

## **Lecture 7:**

Copyright © 2002 by Antal E. Fekete

August 12, 2002

# **GOLD STANDARD UNIVERSITY**

**Summer Semester, 2002**

*Monetary Economics 101: The Real Bills Doctrine of Adam Smith*

**Lecture 7**

# **THE MYSTERY OF THE DISCOUNT RATE**

**- The Second Greatest Story Ever Told, Chapters 7-8 -**

**- One Discount Rate or Many? -**

**- Arbitrage -**

**- The Rise and Fall of the Discount House -**

**One Discount Rate or Many?**

In the previous Lecture I explained how discounting bills of exchange was invented, how the discount rate appeared, and how changes in the propensity to consume made it go up

or down. I also presented the important argument that the discount rate is entirely different in origin and nature from the rate of interest.

We still have one mystery to solve, namely the question: Is there one discount rate or are there many discount rates? Is the clothier discounting at one rate and the baker at another, or are all retailers discounting at the same rate? The next Chapter in *The Greatest Story Ever Told* will answer that problem.

### *Chapter Seven*

**in which the gentle reader learns why the baker discounts at the same rate as the clothier**

**The clothier noticed that his success in trading bills of exchange attracted imitators. The miller was also drawing bills on the baker and used them to pay the grain merchant for the wheat, after the bill was accepted by the baker. In holding the miller-on-baker bill the grain merchant was earning an income on his idle cash, just as the spinner, holding the weaver-on-clothier bill, was earning an income on his. Both men knew that they could use their bills to pay their suppliers, or anyone else for that matter. They were also confident that if they ever needed gold coins for any reason, they could get them by discounting their bills with another merchant experiencing a temporary overflow of cash.**

**The clothier had a penchant for inquiry. He was anxious to find out at what rate the baker was discounting the miller's bills. Was it the same rate he was using himself, or a higher/lower rate? To his amazement he found that the baker was discounting at exactly the same rate. Whenever he had reason to change the discount rate, so had the baker, moreover, the adjustment was by the same amount and in the same direction. As there was no collusion, it appeared to the clothier that an 'invisible hand' was guiding them and made the adjustment every time a deviation between their respective discount rates was in the offing. The clothier was fascinated by his discovery and was determined to get to the bottom of it.**

**It came to pass that the summer was unusually dry and it did great damage to the cotton crop while actually helping the wheat harvest. The clothier noticed that his suppliers were anxious to discount their bills, in spite of the higher discount rate he was posting. They would rather take the gold coin instead of holding the bill. Meanwhile the discount rate posted by the baker actually went down. The clothier's reaction was immediate and dramatic: he sold all the miller-on-baker bills in his portfolio and used the proceeds to buy back all the weaver-on-clothier bills that were still floating out there. He reasoned that the discrepancy between the discount rates must disappear by the maturity date at the latest, and he could pick up some riskless profits by the maneuver of getting out of bills discounted at the lower and**

getting into bills discounted at the higher discount rate. In other words, the clothier sold bills at the higher and bought them at the lower price, and expected to profit from the equalization of the discount rates.

The weaver was following these maneuvers of the clothier with fascination, and offered a bet. He was betting that the price of bread would go down as a result of the good wheat harvest, and the price of cloth would go up as a result of the disastrous cotton crop. His thinking was conditioned by 'conventional wisdom' asserting that a good crop means lower and a bad one means higher prices. The clothier won the bet hands down. There was no change in the price of the bread, nor in the price of cloth. Moreover, the spread between the two discount rates completely disappeared.

The clothier would not kid himself that all this was due to his intervention in the bill market. He was candid enough to admit that other factors were at work, too. Cotton merchants from other regions not affected by the dry summer were attracted by the higher discount rate. They drew bills against their shipments of cotton to the area afflicted by the drought. Meanwhile, merchants back home were drawing bills against their shipment of grain to other places with a poor grain harvest, where the discount rate was higher. These operations called 'arbitrage' had the effect of equalizing the discount rates on cloth and bread. They also explained why there was no rise in the price of cloth, nor a fall in the price of bread. The spread in the discount rate attracted cotton to the area of shortages, and expelled grain from the area of surpluses. The reason for price changes disappeared before they could materialize.

### Arbitrage

The clothier deserved to win the bet since he had the better grasp of the fundamentals of bill trading. The weaver failed to understand that a discrepancy between the discount rates on cloth and on bread is an aberration that was bound to disappear in short order due to the arbitrage of those who understood the bill-trading process. *Arbitrage* means buying in one market while selling in another (the two markets may also be the same as a special case) motivated by the arbitrageur's expectation of a certain change in the spread. The *spread* is defined as the difference between prices at which he has bought and sold. In our example, the weaver-on-clothier bill was bought at a lower and the miller-on-baker bill was sold at a higher price (due to a higher discount rate on the former and a lower one on the latter). By maturity the prices, on average, would be equalized. The arbitrage opportunity of which the clothier availed himself promised him risk-free profits.

Economists haven't paid sufficient attention to the spread and arbitrage, concentrating their efforts on the price and speculation instead. Yet the fact is that arbitrage and speculation are diametrically opposed to one another. The speculator takes large risks in

the hope of large profits. The arbitrageur is not interested in increasing risks: he is interested in reducing them. The fact is that the price is subject to so much diverse and capricious influence that predicting its changes is a risky business. By contrast, spreads filter out a good many of these capricious effects on individual prices. Well-informed businessmen know this and, with a solid understanding of the economic factors they can spot the spreads that are out of line and predict in which direction they will move. In these Lectures I shall concentrate on the guiding star of business: the spread, and describe arbitrage as the principal form of human action, the tool *par excellence* of successful businessmen who provide the driving force behind the changing economic landscape.

In the previous Chapter we saw several examples of arbitrage, and I am asking you to study each one separately. In addition to buying the weaver-on-clothier bill at the lower, against selling the miller-on-baker bill at the higher price, we also saw that if wheat was cheaper in country *A* and a more expensive in country *B*, then the arbitrageur would buy it in *A* and sell it in *B*. Also, if the discount rate was higher in *A* and lower in *B*, then the arbitrageur would buy the bills drawn on country *A* (where bills were cheaper) and sell the bills drawn on country *B* (where bills command a higher price). Arbitrage is the most important tool to reduce risks in economic activity. The previous examples are related to *inter-spatial* arbitrage. Warehousing provides examples for *inter-temporal* arbitrage. Take a grain merchant who buys grain in the fall to fill his grain elevators. His problem is that he will need an exorbitant amount of capital in order to be able to shoulder the risk that the price of his grain in the elevators might drop. He solves the problem by going to the grain futures market where he sells forward an equivalent amount of grain. Using another word, he is *hedging* his inventory of grain in his elevators. As he is selling grain from his elevators, he will lift a matching number of his hedges in the grain futures market. Hedging gives the grain merchant protection against falling grain prices. For losses on grain held in the elevator he is compensated by capital gains on the hedges.

### *Chapter Eight*

**in which the gentle reader learns why the clothier was in such a hurry to go out of the cloth business**

**Soon afterwards the clothier sold his store and went out of the cloth business. He had a better idea. He would trade bills drawn by one tradesman on another against shipments of consumer goods. The clothier was in a hurry. He assumed that other clever traders might be planning to do the same thing, and he wanted to get a piece of the action.**

**With a good grasp of the needs of tradesmen the clothier knew exactly where and when to buy bills, or where and when to sell them. He would buy bills drawn on a tradesman whose business was slack temporarily, but who were about to enter their high season. He would sell bills to tradesmen whose wares were moving pretty fast**

at the moment, but who were about to enter their slack season. In September he would buy bills drawn on the coal-merchant, and offer bills for sale to the grain merchant. The former was building up an inventory of coal for the coming winter heating season, and bills on coal were relatively cheap. The latter was drawing down his inventory of grain and was looking for liquid earning assets where he could park his idling circulating capital until the next harvest.

The clothier knew from his own experience that the inventory of bills in the portfolio of a retail merchant was complementary to the inventory of merchandise on his shelves. Both were earning assets to the retailer, albeit in a different way. The incomes from the two inventories see-sawed with the seasons. The retailer, while keeping the combined value of the two at about the same level, would let the mix vary with the change of the seasons. In this way the retailer could, with the help of the special bill-trading services offered by the clothier, mitigate or eliminate the seasonal character of his business. He would compensate for the decline of income in his low season by increasing the income from his bill-portfolio consisting of bills drawn on merchants in their high season. Then at the start of his high season he would draw down his inventory of bills and use the proceeds to build up his inventory of merchandise. As his income from the bill portfolio declined, so would his income from the inventory of merchandise increase.

The clothier called his new business the "Discount House". He also offered other special services to his clients, such as collecting the face value of bills at maturity from the acceptor. He was making a market in outstanding bills: he would be ready to buy bills from one client who unexpectedly found himself short of cash, or to sell bills to another who unexpectedly found himself with more cash than he needed for the conduct of his business.

### **The Role of the Discount House**

This is how the Discount House specializing in market-making for bills of exchange was born. It has extended the scope of bill circulation greatly. Of course, bills could circulate in the absence of the Discount House, too, but circulation would be limited to a small circle of merchants in business contact with one-another, such as the spinner, the weaver and the clothier. Now, with the intermediation of the Discount House, one merchant could buy the bill of another even if he was not personally acquainted with him. He relied on the expertise of the Discount House concerning the security of the paper he was buying. A lot of new businesses sprang up to satisfy the seasonal needs of the consumer which could not formerly prosper as a result of the exorbitant capital costs involved in carrying seasonal merchandise. These capital costs were now drastically reduced, as a result of the expansion of bill circulation, thanks to the operation of the Discount House helping to finance trade in seasonal consumer goods.

It may help us understand the bill market better if we contemplate that the market process in effect gives temporary and ephemeral monetary privileges to the bill of exchange drawn of fast-moving merchandise on its way from the producer and distributor to the consumer, as I have suggested earlier. Indeed, consumer goods circulate, and their circulation is fueled by two of the most important human instincts, survival and recreation. Monetary circulation of consumer goods *in natura* is hardly possible. Bills of exchange make consumer goods circulate by proxy, as it were. There is no risk involved in holding the bill. Payment at maturity is a virtual certainty. The underlying consumer goods are known to exist and to be in demand. Shortages of gold, real or imagined, will not hamper the liquidation of the credit drawn against the movement of consumer goods. At maturity the consumer's gold coin will liquidate not only the liability of the last endorser of the bill, but that of all the previous endorsers as well. This is what makes the credit represented by the bill of exchange self-liquidating.

### **The Hijacking of the Social Circulating Capital**

Compare two scenarios: the first in which the Discount House operates in the absence of a Commercial Bank, and the second the other way round, in more details, the Commercial Bank is the only place where merchants can discount their bills which then become the earning asset of the bank. One might say that the two credit systems are economically equivalent. However, there is a significant difference. Full disclosure is achieved only under the first scenario. Here bills are openly traded: everybody is free to inspect all the bills offered for sale. Fraud is nearly impossible, as traders would quickly spot a bill drawn on a stalled good, or a higher-order good, or multiple bills drawn on the same merchandise. Nor would it be possible to 'roll over' a bill at maturity. There is transparency, every trade in the credit market is under public scrutiny, and every trader is an umpire who would blow the whistle if he saw an irregularity.

Under the second scenario "banking secrecy" covers up most information that the public should be entitled to have. The portfolio of the commercial bank may shelter a lot of illiquid or slow bills that the Discount House would reject outright, such as bills drawn on stalled goods, or on higher order goods, or multiple bills on the same good. At maturity a bill may be redrawn, in other words, the absolute ban on extending maturity beyond 91 days could easily be violated under the cover of secrecy provided by the Commercial Bank. The temptation to cheat would be great.

But perhaps the most important shortcoming of the second scenario is in the perverse perceptions created, making the banker the boss and the tradesmen discounting their bills at the bank merely his clients dependent on his favors. In reality the tradesmen are the boss and should be so perceived, while the banker is their servant. After all, the credit being traded is rooted in the momentum of the consumer goods that the tradesmen are moving to the ultimate cash-paying consumer. The banker's job is not that of *rationing*

credit, which is the ruling perception, but that of *clearing* it, shifting it from one tradesman who no longer needs it to another who does in the task of moving merchandise most efficiently from the producer to the consumer.

But it is this perverse world is what we have got. The Discount House has been forced out of business by the Commercial Bank in a *coup*. The latter has preempted the business of the former, taking over and monopolizing its functions. The Social Circulating Capital has been hijacked. Formerly it was under the sole control of the tradesmen moving consumer goods along to the consumer with all deliberate speed. The tradesmen used to recognize only the sovereign consumer. Now they cringe before their new boss, the banker, who in turn does not recognize the sovereign consumer. In this way the tradesmen, like the mythological hero Anteus, have been cut off from their natural source of strength, the Social Circulating Capital. The source of strength of Anteus was Mother Earth, and he had to touch her every so often to replenish his strength during the fight. His enemies, privy to his secret, could cause his downfall by holding him up in the air and wrestling him to death that way. The tradesmen are losing the fight as the monopoly of the Commercial Bank over the Social Circulating Capital has made it impossible for them to raise credit directly from it. The hijacking of the Social Circulating Capital was a very unfortunate development to which I should have to return in a future Lecture.

### **Efficiency of the Gold Coin**

The bill market has made the gold coin extremely efficient, far beyond its physical capability to circulate. The limitation on improvements in production and distribution technology through refining division of labor further has been removed. The bill market has made the monetary system more elastic and more responsive to the needs of the consumer. Any type of good can generate bill circulation, provided that the consumer demands it urgently enough. By the same token, bills representing goods that have just fallen out of the consumers' favor are immediately demonetized. As the bill market works only with short maturities (never ever exceeding 91 days) it will adapt itself quickly and smoothly to the changing whims of the consumer. The bill market is characterized by its near-perfect flexibility, adaptability, and elasticity. Consumer prices no longer depend on the greater or lesser availability of gold coins. If the consumer demands an item sufficiently urgently, then its production and distribution can be financed instantaneously through drawing bills against its movement. The volume of bills flows and ebbs with the volume of merchandise trade, eliminating both price squeezes and price explosions.

The principle of granting certain limited and ephemeral monetary privileges to the bill of exchange is a sound one. It recognizes the fact that a market relying solely on the circulating gold coin could not handle the extra, unexpected, or changing burden that might be thrown upon it by the proverbially erratic behavior of the consumer. Thanks to the flexibility of bill circulation, it is the consumer, and the consumer alone, who

ultimately decides what ought to be produced, when, and how much. In the market every day is balloting day. The consumer's ballot paper is made of gold. He casts his ballot by plunking down the gold coin on the retail counter. The distributors and producers of merchandise in whose favor he has cast his ballot, no less than the others he chose not to favor, will certainly get the message.

It is very important for you to see that *it is not the price-system that communicates this message from the consumer to the producer*. Temporary changes in the demand for staple consumer goods (such as food, clothes, fuel) does not give occasion to changes in the price. The price-system in and of itself is neither sensitive nor quick enough to accomplish the task of alerting the merchants to the impending changes in the mood of the consumer. The message concerning changes in the propensity to consume is communicated to the distributors and producers, not through changing prices, but through changes in the discount rate (and the composition of the social circulating capital, as I shall explain it in a later Lecture). Changes in the discount rate respond quickly and sensitively to the changes in consumer demand. The lubricating mechanism that guards the movement of goods against seizing up when changing to high or low gear is the bill market. Without it, roundabout production processes (making the evolution of goods of ever-higher order possible) could not exist. Without it, the internal communication system of the economy would be overloaded.

### **Mises on Fiduciary Credit**

As I have suggested in earlier Lectures, my presentation of the evolution of fiduciary currency deviates substantially from that of Ludwig von Mises. It is now time to scrutinize this deviation more closely. Mises divides credit into two large categories, according as the party extending the credit does or does not have to make a 'sacrifice'. So credit belonging to the second category is created 'gratuitously'. Mises calls it fiduciary credit, while calling the currency to which it gives rise fiduciary currency.

Mises admits that the concept of fiduciary credit may appear "puzzling, even inexplicable; it constitutes a rock on which many an economic theory have come to grief" (*op.cit.*, p. 297). The bank is creating something out of nothing. Mises specifically criticizes the opposite view (ours) suggesting that when the bank discounts a bill, it merely substitutes its own credit which is more negotiable and has a higher recognition value, for credit represented by the bill which is less negotiable and has a lower recognition value. "The fundamental error [in this explanation] lies in its failure to understand the nature of the issue of fiduciary media. When the bank discounts a bill . . . it exchanges a present good for a future good . . . [ T ]he issuer creates the present good . . . practically out of nothing" (*op.cit.* p 341).

Mises doesn't refer to clearing in connection with the emergence of fiduciary credit, although he uses the term 'circulation credit' (Zirkulationskredit) as an alternative name for it, as opposed to 'commodity credit' (Sachkredit) which is an alternative name for credit of the first category. Nor does Mises raise the possibility of fraud by the bank when it pretends that it has the power to create something out of nothing by extending fiduciary credit. I find it impossible to go along with Mises' view that the bank, or anyone else for that matter, can create present value out of nothing at (nearly) zero cost. There must be a cost born by someone. Those bearing it may not be aware that they are being victimized by the banks, as the prestidigitation is well-hidden by fraud. But there is a cost. The denial of it this is equivalent to asserting that the banks have supernatural powers.

The failure of Mises to distinguish between two types of fiduciary credit, namely, credit emerging as a result of clearing, and credit emerging as a result of fraud, has led him to dismiss Adam Smith's Real Bills Doctrine as a *deus ex machina*. Adam Smith's theory, unlike that of Mises, admits that circulation credit may arise through spontaneous bill circulation even in the complete absence of banks. This makes it plausible that fraud may appear when the banks enter the scene and establish their monopoly of creating fiduciary credit. I can only speculate that the aversion of Mises to the Real Bills Doctrine was due to his unconditional adherence to the Quantity Theory of Money. At any rate, this unfortunate aversion led Mises to create a faulty theory of credit.

For another recent interpretation of the monetary and credit theories of Mises see the Internet publication *Mises on Money* by Gary North, who presents the opposite view. My readers can compare the two and are in an excellent position to make up their own mind.

The great evil of our age, unlimited credit expansion, cannot be understood, still less corrected, on the basis of a faulty theory of credit. This is the reason why I have taken the trouble, and liberty, to develop a new theory which will restore Adam Smith's Real Bill Doctrine to its proper place, and will draw attention to the fact that *it is possible to replace the banking system in a modern economy with real bill circulation*, provided that the Mint is opened to gold first.

## References

Ludwig von Mises, *The Theory of Money and Credit*, Indianapolis: Liberty Classics, 1980 (first published in 1912)

Gary North, *Mises on Money*, Part 4: Fractional Reserve Banking, January, 2002, [www.lewrockwell.com/north86.html](http://www.lewrockwell.com/north86.html)

Note. The characters of the cotton dealer, the spinner, and the weaver in my *Second Greatest Story Ever Told* were borrowed from Mises (op.cit. p. 345).

\* \* \*

## **Just Leave Them Enough Rope to Hang Themselves**

My efforts here at Gold-Eagle University to work out a blueprint for the return to a gold standard and thereby to escape credit collapse were rewarded by J.N. Tlaga. He came out with a critique of my plan (*At First for Buses Only*, [www.gold-eagle.com/editorials\\_02/tlaga072902.html](http://www.gold-eagle.com/editorials_02/tlaga072902.html)). Mr. Tlaga had also put forward a blueprint of his own (*The Alternative Future*, [www.gold-eagle.com/editorials\\_01/tlaga112801.html](http://www.gold-eagle.com/editorials_01/tlaga112801.html)).

My own credentials to devise a blueprint for monetary reform include a 5-year tour of duty on Capitol Hill. In 1985 Former Congressman W. E. Dannemeyer of California invited me to work in his Congressional office as his advisor on fiscal and monetary reform. Mr. Dannemeyer was to lead a delegation of ten Republican Congressmen to the White House. The only item on the agenda was monetary and fiscal reform. I was entrusted with the task of preparing a draft proposal for the perusal of President George Bush. We have considered the inclusion of an outright return to a gold standard. The stumbling block was the 'fixing' of the gold price. Whatever consensus might exist in favor of a gold standard, it would be wrecked as soon as a specific number was proposed as the official price of gold. Debtors and creditors would never agree on the same number. My proposal was that, as a preliminary, we should recommend a more modest plan. We should call for the refinancing of government debt in terms of gold bonds - a medicine American money doctors on an errand of mercy to Moscow had prescribed for the moribund Soviet economy only a few months earlier, at the eleventh hour. In other words, I proposed that the rate of interest should be stabilized first, and the dollar afterwards. In October, 1989, the delegation under the leadership of Mr. Dannemeyer met President Bush in the Oval Office and presented the Gold Bond Plan. The President listened intently, and instructed his Secretary of the Treasury, also present at the meeting, to schedule a conference of his staff and that of Mr. Dannemeyer to prepare the final draft on the proposal. The conference was scheduled and rescheduled three times by Treasury officials, before I realized that I was wasting my time in Washington and left. So much for the power of Presidents to make a first very tentative step to a gold standard, in the face of what Mr. Tlaga colorfully describes as the opposition of "armed gangsters".

In all the previous historic experiments with irredeemable currency there was *competition*: there were other countries still on a metallic monetary standard. In every instance, the experiment was a miserable failure, and irredeemable currency suffered an ignominious defeat, in full view of the whole world. The present experiment is the first in history in which the promoters of irredeemable currency take no chances and exclude competition altogether. Even the tiniest of countries is forbidden to adhere to a gold standard, by the revised statutes of the IMF. By opening the U.S. Mint to gold, and by revoking the legal tender protection of the irredeemable dollar (which the U.S. House of Representatives could order by a simple majority vote, on the strength of its Constitutional prerogatives) irredeemable currency could have competition once more. This would not be an "At First Buses Only" experiment. It would be a challenge of gold money to the hegemony of paper money. If the challenge was turned down, it would in

itself be a victory. The opponent would be seen not to have accepted it for fear of defeat. For fear that the irredeemable dollar would lose against gold, as has every one of its predecessors: the continental, the assignat, the mandat, the Reichsmark, to mention but a few, did before it.

In Mr. Tlaga's blueprint "The Alternative Future", the monetary reform would have to live the odium down of robbing innocent people of their life savings through repudiation of paper currency, bank deposits, and debt. Why burden the new monetary regime with that odium, when the managers of the irredeemable dollar are so eager to shoulder it? Just leave them enough rope. There can be no doubt that, given free competition between the Gold Eagle coin and the irredeemable paper dollar (*minus* its legal tender protection), the depreciation of the latter will greatly accelerate, and the agony of "waiting for Godot" will soon be over. After all, *gold is gold, and paper is paper*.

**Antal E. Fekete**

**Professor**

**Memorial University of Newfoundland**

**St. John's, CANADA A1C5S7**

e-mail: [aekekete@hotmail.com](mailto:aekekete@hotmail.com)

## **GOLD STANDARD UNIVERSITY**

### **SUMMER SEMESTER, 2002**

#### **Monetary Economics 101: The Real Bills Doctrine of Adam Smith**

Lecture 1: Ayn Rand's Hymn to Money

Lecture 2: Don't Fix the Dollar Price of Gold

Lecture 3: Credit Unions

Lecture 4: The Two Sources of Credit

Lecture 5: The Second Greatest Story Ever Told; (Chapters 1 - 3)

Lecture 6: The Invention of Discounting; (Chapters 4 - 6)

Lecture 7: The Mystery of the Discount Rate; (Chapters 7 - 8)

Lecture 8: Bills Drawn on the Goldsmith; (Chapter 9)  
Lecture 9: Legal Tender. Bank Notes of Small Denomination  
Lecture 10: Revolution of Quality; (Chapter 10)  
Lecture 11: Acceptance House; (Chapter 11)  
Lecture 12: Borrowing Short to Lend Long; (Chapter 12)  
Lecture 13: Illicit Interest Arbitrage

## **FALL SEMESTER, 2002**

**Monetary Economics 201: Gold and Interest**

## **IN PREPARATION: COURSES TO BE OFFERED IN 2003**

**Monetary Economics 201: The Bill Market and the Formation of the Discount Rate**

**Monetary Economics 202: The Bond Market and the Formation of the Interest  
Rate**