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Roulette Wheels, Interest Rate Risk and the Mismatch Center

One of the implications of the prolonged zero-low-rate environment of the last several years is that the pain associated with rapidly rising interest rates has long been forgotten. Amidst the self-congratulatory revelry that has accompanied the recovery in bank earnings, *there is little acknowledgment of the degree to which the recovery has been manufactured.*

Beginning in mid-2007, the Fed began to intervene in interest rate markets to an extent that it never had before; not only did it bring the Fed Funds rate to the lowest level in history, it also flattened the yield curve through several rounds of Quantitative Easing (QE). The manipulation of interest rates was an attempt to stimulate private and public sector borrowing and would serve to recapitalize ailing banks. In telegraphing that these rate policies would persist *for years and until told otherwise*, the Fed (as croupier) set up the greatest roulette wheel banks had ever seen. In effect, the Fed was saying to them:

Step right up and place your bets (on rates)!
As you do so, notice my hand. I am going to hold it under the wheel and you will observe that the little white ball is going to land on ***RED****…*
every single time!

With each spin of the wheel (otherwise known as an FOMC meeting), the little white ball (the Fed Funds rate), in fact, did keep landing on **RED** (zero). Astute gamblers (banks) quickly took notice and made the right bet: They played the carry trade – borrow short and lend/invest as far out the curve as possible – in effect, structuring their balance sheets like S&Ls pre-1978.

And 8 years passed at the grandest casino of all!

The gamble worked out well: Borrowing was stimulated, the economy recovered, albeit somewhat slower than expected, and bank earnings grew, although profitability (as measured by ROE) may never get back to pre-crisis levels.[1] Alas, rigged games cannot last forever. The Fed is now making clear

[1] We can debate whether the earnings recovery was ultimately for the benefit of the banks and their shareholders or the regulators as much of the increase in retained earnings must now be held to meet higher capital requirements.

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that it is pulling its hand away from the table; this will be a fair game going forward. The pill may find a **BLACK** pocket every now and then. In fact, it already did in December 2015 and December 2016 and could be finding it much more frequently in 2017.[2] But what does the story of the roulette wheel have to do with the Mismatch Center?

Quite a lot actually. Does management believe that all of the bank's earnings should be attributed to the loans and deposits that are on the balance sheet? Or does management acknowledge that a material portion of earnings have come as a result of a generous croupier? What do they choose to believe? What is the truth?

The good news is that the answers to these questions do not have to be left open to conjecture. They are evident in the earnings in the Mismatch Center. Assuming the bank has been liability sensitive for some years, if Mismatch Center earnings have been consistently positive, then management has acknowledged the generous croupier. If, on the other hand, Mismatch Center earnings have been near zero or even negative, then they indicate a belief that lending and deposit gathering are the only drivers of earnings. Of course, this is in conflict with the facts because gambling winnings associated with IRR bets are being falsely attributed to lending and deposit gathering activities. In either case, the gift is being taken away and its absence will be noted. If you are at the former bank, management likely sees this coming, but if you are at the latter bank, the increase in rates will be a rude awakening.

Unwilling Gamblers

The earnings roulette wheel is a very real problem for lenders and deposit gatherers at banks and credit unions that choose not to utilize FTP, because there is no mechanism in place to quantify the amount of earnings that come from gambling. As a result, the inevitable reduction in earnings associated with an increase in market interest rates will be borne entirely by the lending and deposit gathering business units. It is as if executive management (in the guise of ALCO) has strapped the hapless lenders and deposit gatherers to the roulette table (or pick your game) and forced them to play. Good times!

Bet	Odds Against Winning	Payout
Straight-up	37-1	35-1
Split	18-1	17-1
Street	11.6-1	11-1
Trio	11.6-1	11-1
Corner	8.5-1	8-1
Five Number	6.6-1	6-1
Six Line	5.33-1	5-1

[2] As of this writing, Fed Funds futures markets are expecting 3 increases in 2017.

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About David Green Advisors

DGA is a boutique advisory firm led by David Green, PhD, CFA. Specializing in risk and profitability management, DGA advises in all aspects of framework development, including policies, quantitative models, operational and management processes and governance structures. A leading provider of risk and profitability workshops around the globe, DGA offers a unique blend of advisory services and educational training that maximizes knowledge transfer and ensures practical consistency throughout the organization.

Areas of Specialization:

- Asset/Liability Management
- Governance Responsibilities of ALCO
- Interest Rate Risk Management
- Liquidity Risk Management
- Funds Transfer Pricing
- Behavioral Modeling of Loans and Non-Maturity Deposits
- Quantitative Model Development, Calibration and Implementation
- Risk and Profitability Management Frameworks
- Executive Training on Risk and Profitability Management
- Live and Web-based Workshops

For more information about DGA, see davidgreenadvisors.com/about.

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Dr. Green is motivated by the understanding that key risk and profitability management functions at a depository institution must be fully aligned in order that the story of how the firm makes money be robust to the dynamics of the business cycle; absent proper alignment, measures of business segment- and product-level profitability will be incorrect and unstable, challenging effective management of the organization.

About David Green, PhD, CFA

Dr. Green is a leading expert in risk and profitability management. His expertise derives from lessons learned in a >20 year career spanning banking, bank regulation, consulting and software development. Prior to consulting for the last decade, he served as the Treasurer at BankUnited, the largest bank headquartered in Florida, where he was responsible for ALM, FTP, the investment portfolio, funding and derivatives as well as secondary marketing. Prior to this, he was the A/L Manager at SunTrust Bank in Atlanta; there he built and managed all of the static and stochastic interest rate risk models for the bank and worked to align a number of business functions including budgeting/ forecasting, funds transfer pricing and strategic balance sheet management.

Dr. Green is a former Chairman of the Georgia Bankers Association's A/L Management Committee. He served as a Bank Examiner at the Federal Reserve Bank of Atlanta, where he also spent two years in research while completing his Ph.D. He was Chairman of SunGard/Bancware's US Client Advisory Council for many years.

Dr. Green holds a Ph.D. in Economics from Georgia State University, a BS in Applied Mathematics from Georgia Tech and is a CFA charter holder. He is a frequent speaker at banking and risk management conferences.

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