complex, if I didn't explain it properly, please refer to the introduction of this post that serves as a simplified summary.