

## Balance Sheets, Money, Liquidity and Finance

### Balance Sheets

- Every economic unit has a balance sheet. Governments, businesses, households, all have balance sheets. You have a balance sheet, even if you never write it down. A balance sheet is simply a list of the unit's *asset* and *liabilities*. We often write balance sheets with assets on the left and liabilities on the right.
- An asset is anything you own that you expect to receive income from in the future. A liability is an obligation to make a payment at some time in the future. A liability is a commitment to make a payment in the future. For our purposes, we can think of a liability as being the same as a debt.
- A financial asset is any kind of claim that requires someone else to make payments to you in the future. For example, if you borrow \$20 from me and give me an IOU, that IOU is an asset for me, because it represents your obligation to pay me the \$20 sometime in the future. Various kinds of debt and equity (stocks) are the most familiar financial assets, but there are many others. A *real asset* is something you expect to receive income from not because anyone is required to pay you, but because you can use it in some way that will benefit you. The machines and buildings owned by a business, or the house and car owned by a family, are examples of real assets.
- Every liability is an asset for someone else. (If you owe money, there must be someone you owe it to.) Every financial assets is a liability for someone else. Real assets are not liabilities for anyone. Everything on a balance sheet is a stock (as opposed to a flow). *Net worth* is a special kind of liability. It is defined as total assets minus total financial liabilities. It may sound strange that net worth is a liability, but that is how it is treated in accounting.
- Financial transactions involve changes in balance sheets. Every real transaction has a corresponding financial transactions. But many financial transactions have no connection with real transactions.

### Money

- There are four functions of money:
  1. *Medium of exchange*. Money is something you can give in return for a good or service.
  2. *Unit of account*. We measure the value of things in terms of money.
  3. *Store of wealth*. If you have more income right now than you want to spend, you can hold money to give you the option of spending later.
  4. *Means of payment*. If you have a debt to someone, they will accept money to settle it. This is the function of money that is connected to an asset's status as **legal tender**. By law, anything designated as legal tender (dollar currency in the US) must be accepted in payment as a debt. Legal tender does *not* have to be accepted as payment for goods or services.

Note: The textbook only discusses the first two of these functions.

- Many assets perform some of the functions of money, but not all of them. Different assets perform the functions of money at different times. For example, in a country with high inflation, people might use the local currency to buy goods and services settle debts, but not as a store of value. So there is no hard and fast rule about whether a given asset is or is not money. In many times and places, no single asset performs all of these functions, any it does not make sense to say that anything is “money”.
- Economists used to talk about the "quantity of money," and describe central banks as "printing money" or "controlling the money supply," but that kind of language is no longer used. There is too much fuzziness about what does and does not function as money, for there to be a meaningful quantity of it.

## Liquidity

- The *liquidity* of an asset refers to how easy it is to trade it or convert it into money, by selling it, borrowing against it, etc. Liquid assets should have low *transaction costs* a predictable value, thick markets, and come in standard form. And it should be easy to buy or sell them without having to change what you are doing. A financial asset like a bond is very liquid – there are well-organized markets with lots of buyers and sellers, one bond is just like another, and owning a bond and collecting interest from it doesn't require you to do anything else. A stock is less liquid because its value is unpredictable – you might not be able to convert into as much cash as you were expecting, when you need it. A piece of machinery, a building, a house are much less liquid – each one is a little different, so it's harder to find buyers, and there are often significant costs involved in transferring ownership. And to get an income from it, you have to actively do something with it.
- Any asset that will function as money must be liquid. Another way of thinking of liquidity is the "moneyness" of an asset. Something you can easily convert into money when you need it, is almost as good as holding money itself.
- As applied to a balance sheet of a business, household, or other economic unit, liquidity refers to how easily they can acquire money when they need it. Holding money obviously makes your balance sheet liquid, as does holding liquid assets. But an economic unit may also be liquid if it is easy for them to borrow money.

## Finance

- In any monetary economy, there is a *circular flow* with goods and services flowing in one direction and money flowing the other way. Total spending always equals total production. But individual units can spend more or less than their income.
- The *financial system* is what allows us to make spending decisions independent of our income. If we want to spend less than our income, we acquire a financial asset – in effect, we make a loan to the financial system. And if we want to spend more than our income, we can borrow – that is, we add a liability to our balance sheet, which is an asset for the financial system.

- Most of what we use as "money" is actually liabilities of the financial system. Your bank account is really a debt the bank owes to you. When you pay someone, you transfer that debt to a third party.
- *Reserves* are a special money that banks use to make payments to each other. They are a liability of the central bank.
- Every time a bank makes a loan, it creates money. The loan is really two offsetting debts – your debt to the bank, and the bank's debt to you in the form of a new deposit. If you borrow \$100,000 from a bank, your assets and liabilities each increase by \$100,000, and so do the bank's. The loan is an asset for the bank, but the deposit – the money you now have – is a liability.
- So the total amount of spending in the economy depends strongly on the terms on which banks are willing to extend credit. In effect, the financial system regulates the flow of payments through the rest of the economy. That is why it is so important for macroeconomics and macroeconomic policy.
- Not all credit finances purchases of real goods and services. It can also be used to finance asset purchases. The more *liquidity* there is in the economy, the easier it is to finance purchases of assets, so the more demand there will be for assets and the higher the price of them will go. This is why easy credit is often associated with *asset bubbles*.
- An asset bubble is a situation in which people buy an asset primarily because they expect its price to go up. (An increase in the price of an asset is called a *capital gain*.) If enough people expect the asset price to rise, then demand for the asset will cause its price to rise. So people's optimistic predictions come true, and demand for the asset will rise further. In other words, there is a positive feedback loop between demand for its asset and the price of the asset. (This is different from the negative relationship between price and demand that exists in normal markets.) But it's not enough for people to want more of an asset, they also have to be able to pay for it. So easy credit is an essential ingredient for asset bubbles as well.