**Week 2.2** Breaking down the structures of transactions

**Credit Card**

```
A   B
   |   |
   ID  ID
---|--|--

$\rightarrow$ $\rightarrow$

C   C
   |   |
   $\leftarrow$ $\leftarrow$
```

**Check/ATM Card**

```
A   B
   |   |
   ID  ID
---|--|--

$\leftarrow$ $\leftarrow$

C   C
   |   |
   $\rightarrow$ $\rightarrow$
```

**Checks**

```
A   B
   |   |
   ID  ID
---|--|--

$\leftarrow$ $\leftarrow$

C   C
   |   |
   $\rightarrow$ $\rightarrow$
```

**Cash**

```
A   B
   |   |
   $\leftarrow$ $\leftarrow$

C   C
   |   |
   $\rightarrow$ $\rightarrow$
```

**Anatomy of a Transaction**

A typical transaction consists of a minimum of two parties and one physical medium. This is when the transaction is immediate, and typically uses basic, physical currency. When the transaction is not immediate, the medium is typically virtual currency, mediated by a third party.

When this occurs, a number of steps must be taken, and can be taken in different orders. One step is identification; the currency involved in the exchange must be linked to the buyer, so his or her identity needs to be established for the vendor, so that he or she can identify the buyer to the third party and get paid.

Another step is that the buyer must give currency to the third party. In the case of a bank, this step must typically be before the vendor is paid; the bank acts as currency storage. In the case of a credit company, this step takes place after the vendor is paid. The credit company sends a compiled bill of all credit use to the buyer, trusting the buyer to be able to pay it.