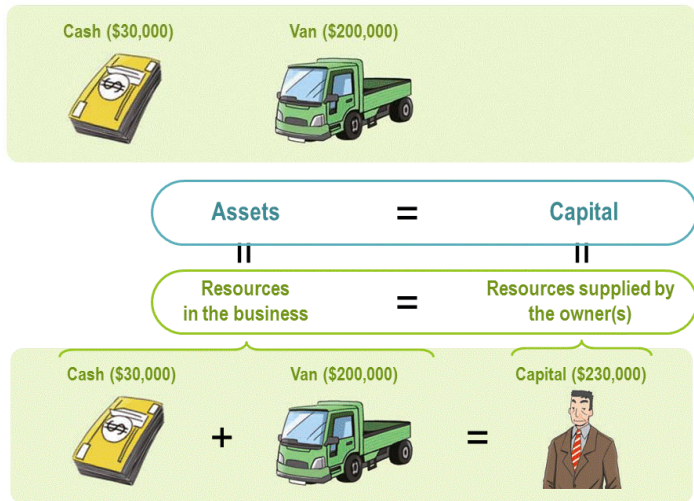


Chapter 2

The accounting equation

When all the resources are supplied by the owner(s)

- Assume Mr Tam, a sole proprietor, started a business and contributed \$30,000 in cash and a van valued at \$200,000 to his business.

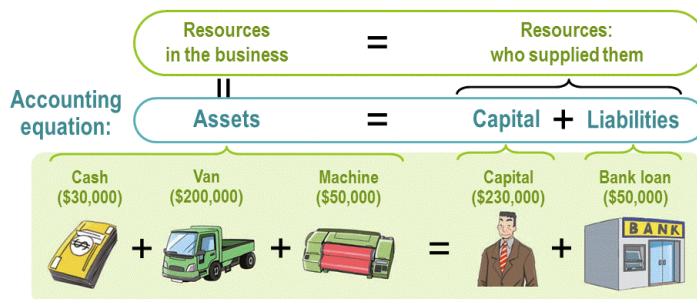


Other examples of assets:

- Land and buildings
- Furniture and fixtures
- Inventory
- Cash at bank

When the resources are supplied by the owner(s) and other people

- Later, Mr Tam's business borrowed \$50,000 from a bank to buy a machine.



- The total assets of the firm increased by \$50,000.
- Liabilities are the resources supplied to a business by people other than its owners.

Accounting equation:

$$\text{Assets} = \text{Capital} + \text{Liabilities}$$

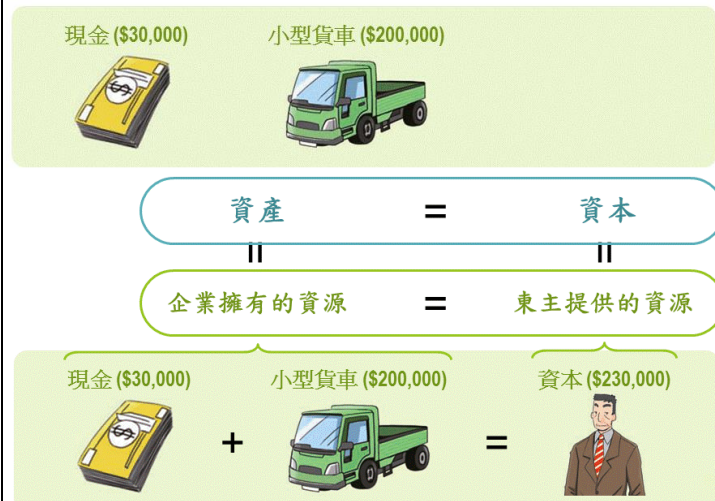
- Whenever a business transaction is made, it will have two effect(s) on the accounting equation.
- Yet both sides of the equation always have the same total.
- This is because we are dealing with the **resources** of a business from two different angles.

第 2 章

會計等式

企業東主提供所有資源

- 假設譚先生以 獨資經營 方式開設一家企業，投入 \$30,000 現金和一輛價值 \$200,000 的小型貨車。

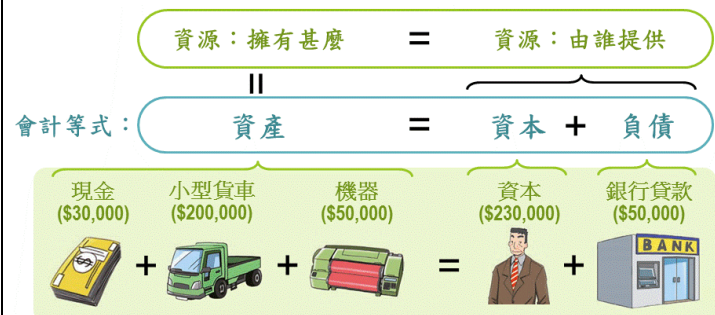


資產的例子還包括:

- 房地產
- 家具及裝置
- 存貨
- 銀行存款

企業東主和其他人士共同提供資源

- 譚先生後來向銀行借款\$50,000 購買一台機器。



- 企業的總資產增加\$50,000。
- 負債是指東主以外的人士所提供的資源。

會計等式：

$$\text{資產} = \text{資本} + \text{負債}$$

- 每項商業交易都會對會計等式帶來兩個影響。
- 等式兩邊的總和永遠維持相等。
- 這是因為我們是從兩個不同的角度來分析企業的資源。

Accounting equation:

$$\text{Assets} = \text{Capital} + \text{Liabilities}$$

↓ Rearranging

$$\text{Capital} = \text{Assets} - \text{Liabilities} \\ = \text{Net assets}$$

The expanded accounting equation

Revenues and expenses

- Businesses earn **revenues** and incur **expenses** in their day-to-day operations.

Revenues

Income earned from:

- the sale of goods
- the provision of services to customers
- other sources



Expenses

Costs incurred to generate revenue, such as:

- Rent
- Staff salaries
- Water and electricity
- Cost of goods sold

$$\text{Profit (or loss)} = \text{Revenues} - \text{Expenses}$$

- $\text{Revenues} \geq \text{Expenses} \Rightarrow \text{Profit} \Rightarrow \text{Capital} \uparrow$
- $\text{Revenues} \leq \text{Expenses} \Rightarrow \text{Loss} \Rightarrow \text{Capital} \downarrow$

- Whether a profit (or loss) is made, it belongs to the **owner(s)** and will affect owner's/owners' equity (i.e. **capital**).

Drawings

- **Drawings** refer to the resources of a business taken by its **owner(s)** for **personal** use.
- Drawings must be separately recorded and will be deducted from the owner's/owners' **capital**.

The expanded accounting equation

$$\text{Assets} = \text{Capital} + (\text{Revenues} - \text{Expenses}) - \text{Drawings} + \text{Liabilities}$$

會計等式：

$$\text{資產} = \text{資本} + \text{負債}$$

↓ 可重新排序為：

$$\text{資本} = \text{資產} - \text{負債} \\ = \text{淨資產}$$

擴展了的會計等式

收益與費用

- 企業在營運期間會賺取收益及招致費用。

收益

向客戶銷售 **貨品** 或提供 **服務**，或從其他途徑賺取的收入。



費用

為賺取收益而招致的成本，例如：

- 租金
- 員工薪金
- 水電費
- 銷貨成本

$$\text{利潤 (或損失)} = \text{收益} - \text{費用}$$

- $\text{收益} \geq \text{費用} \Rightarrow \text{利潤} \Rightarrow \text{資本} \uparrow$
- $\text{收益} \leq \text{費用} \Rightarrow \text{損失} \Rightarrow \text{資本} \downarrow$

- 企業所賺取的利潤或蒙受的損失，均由**東主**承擔，並會影響東主權益（**資本**）。

提用

- 提用是指被**東主**提取**自用**的資產。
- 企業必須開設獨立帳戶記錄提用，而提用金額會從**資本**中扣除。

擴展了的會計等式

$$\text{資產} = \text{資本} + (\text{收益} - \text{費用}) - \text{提用} + \text{負債}$$

Effects of transactions on the accounting equation

1. The owner introduced capital

On 1 June 2013, H Chan started a business by contributing \$20,000 in cash. Of the sum, \$8,000 was immediately placed in a current account and another \$7,000 placed in a fixed deposit account, both under the name of the business.

Assets		Capital		Liabilities
Bank \$15,000 (current account \$8,000; fixed deposit account \$7,000)	=	\$20,000	+	-
+ Cash \$5,000 (\$20,000 - \$8,000 - \$7,000)				
\$20,000		\$20,000		-

2. Bought an asset by cheque

On 6 June 2013, the firm bought furniture for \$4,000 by cheque.

Assets		Capital		Liabilities
Bank \$11,000 (current account \$8,000 - \$4,000; fixed deposit account \$7,000)	=	\$20,000	+	-
+ Cash \$5,000				
+ Furniture \$4,000				
\$20,000		\$20,000		-

3. Bought an asset on credit

On 9 June 2013, the firm bought a machine for \$2,000 from J Wu. It agreed to settle the payment within one month.

Assets		Capital		Liabilities
Bank \$11,000 (current account \$4,000; fixed deposit account \$7,000)	=	\$20,000	+	Creditor: J Wu \$2,000
+ Cash \$5,000				
+ Furniture \$4,000				
+ Machinery \$2,000				
\$22,000		\$20,000		\$2,000

- A creditor is a person or organisation to whom a firm owes money.

4. Repaid a liability

On 13 June 2013, the firm paid J Wu, its creditor, \$1,000 in cash as partial payment of the amount owed.

Assets		Capital		Liabilities
Bank \$11,000 (current account \$4,000; fixed deposit account \$7,000)	=	\$20,000	+	Creditor: J Wu \$1,000 (\$2,000 - \$1,000)
+ Cash \$4,000 (\$5,000 - \$1,000)				
+ Furniture \$4,000				
+ Machinery \$2,000				
\$21,000		\$20,000		\$1,000

商業交易對會計等式的影響

1. 東主投入資本

2013 年 6 月 1 日，陳先生開設一家企業，並投入現金 \$20,000。當中的 \$8,000 立即存放在企業名下的 往來存款帳戶，作日常營運之用；另有 \$7,000 存放在企業名下的定期存款帳戶，作儲蓄之用。

資產		資本		負債
銀行存款 \$15,000 (往來存款帳戶 \$8,000 ; 定期存款帳戶 \$7,000)	=	\$20,000	+	-
+ 現金 \$5,000 (\$20,000 - \$8,000 - \$7,000)				
\$20,000		\$20,000		-

2. 以支票付款購買資產

2013 年 6 月 6 日，企業以支票付款購買價值 \$4,000 的家具。

資產		資本		負債
銀行存款 \$11,000 (往來存款帳戶 \$8,000 - \$4,000 ; 定期存款帳戶 \$7,000)	=	\$20,000	+	-
+ 現金 \$5,000				
+ 家具 \$4,000				
\$20,000		\$20,000		-

3. 賒購資產

2013 年 6 月 9 日，企業向胡先生賒購一台價值 \$2,000 的機器，並答應在一個月內付款。

資產		資本		負債
銀行存款 \$11,000 (往來存款帳戶 \$4,000 ; 定期存款帳戶 \$7,000)	=	\$20,000	+	債權人： 胡先生 \$2,000
+ 現金 \$5,000				
+ 家具 \$4,000				
+ 機器 \$2,000				
\$22,000		\$20,000		\$2,000

- 債權人（俗稱債主）是指被企業欠債的人或機構。

4. 償還負債

2013 年 6 月 13 日，企業向其債權人胡先生支付現金 \$1,000，以償還部分欠款。

資產		資本		負債
銀行存款 \$11,000 (往來存款帳戶 \$4,000 ; 定期存款帳戶 \$7,000)	=	\$20,000	+	債權人： 胡先生 \$1,000 (\$2,000 - \$1,000)
+ 現金 \$4,000 (\$5,000 - \$1,000)				
+ 家具 \$4,000				
+ 機器 \$2,000				
\$21,000		\$20,000		\$1,000

5. Borrowed money from people other than the owner

On 18 June 2013, the firm borrowed \$20,000 from a bank and immediately deposited the sum into the current account.

Assets		Capital		Liabilities
Bank \$31,000 (current account \$4,000 + \$20,000; fixed deposit account \$7,000)				
+ Cash \$4,000	=	\$20,000	+	Creditor: J Wu \$1,000
+ Furniture \$4,000				+ Loan from bank \$20,000
+ Machinery \$2,000				
\$41,000		\$20,000		\$21,000

6. Sold an asset on credit

On 20 June 2013, the firm sold a piece of furniture to D Wai at its original cost of \$100. The amount was to be paid one month later.

Assets		Capital		Liabilities
Bank \$31,000 (current account \$24,000; fixed deposit account \$7,000)				
+ Cash \$4,000	=	\$20,000	+	Creditor: J Wu \$1,000
+ Furniture \$3,900 (\$4,000 - \$100)				+ Loan from bank \$20,000
+ Machinery \$2,000				
+ Debtor: D Wai \$100				
\$41,000		\$20,000		\$21,000

- A debtor is a person or organisation which owes money to a firm.

7. Paid staff salaries

On 26 June 2013, the firm paid staff salaries of \$4,000 by cheque.

Assets		Capital		Liabilities
Bank \$27,000 (current account \$24,000 - \$4,000; fixed deposit account \$7,000)				
+ Cash \$4,000	=	\$16,000 (\$20,000 - Expense \$4,000)	+	Creditor: J Wu \$1,000
+ Furniture \$3,900				+ Loan from bank \$20,000
+ Machinery \$2,000				
+ Debtor: D Wai \$100				
\$37,000		\$16,000		\$21,000

8. The owner took cash for personal use

On 28 June 2013, the owner took \$2,000 in cash for personal use.

Assets		Capital		Liabilities
Bank \$27,000 (current account \$20,000; fixed deposit account \$7,000)				
+ Cash \$2,000 (\$4,000 - \$2,000)	=	\$14,000 (\$16,000 - Drawings \$2,000)	+	Creditor: J Wu \$1,000
+ Furniture \$3,900				+ Loan from bank \$20,000
+ Machinery \$2,000				
+ Debtor: D Wai \$100				
\$35,000		\$14,000		\$21,000

5. 向東主以外的人士借款

2013 年 6 月 18 日，企業向銀行借入 \$20,000，並立即把款項存入往來存款帳戶。

資產		資本		負債
銀行存款 \$31,000 (往來存款帳戶 \$4,000 + \$20,000; 定期存款帳戶 \$7,000)				
+ 現金 \$4,000	=	\$20,000	+	債權人：胡先生 \$1,000
+ 家具 \$4,000				+ 銀行貸款 \$20,000
+ 機器 \$2,000				
\$41,000		\$20,000		\$21,000

6. 除銷資產

2013 年 6 月 20 日，企業把一件家具以成本價 \$100 售予韋先生，並容許韋先生一個月後才付款。

資產		資本		負債
銀行存款 \$31,000 (往來存款帳戶 \$24,000; 定期存款帳戶 \$7,000)				
+ 現金 \$4,000	=	\$20,000	+	債權人：胡先生 \$1,000
+ 家具 \$3,900 (\$4,000 - \$100)				+ 銀行貸款 \$20,000
+ 機器 \$2,000				
+ 債務人：韋先生 \$100				
\$41,000		\$20,000		\$21,000

- 債務人（俗稱債仔）是指欠企業款項的人或機構。

7. 支付員工薪金

2013 年 6 月 26 日，企業以支票支付員工薪金 \$4,000。

資產		資本		負債
銀行存款 \$27,000 (往來存款帳戶 \$24,000 - \$4,000; 定期存款帳戶 \$7,000)				
+ 現金 \$4,000	=	\$16,000 (\$20,000 - 費用 \$4,000)	+	債權人：胡先生 \$1,000
+ 家具 \$3,900				+ 銀行貸款 \$20,000
+ 機器 \$2,000				
+ 債務人：韋先生 \$100				
\$37,000		\$16,000		\$21,000

8. 東主提取現金自用

2013 年 6 月 28 日，東主從企業提取現金 \$2,000 自用。

資產		資本		負債
銀行存款 \$27,000 (往來存款帳戶 \$20,000; 定期存款帳戶 \$7,000)				
+ 現金 \$2,000 (\$4,000 - \$2,000)	=	\$14,000 (\$16,000 - 提用 \$2,000)	+	債權人：胡先生 \$1,000
+ 家具 \$3,900				+ 銀行貸款 \$20,000
+ 機器 \$2,000				
+ 債務人：韋先生 \$100				
\$35,000		\$14,000		\$21,000

9. Received bank interest

On 30 June 2013, the firm received interest of \$10 on its fixed deposit.

Assets		Capital		Liabilities
Bank \$27,010 (current account \$20,000; fixed deposit account \$7,000 + \$10)				
+ Cash \$2,000	=	\$14,010 ((\$14,000 + Revenue \$10)	+	Creditor: J Wu \$1,000
+ Furniture \$3,900				+ Loan from bank \$20,000
+ Machinery \$2,000				
+ Debtor: D Wai \$100				
\$35,010		\$14,010		\$21,000

Exhibit 2.1

Suppose K Leung's business had the following assets, capital and liabilities as at 31 August 2013:

Assets		Capital		Liabilities
Equipment \$24,000				
Motor vehicles \$56,000				
Debtors \$16,300	=	\$100,000	+	Creditors \$13,500
Bank \$13,200				
Cash \$4,000				
\$113,500		\$100,000		\$13,500

Transaction	Effect on			
	Assets	Capital	Liabilities	Totals
Bought extra equipment for \$2,000 in cash.	Equipment + \$2,000 Cash - \$2,000			Unchanged
Debtors paid the firm \$10,000 by cheque.	Bank + \$10,000 Debtors - \$10,000			Unchanged
Received a loan of \$20,000 in cash from M Chen.	Cash + \$20,000		Loan from M Chen + \$20,000	+ \$20,000
Paid creditors \$13,500 by cheque.	Bank - \$13,500		Creditors - \$13,500	- \$13,500
K Leung contributed a private car valued at \$30,000 to the firm.	Motor vehicles + \$30,000	Capital + \$30,000 (additional capital)		+ \$30,000
Sold an old car at its original cost of \$8,000 in cash.	Cash + \$8,000 Motor vehicles - \$8,000			Unchanged
Paid water charges of \$800 in cash.	Cash - \$800	Capital - \$800 (expense)		- \$800
Received commissions of \$1,200 by cheque.	Bank + \$1,200	Capital + \$1,200 (revenue)		+ \$1,200
K Leung took \$900 in cash from the business bank account for personal use.	Bank - \$900	Capital - \$900 (drawings)		- \$900

9. 收取銀行利息

2013 年 6 月 30 日，企業收到定期存款利息\$10。

資產		資本		負債
銀行存款 \$27,010 (往來存款帳戶 \$20,000 ; 定期存款帳戶 \$7,000 + \$10)				
+ 現金 \$2,000	=	\$14,010 ((\$14,000 + 收益 \$10)	+	債權人：胡先生 \$1,000
+ 家具 \$3,900				+ 銀行貸款 \$20,000
+ 機器 \$2,000				
+ 債務人：韋先生 \$100				
\$35,010		\$14,010		\$21,000

示例 2.1

假設梁先生的企業在 2013 年 8 月 31 日的資產、負債和資本如下：

資產		資本		負債
設備 \$24,000				
汽車 \$56,000				
債務人 \$16,300	=	\$100,000	+	債權人 \$13,500
銀行存款 \$13,200				
現金 \$4,000				
\$113,500		\$100,000		\$13,500

交易項目	影響			
	資產	資本	負債	總和
購買額外的設備，支付現金 \$2,000。	設備 + \$2,000 現金 - \$2,000			不變
債務人以支票還款 \$10,000。	銀行存款 + \$10,000 債務人 - \$10,000			不變
向陳先生借入現金 \$20,000。	現金 + \$20,000		陳先生的貸款 + \$20,000	+ \$20,000
以支票向債權人還款 \$13,500。	銀行存款 - \$13,500		債權人 - \$13,500	- \$13,500
梁先生投入一輛價值 \$30,000 的私家車。	汽車 + \$30,000	資本 + \$30,000 (額外資本)		+ \$30,000
按成本出售一輛舊汽車，收取現金 \$8,000。	現金 + \$8,000 汽車 - \$8,000			不變
以現金支付水費 \$800。	現金 - \$800	資本 - \$800 (費用)		- \$800
以支票形式收取佣金 \$1,200。	銀行存款 + \$1,200	資本 + \$1,200 (收益)		+ \$1,200
梁先生從企業的銀行帳戶提取 \$900 自用。	銀行存款 - \$900	資本 - \$900 (提用)		- \$900

After recording the above transactions, the assets, capital and liabilities of K Leung's business would appear as follows:

Assets		Capital		Liabilities
Equipment \$26,000				
Motor vehicles \$78,000				
Debtors \$6,300	=	\$129,500	+	Loan from M Chen \$20,000
Bank \$10,000				
Cash \$29,200				
\$149,500		\$129,500		\$20,000

記錄上述交易後，梁先生的企業的資產、負債和資本如下：

資產		資本		負債
設備 \$26,000				
汽車 \$78,000				
債務人 \$6,300	=	\$129,500	+	陳先生的貸款 \$20,000
銀行存款 \$10,000				
現金 \$29,200				
\$149,500		\$129,500		\$20,000