

### **Transaction Banking by D Sign**

Blog

Professor Michael Mainelli May 2015

# **Hotel Lotus Or Portable Banking?**

"Those who ate the honey-sweet lotus fruit no longer wished to bring back word to us, or sail for home. They wanted to stay with the Lotus-eaters, eating the lotus, forgetting all thoughts of return." [Homer, The Odyssey (IX:63-104), translated by A S Kline]

### **Our Clients Are Addicted To Giving Us Business**

The Odyssey's Lotus-eaters are often taken as an allegory of individuals' addiction. Corporations can be just as addicted as individuals. In the case of transaction banks, they believe that many poorly-served clients may never wake up from their reveries or ensnarement. Or is it the other way around, the transactions banks are drugged and indolent to their clients' intentions? Or regulators' intentions? And addiction is a really hard habit to kick.

Banking is a 'sticky' product with 'unsticky' prices. 'Sticky' is an economic concept that attempts to capture the idea of resistance to change. Prices often 'change', but not materially, think of sandwiches. You may find sandwiches ranging from the cheap end to the ultra-expensive, yet perhaps only by a factor of three or four. Meanwhile, you might find that prices of art vary by factors of millions. A sandwich shop that sees its costs rise can often have a hard time raising its prices unless all other shops have the same cost increase problem. Sandwich shop prices could be said to be 'sticky'. Sticky prices do not adjust rapidly to changing economic conditions.

Transaction banks often have 'unsticky' prices. Cost increases are passed on rapidly. Prices rise. Cost decreases are booked long before prices fall. Over time, the resultant price structures can vary noticeably. In part, transaction banking prices are 'unsticky' because the transaction banking relationship is 'sticky'. This is ideal for a transaction bank. Dreadful would be 'sticky' prices and an 'unsticky' relationship. Dreadful may be on the horizon though. There are two regulatory concerns that could make client relationships more slippery, to the point of perilous.

First, regulators are concerned about too-big-to-fail or systemically important financial institutions. A systemically important financial institution (SIFI) is a bank, insurance company, or other financial institution whose failure might trigger a financial crisis. Regulators are smarting from several failures, perhaps most notably Lehman Brothers and the 'Lehman Problem'. The liquidators at Lehman found themselves with two million open derivative positions that took three years to unwind. So regulators are looking for SIFIs everywhere. Unsurprisingly, one of the key determinants of being a SIFI is interconnectedness, having multiple linkages that may be conduits for the transmission of



the effects of financial distress. Interconnectedness is core to profitable transaction banking. Any transaction bank of size runs the risk of being labelled a SIFI.

Secondly, regulators are concerned about increasing market competition. They have lit upon the idea of account portability for consumers. Recognising that consumer banking relationships are 'sticky', from the UK to India regulators wish to increase the ease of moving accounts from one bank to another. For example, some consumer groups promote the idea of retaining an 'account number for life', regardless of where you bank. And where regulators go with consumers, SMEs and corporate are likely to follow. Interestingly, the UK Payments Council makes a mistake in its assessment of account portability – "Although no conclusive evidence currently exists that account portability would encourage switching, we know that delivering full portability would require building a new centralised system, or a central utility." I may disagree with them on switching; I believe account portability would encourage switching. But their mistake is the conclusion, "would require building a new centralised system". Not quite.

#### A Bit Or A Block On The Side

A distributed ledger is a decentralised database technology that securely stores transaction records in multiple locations. The implementation of choice for a distributed ledger is a distributed database. Distributed databases are persistent and pervasive. Historically, the desired benefit from a distributed database was the continued existence of a ledger in multiple locations in extreme circumstances, for example during warfare. Defence organisations used distributed databases for this reason in the 1970s. Distributed ledgers have suffered from two perceived disadvantages; they are too insecure and too complex. These two perceptions are rapidly being overturned due to the growing use of distributed ledgers in cryptocurrencies.

A blockchain is a distributed transaction database based on a distributed cryptographic ledger shared amongst all nodes participating in a system. Blockchain technology was first introduced in Bitcoin, a cryptocurrency-based distributed payment protocol, in 2009. The blockchain does not require a central authority or trusted third party to coordinate interactions, validate transactions or oversee behaviour. A full copy of the blockchain contains every transaction ever executed, making information on the value belonging to every active address (account) accessible at any point in history. Blockchain technology offers everyone the opportunity to participate in secure contracts over time, but without being able to avoid a record of what was agreed at that time.

The Bitcoin blockchain is important because it showed that distributed ledgers could work in harsh environments of little, no, or even negative, trust. The Bitcoin blockchain has been challenged by businesses, criminals, law and security agencies. So far, though there have been some hiccups, the blockchain has not been compromised. Further, while more complex than a centralised ledger, the complexity of the blockchain is comprehensible and provides commensurate benefits for multi-party transactions. The principal components for modern distributed ledgers are public-key cryptography (Diffie-Hellman circa 1976) and a proper decentralised peer-to-peer network (Gnutella 2000). The two technical weaknesses are also apparent. If public-key cryptography is cracked, or internet peer-to-peer somehow switches off, then cryptocurrencies would fail, but along with everything else in modern finance starting with credit cards. This change of perception about distributed ledgers being



"too insecure and too complex" has led people to reconsider the use of distributed ledgers in other applications. A variety of different distributed ledgers are flourishing in prototypes, ranging from clones of the Bitcoin blockchain, to revitalised older distributed ledgers, to new architectures my firm is working on. In fact, with a regulator involved in validating transactions, quite robust distributed ledgers work much more swiftly and cheaply than blockchains.

### **Checking Out Of Hotel Lotus**

The primary advantages of a distributed ledger, i.e. persistence and pervasiveness, make them ideal for providing a regulator with a full transaction record for both oversight and recovery in the case of a systemically important financial institution failing, or for account portability and competition. These suggestions are doing the rounds, and the increasing confidence in distributed ledgers is likely to increase calls for using distributed ledgers to provide a permanent record available to the authorities in emergencies. Look forward to "mandatorily writing transactions to a distributed ledger" discussions on banks' "living will" negotiations.

How might distributed ledgers promote account portability? A regulator might mandate that all client transactions are written cryptographically to a distributed ledger that the client controls. The distributed ledger service could be spread as a national peer-to-peer service, run as a utility by a third party, provided by clients in the same way as they 'provide' their own electronic 'purses', or offered by a regulator (the Payments Council scores a small point on 'centralised in this last version). A client dissatisfied with its bank, Bank A, gives Bank Z access to the ledger to provide a quote for service. The ledger has the history of all transactions, perhaps going back through previous banks as well. Bank Z has quite a bit of information from which to quote. If Bank Z is convincing enough to win a mandate, the client notifies Bank A that it is no longer able to write to the client's distributed ledger. End of service. The client then notifies Bank Z that it is has the authority to write to the ledger. Bank Z merely loads the historical transactions into its systems and contacts Bank A for a direct transfer of the cash balance. Close to instantaneous account portability.

The Eagles 1977 classic song, *Hotel California*, has the lyrics, "You can check-out any time you like, but you can never leave!" Quite a few banks have a 'client abuse problem'. The substance of their profitability is an illusion created by a lack of choice. They believe that the clients can't or won't check out. We all need to wake and smell the coffee, though perhaps without the addictive additive, caffeine. Change may come slowly, but anti-SIFI and pro-portability regulation will leave us with slipperier customers. We return again to the basics of serving the changing needs of our clients' communities with good service and modest prices. Perhaps we should close with Robert Palmer's lyrics as our guide, we should be "addicted to love" our clients.

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#### About the author

Professor Michael Mainelli is Executive Chairman of Z/Yen Group and Principal Advisor to Long Finance. His latest book, **The Price of Fish: A New Approach to Wicked** 



Economics and Better Decisions, written with Ian Harris, won the 2012 Independent Publisher Book Awards Finance, Investment & Economics Gold Prize.