# THE EIGHTH PILLAR OF SOUND MONEY AND CREDIT

## THE PRINCIPLE OF MATCHING MATURITIES

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#### A Venetian Tale

A Venetian merchant lost his ship of cargo on the reefs of the Dalmatian coast. As he was sitting in a cove lamenting his loss, a mermaid appeared and inquired what was the matter. Feeling sorry for the merchant who lost his entire fortune in the accident, she dived into the sea and brought up a boat laden with silver, and asked him if that were the boat he had lost. When the man said that it wasn't, the mermaid dived again and fetched up the merchant's own boat. "That's the right one." he said gratefully. The mermaid, so delighted with his honesty made him a present of the other boat as well.

When he returned to Venice and told his colleagues about his good fortune, one of them thought that he could pull off a similar coup. He loaded his boat with merchandise, sailed to the Dalmatian coast and scuttled his ship. Then he sat down in the cove and wept. The mermaid appeared again. Upon hearing the cause of his tears, she dived and soon produced a boat laden with gold. asking if it were the same one that had been lost. The man, who has never seen that much gold in his life. cried ecstatically: "O yes, indeed!"

The mermaid was so shocked at this unblushing impudence that, far from giving him the boat with its gold cargo, she did not even restore his own to him. "You are not only a

liar," she said, "but also an impostor." She sailed away leaving the man alone in the deserted cove.

### The propensity to save

As we have seen in the Seventh Pillar, there is a significant difference between commercial banking and investment banking (including savings banks). The former depends on the people's propensity to consume, and the latter, on their propensity to save. The banks pool the flow of savings from individuals, and make this pool feed the flow of investments to every part of the national economy. The banks borrow funds from the savers for various fixed terms, and lend them out to producers, entrepreneurs, speculators, for various fixed terms. The banks have a double balancing act; they must balance their liabilities with assets not only dollar for dollar, but also maturity for maturity. That is to say the banks must see to it that their assets mature no later than their liabilities. This is known as the *Principle of Matching Maturities*.

Since there is no investment without prior saving, the minimal rate of interest is determined by the propensity to save (or by its reciprocal, time preference). The higher the propensity to save, the lower is the minimal rate of interest (or, the lower the time preference, the lower is the minimal rate of interest) and conversely.

#### **Borrowing short and lending long**

The Principle of Matching Maturities is often quoted in its negative form: a bank must not borrow short and lend long. This is the one commandment most often violated by the banking fraternity. To understand the underlying temptation, we have to examine the source of bank profits. The investment bank derives its profits from the spread between the interest it earns on its assets and the interest it pays on its liabilities. The bank could, illegitimately, increase its profits by borrowing short at an even lower rate, and lend long at an even higher rate because longer term borrowing and lending normally command higher interest rates. The bank guilty of this illegitimate practice is an impostor, as it misrepresents the true state of affairs in the balance sheet, just as the greedy Venetian sailor misrepresented his situation to the mermaid.

The practice of borrowing short and lending long is no less dangerous than it is illegitimate. The bank would obviously have to borrow again and again, before its assets matured. No one knows the future, and the bank is no exception. Future borrowing conditions may be worse than those at present. The bank may be confronted with borrowing costs higher than the earnings it has locked itself into or, in an extreme case, the bank may not be able to borrow at any price.

A bank guilty of borrowing short and lending long is not only an impostor but a liar as well. It lies in overstating the value of its assets and understating its liabilities in the balance sheet. The bank in fact pretends that it can use short term funds to balance its long term liabilities.

#### Short debt makes long friends

The American banking system is in deep trouble on account of its long-standing addiction to the drug of borrowing short and lending long. Worst offenders are the savings banks loaded with mortgages maturing in 20 years or longer, held against liabilities maturing daily. That this situation is preposterous should be clear to every impartial observer. The bank has sunk liquid funds into brick and mortar, against which it holds liabilities subject to withdrawal without notice (or on short notice). The banks are sitting on mountains of paper losses, which will become real losses at the first test of extensive cash withdrawals.

Federal deposit insurance is hardly a fig leaf. The assets of the insurer cover only a minuscule part of its contingent liabilities. Worse still, these assets are carried in the form of government securities, and even a minor asset liquidation would embarrass the government and break the market.

Had the American banks taken to heart the ancient wisdom of the English proverb: "short debt makes long friends." They could have avoided diverting enormous resources into loan-loss reserves.

#### Vicious circle

If bank liabilities mature faster than bank assets, then two things will happen. (1) Interest rates will rise, as the banks are forced to resort to asset-liquidation, and the public will acquire these assets only at a concession in price. (2) The maturity structure of the debt will shrink, as the banks are forced to issue short-term debt in exchange for long-term debt. In other words, the banking system, led by the central bank, is forced to finance a massive exodus of the savers from long to short term debt. As the banking system has to absorb more and more long-term debt, unwanted by the saving public, and give short-term credit in exchange, it becomes clear that the only cure for the condition caused by that drug abuse is more drug abuse.

The central bank is helpless. Any hesitation on its part to make available the reserves needed to meet the maturing liabilities of banks would bring down the house of cards immediately. The central bank would therefore continue to buy the long-term bonds dumped by a disgruntled public. That is to say the central bank would continue to borrow short and lend long on an ever larger scale.

The vicious circle, however, cannot continue indefinitely as the average maturity of the debt cannot shrink to zero. Before that happens the bond market, like a rotten apple, will fall into the lap of the money market. The money supply will explode, the supply of savings will implode, and the new brave world of borrowing short and lending long will come to a sorry end.