

*Sponsored Transactional Patterns: Comments on Mehrling's
"Essential Hybridity: A Money View of FX"
David DeRosa*

Mehrling starts by defining an exchange rate as the "price of one money in terms of another money." In so doing he purposively ignores the goods market equilibrium condition known as the "law of one price" or as the "purchasing power parity." Moreover, his definition steers away from what he calls the "finance" definition that an exchange rate is the relative price of financial assets in two countries.

This takes him to the next question, namely, what is money. His answer is in two parts. First there is money created by central banks, called either "high powered money" or the monetary base. This is equal to currency in the hands of the public plus commercial bank reserve deposits held at the central bank. Mehrling calls this "state" money. Next there is "broad based" money that is created by the commercial banks in a process of collecting deposits and making loans in the environment of fractional reserve requirements. Mehrling calls this "private" money.

The composition of the money supply is hardly new¹. What is original is when Mehrling calls attention to "money itself is essentially a hybrid entity, part private and part state." This distinction is the core of Mehrling's paper. He also makes the observation that a role of the central bank is to keep equivalent the values of state and private money. The central bank must remain willing to be a "direct market maker[s] in [its/their] own currency" - a dollar is a dollar, period. We might call this the internal exchange rate. The external exchange rate is value of the country's currency against another country's currency.

The insight on the hybridity of money can be deepened. Consider what actually happens in a foreign exchange trade. In a casual conversation, a spot transaction could be described as when two parties agree on a trade day to exchange sums of foreign currency two bank-business days later, that second date called the value day. One has to ask what is the nature of the exchange of currencies on the value day. It is not cash that changes hands, of course.

¹ See DeRosa (2001) and DeRosa (2009)

Settlement consists of transfer of balances in bank accounts in the two relevant countries.

Imbedded in this settlements infrastructure are important nuances as to how financial markets operate. I call these Sponsored transactional patterns. These patterns are frequently established by central banks. What determines the kinds or patterns of transactions that actually occur is sometimes determined by direct regulation but it is also a product of facilitation. By this I mean that central banks as operators of payment mechanisms are often integral parts of financial transactions without their having to lift a regulatory finger. All of this is woven into the fabric of the financial market.

Foreign exchange settlements are made by means of electronic funds transfers. Ever since the advent of floating exchange rates following the collapse of the Bretton Woods/Smithsonian agreements, banks and central banks have been worried about settlement risk in foreign exchange. In 1974 a small German bank, Bankhaus Herstatt, failed midway between receipt and payment of ordinary foreign-exchange transactions. Herstatt had been speculating heavily in the foreign exchange market and its losses led to its insolvency. Herstatt's notoriety arose when it took in Deutsche marks in the European time zone and then was closed down by its regulators at the end of the European day. This meant that Herstatt never paid the dollars it owed on foreign exchange settlement to its counterparties accounts in New York. This event, plus some other spectacular settlements failures, launched a four-decade long search for a perfect settlement system.

What has evolved is a system in which central banks are an integral part of the marketplace. Most people think of central banks as the suppliers of high-powered money, the implementers of monetary policy, and the occasional interveners in the foreign exchange market. Let me not forget the lender of last resort². In addition, practically every central bank operates what is known as a Real Time Gross Settlements ("RTGS") system for large-value transfers of funds in its own currency. Some examples are the Fedwire in the United States, Target2 in the euro-zone, and CHAPS in the UK. It is not just the large central banks. The same is true throughout the emerging markets. This is a near

² See Mehrling (2011)

monopoly in every case. Although there are private competitors, such as CHIPS in the United States, even these ultimately make payments through the Fedwire.

I note that it takes two RTGS transfers to settle FX - but here I should say that the over 170 central banks operate RTGS systems³. This is the way the central banks want payments systems to work, and, this is the way they actually operate.

It is important to understand that some significant portion of the explosive growth in foreign exchange (recently \$4 trillion a day) could not have occurred without a proper settlements mechanism. The commonplace explanation for the growth over the last few years is the emergence of electronic trading. That is partly true. But consider this: foreign exchange trading grew because it could grow. It could not have grown without secure settlement multi-national systems.

This puts a new light on the old gripe that foreign exchange "over trades." The irony is that many central banks, the most important being the Bank of Japan, are practically at war with the foreign exchange market. Yet the BOJ operates a RTGS system. Practically speaking the BOJ, like practically all central banks, is an enabler of foreign exchange trading. Of course this also means central banks are in a position to enforce capital controls, to varying extents.

The characteristics of an RTGS system are that all payments are made nearly immediately and that they have finality. Finality means they can't be retracted. But even more important is the characteristic that the payments are made to and from the reserve accounts that commercial banks hold with the central bank. This feature makes RTGS payments not "good as gold" but rather "better than gold."

Central banks also operate retail payments networks, such as the ACH system in the United States. There are numerous other funds transfer networks that central banks operate

³ There are facilities like the CLS Bank that are privately owned and are instrumental in the operation of large-value settlements. Still, the CLS Bank could not operate without the cooperation of the RTGS systems that only central banks can operate.

including ones that facilitate check clearing and credit and debit card operations.

The point is this: central banks, and by extension governments, can rule or at least regulate through monopolistic control of important functions of markets. Some of these functions are less obvious. They are in the domain of clearing, settlement, and transfer of the ownership of assets. When a central bank dictates the pattern of transactions that are the most economical to be done it gains control over the rules of the game, at a certain level. Ultimately it controls, at least in part, which patterns of transactions can occur and what will be the format for doing these transactions.

In conclusion, Mehrling is correct that money has hybridity, being part state and part private. That hybridity extends to how central banks facilitate the pattern of transactions and their settlement protocols. To take a twist on Marshall McLuhan, the payments medium is the message.

There are other examples of sponsored transactional patterns in the appendix to this paper.

APPENDIX:

Other Examples of Sponsored Transactional Patterns

- *Consider how bond traders do steepening and flattening trades. They go long and short treasuries in iconic sectors of the yield curve on a duration-weighted basis. The iconic sectors are the 2s-5s, 2s-10s, 5s-10s, 10s-30s, etc. These are the same approximate maturities at which the U.S. Treasury (through the NY Fed) issues notes and bonds.*
- *A second sponsored transactional pattern arises in the way in which zero coupon bonds are created. In fact, the practice started in the marketplace by the investment banks. But then the FED began to record coupons stripped securities on its book entry accounting system. Parenthetically, the term STRIP was the U.S. Treasury's acronym for Separate Trading of Registered Interest and Principal Securities. This*

replaced private constructs such as Merrill Lynch's TIGRS (Treasury Income Growth Receipts) and Solomon Brothers' CATS (Certificates of Accrual in Treasury Securities). From that point on, the zero-coupon bond market involved entries on the central bank's bond ownership accounting system.

- *The third example is the repo transaction. One of the major ways in which central banks manage the stock of high-powered money is by doing purchase-and-repurchase transactions. These are "repo" and "reverse repo" transactions. The structure of this transaction is the central bank buying a security from a primary dealer with a commitment to sell the same security back to the same dealer at a at the same price a short time into the future. The coupon is passed to the original owner of the security and repo interest is passed in the other direction. When the central bank initiates a purchase of a bond, meeting in the 1st leg of the transaction, the monetary base contracts. When the Fed sells a bond in the 1st leg of the transaction, the monetary base expands. Most central banks use this form of transaction in an important way to manage money supply, and by extension influence short-term interest rates. What is interesting is that this form of transaction has become the standard way for private parties to engage in securities and bond lending. So like the zero coupon bond, the central bank became the standard for how a certain type of transaction became the dominant architecture of the financial market, at least in this regard.*
- *A fourth example is central banks that operate de facto delivery versus payment systems for settlement of government securities. These DVP systems usually work in parallel with RTGS systems.*

REFERENCES

DeRosa, David F. 2013 Foreign Exchange Operations: Master Trading Agreements, Settlement, and Collateral, John Wiley & Sons.

DeRosa, David F. 2009 Central Banking and Monetary Policy in Emerging-Markets Nations. Research Foundation of the CFA Institute.

DeRosa, David F. 2001 In Defense of Free Capital Markets, The Case Against a New International Financial Architecture, Bloomberg Press

Mehrling, Perry, "Essential Hybridity: A Money Theory of Law and Finance For FX" January 21, 2013.

Mehrling, Perry, 2011, The New Lombard Street, How the Fed Became the Dealer of Last Resort, Princeton NJ Princeton University Press.