

## Foundations of Balance Sheet Economics

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Although it is widely accepted that the Great Depression of the 1930s originated in the stock market crash of October 29, 1929 (known as Black Tuesday), Galbraith (1954) asserts that it was the burst of the real estate bubble that triggered the recession. The oil crisis of the 1970s was a typical case of commodity bubbles, in which not only the prices of the petroleum products but also agricultural and other commodities shot up. The Japanese asset price bubble of the 1980s and the U.S. subprime mortgage crisis of the 2000s are other examples of real estate bubbles. It is a well-known fact that all these bubbles have ended up in severe recessions. Copeland (1949) clearly states that the money-flows accounts are dedicated to solve such problems. Obviously national accounts are the only statistics to depict the whole situation what is going on in the economy. However, the traditional commodity-flow System of National Accounts is not suitable to fully understand the mechanism of creation and burst of the bubble. In this direction, we are to design a money oriented system of national accounts that depicts the repercussions between the real and financial economy. This paper is an attempt to depict economic phenomena, such as financial bubbles in the perspective of accounting rules that is based on the Roman law.

A balance sheet is a list of owned *jus in rem* as well as owned and owed *jus in personam* that are measurable in monetary terms. Roman law defines *jus in rem* as the exclusive dominion of a person over a thing, which implies the legal obligation of other individuals in general to tolerate these dominions. Although *jus in rem* is considered to be an implicit contract among people en masse, the duties that correlate with it are always negative, they merely are duties to forbear or abstain. In contrast to this, *jus in personam* is usually an explicit contract between specific parties in which one party is obliged to do or to perform some specific duties on behalf of the other. Liability to pay taxes in a democracy is a *jus in personam* arising from an implicit contract but is considered to be a positive duty. Most of *jus in personam* arise from contract (*ex contractu*) however; some others arise from tort (*ex delicto*). A compensation for damage caused by an unlawful act is also a positive duty. It is noteworthy that *jus* in these contexts (i.e. *obligatio*) signifies duty as well as right. Many of the duties categorized as *jus in personam* are to fulfill monetary obligations, that is to say, the terms are specified in the unit of account. A specific duty relating to *jus in personam* that is measurable in monetary unit is referred to as a liability. Some liability such as bank deposit serves as unit of account. It is specifically referred to as a monetary liability; and the corresponding claim is called monetary asset (or money for short). The liabilities other than monetary liabilities are referred to as financial liabilities; and the corresponding claims are called financial assets. The claims relating to *jus in rem* are referred to as non-financial assets if and only if they are measurable in monetary terms as described in the next paragraph. The balance sheet records all the above classes of assets and liabilities of an economic entity at a particular point in time. In the above context, an economic entity is a group of natural persons that is capable, in its own right, of owning assets and incurring liabilities.

Some economic entities such as business corporations have legal personality, but many others including households do not have any legal status.