

Complex Structured Notes: Risk & Return

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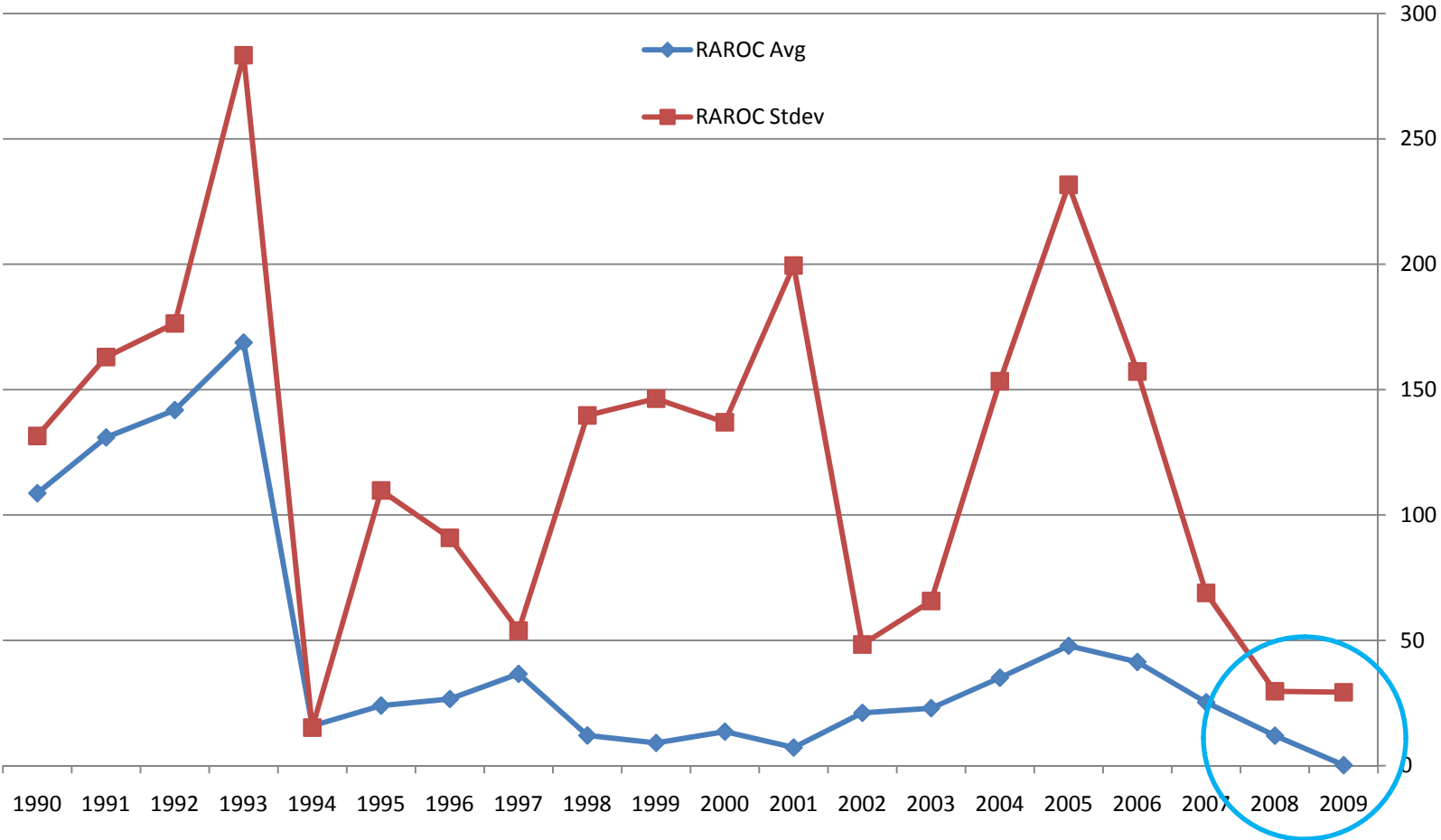
What are Structured Notes?

- Unlike a “plain vanilla” fixed income security which presents an investor with market and credit risk over time, complex structured notes (CSNs) are fixed income securities combined with various types of options and OTC derivatives to enhance returns. Total market for these securities totals into the many trillions of dollars.
- CSNs are derivatives and should be discussed in tandem with OTC derivatives and other types of high-risk designer securities and/or options products. The imbedded derivatives in a CSN make it extremely complex to properly model and value.
- The open-ended question of valuation makes it impossible to properly assess the Average Risk Premium for CSNs and quantify extreme events. CSNs are a wolf in sheep’s clothing, sold like bonds but behaving like OTC derivatives.

Why Structured Notes? Dealers

- **Yield to Commission:** The chief drivers of sale of CSNs and OTC derivatives by BDs is ST profit. Cash market products are inherently unprofitable. BDs, banks rely upon CSNs and OTC products to augment earnings, ROE.
- Most cash products today have spreads which are an order of magnitude narrower than spreads for CSN and OTC derivatives contracts. These derivative products are the last frontier for Wall Street.
- CSNs provide a revenue source that well-exceeds minimum capital hurdles, but also carries unlimited op-risk to BDs and Advisors. CDOs, auction rate notes, TruPS are examples of previous op-risk risk events still unfolding.
- Issue: whether to impose op-risk charge for CSNs.

Large Bank RAROC (%)



Source: FDIC/The IRA Bank Monitor

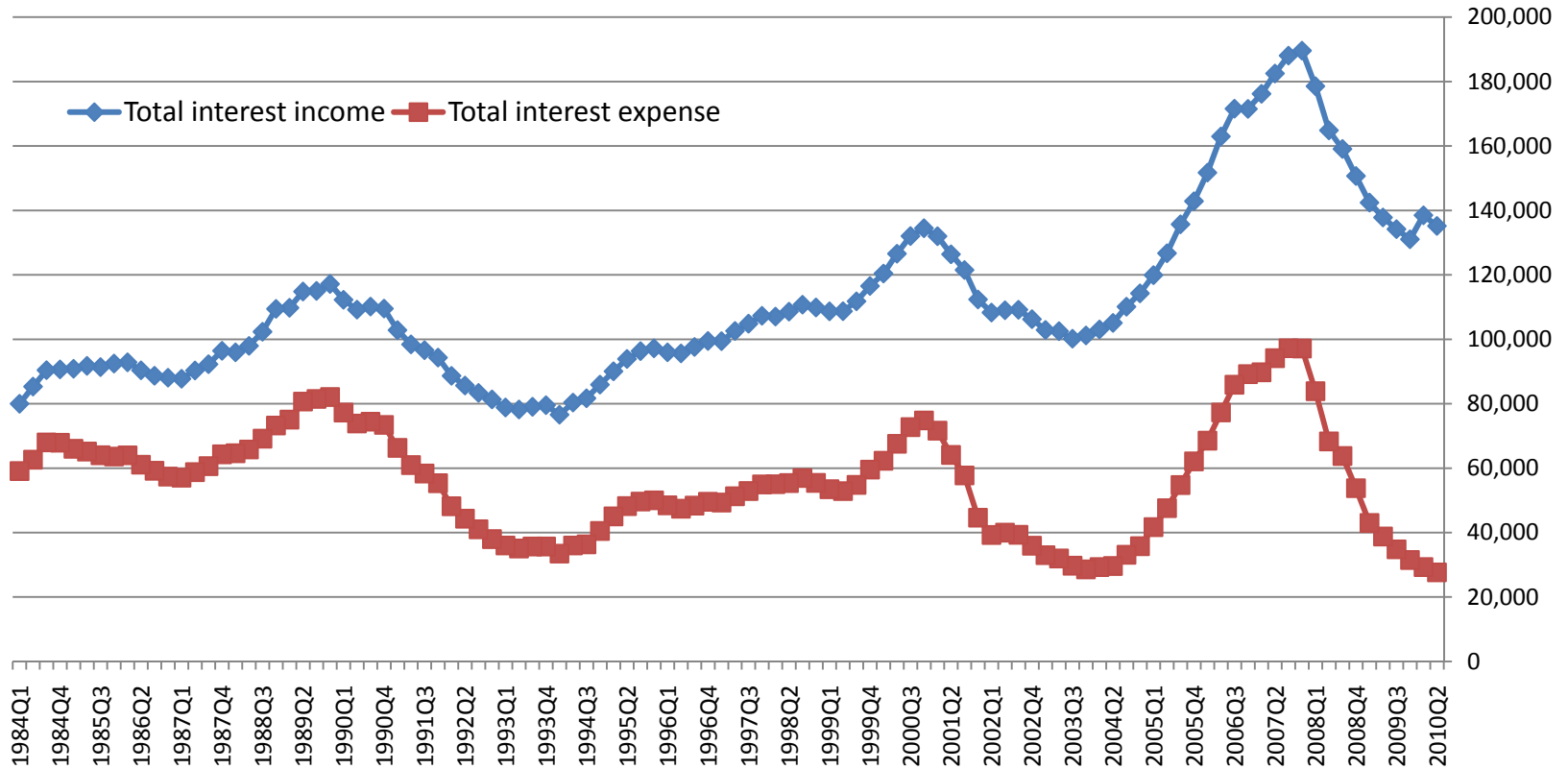
Why Structured Notes? Investors

- **Higher returns:** Both individuals and institutional investors use CSNs and OTC derivatives to create returns and synthetic investment opportunities that do not exist in the marketplace. Interest sensitive investors, banks, pension funds and public agencies all use CSNs.
- Investors use CSNs to enhance yield, both in a general sense and in response to increased financial market volatility arising from “pro-cyclical” Fed policy. Surfeit of fiat paper dollars essentially requires Wall Street to create supply of assets via CSNs and OTC derivatives. Today U.S. banks cannot accommodate full demand for dollar deposits.
- There still is no free lunch, however, thus better yields require higher risk, including complexity and almost total lack of liquidity in virtually all CSNs, whether SEC registered or PPs. Losses arising from the use of CSNs by banks and commercial firms potentially has significant risk implications for the broader economy.

Impact of QE/ZIRP

- Many on Wall Street believe that net interest margin or NIM among U.S. banks is at record levels. They are right, but not in the way that many investors and analysts expect. Unfortunately, measured *in dollars*, gross interest revenue of the banking industry has been cut by a third over the past three years due to the Fed's zero interest rate policy.
- Banks, savers are seeing revenue decrease due to lack of yield on assets due to QE/ZIRP. CSNs provide a ready alternative for investors of all types to replace and/or enhance yield in an environment where the central bank is literally removing duration from the marketplace. Insured depositories, insurance companies and pensions are all large users of CSNs.
- During 2008-2009 timeframe, the Fed was the buyer of literally all of the securities issuance created by the GSEs and U.S. Treasury, pushing down visible measures of volatility. Investors purchasing CSNs in this heavily manipulated market face additional valuation and other risks, including huge duration risk as and when U.S. interest rates begin to rise.

Net Interest Income -- Large Banks



Source: FDIC Quarterly Bank Profile

Risks of Structured Notes: Investors

- **Systems and Controls:** Many players in the CSN market arguably do not understand what they are buying/selling. Fund and public sector participants are frequently not even Series 7 registered and have little or no formal market, risk or compliance training. There are only a handful of structured financial professionals in the entire market who are competent to assess and value CSNs.
- Lack of standardization of documentation, registration, requirements, etc makes risk management environment in many market participants even worse. How can suitability or risk management rules be enforced if neither the buyer nor the seller fully understand all of the tails and risk horizons in a synthetic security?
- Specifically for the dealers of CSNs, what are the internal systems and controls given the assertions above? Can any dealer in today's CSN market truly say that they are meeting responsibilities to shareholders and customers in terms of managing and avoiding potential risks?

Risks of Structured Notes: Dealers

- **Op-Risk:** The banks and BDs which traffic in CSNs are creating vast risk for their enterprise and stakeholders. This risk is not compensated adequately – even with far wider commission spreads on CNCs and OTC products. Liability from CDOs, RMBS, CMBS, and other early CSNs remain a significant source of expense and risk to the securities industry.
- Previous advisories by SEC and other regulators make clear that operational risks from CSNs are substantial and that CSNs are potentially unsafe and unsound – yet the practice continues because of the lack of profitability in other asset classes. So far, regulators have focused almost exclusively on the risk to banks/dealers operating in CSN markets, not the risk to or impact on investors.

Risks of Structured Notes: Market

- **Market:** Consider that Market Risk = P&L. This is the main issue that is never discussed at policy level. We typically think in term of “capital at risk,” instead of thinking about liquidity at risk and/or P&L at risk. CSNs can inject volatility into the P&L and balance sheet, and thereby surprise counterparties and markets, creating systemic events.
- The problem of disclosure of risk stretches from the market for CSNs to residential mortgages. There are tens of millions of households with ARM loans representing trillions worth of duration risk. Just as millions of home owners holding option-rate mortgages have been exploited by Wall Street, the holders of CSNs likewise face hidden liquidity and market risk.
- As a general matter, if I want to buy/sell CSNs, derivatives, or options my broker will ask me various questions. But why can I buy a complex option in my home mortgage without any question? Shouldn't the same requirements apply to all “securities,” including home mortgages notes?

Risks of Structured Notes: System

- **Incentives:** The use of CSNs continues because (a) there is a strong demand, which suggests that there still are too many differently regulated buyers, and (b) the regulatory capital and risk concepts imposed on the Seller allow them to continue to present abnormal returns and get paid in the near-term on poorly captured future risk.
- It can be argued that poorly aligned regulatory incentives also support the use of CSNs. Regulators overly penalize the type of risk they understand and under-estimate the risk they do not understand, thus banks and other financial institutions are discouraged from making loans but encouraged to play in CSNs and OTC derivatives.
- At the systemic level, the result of poorly aligned regulatory rules appears to be “ok”, but at the entity (i.e bank) or desk level the impact is problematic. The CSN model is a classic regulatory arbitrage. Over time there is an over-allocation to businesses with high ROE, which eventually create a bubble a la subprime RMBS. Same movie, different characters.

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