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**Solving Our Nation's Financial Crisis
with Limited Purpose Banking**

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Each financial crisis is different. Yet they all feature financial institutions making promises they can't keep. The financial market has melted down and with it trust in a system that routinely borrows short and lend longs — offering guaranteed repayment, yet investing at risk. It's a system that encourages hucksters with limited liability, fractional reserves, off-balance-sheet bookkeeping, insider-rating, kick-back accounting, sales-driven bonuses, non-disclosure, director sweetheart deals, pension benefit guarantees, and government bailouts.

It's a Wonderful Life, the Christmas movie, showed just where this can lead — to an otherwise honest banker, George Bailey (aka Jimmy Stewart), confessing to a mob of angry depositors that he can't return all their money on demand. Despondent and about to take his life, God sends an angel to save George and his bank at the last minute.

The movie's ending is happy, but its underlying problem persists. Our financial system is far too fragile, perched high atop a pillar of trust that can instantly be undermined. At the

moment, our financial pillar is in ruins and Uncle Sam is desperately trying to glue the pieces back together.

The government's strategy — fighting each financial fire one by one and rebuilding the old system pretty much as was — strikes us as deeply misguided. It treats the symptoms, not the disease, and will leave us financially and fiscally weaker. Instead we offer a solution based on a simple principle: no one should be able to gamble with other people's money, including the taxpayers' money, without their consent.

Uncle Sam's All Powerless Medicine

The current government strategy consists of five policies: (1) extending deposit insurance, (2) providing direct or indirect bailouts for financial and non-financial corporations deemed too big to fail, (3) beefing up the capital assets of financial institutions, (4) subsidizing the sale of "toxic" assets and (5) regulating loan portfolios.

Insuring Deposits. By insuring up to \$250,000 of each depositor's account at commercial banks, the Federal Deposit Insurance Corporation's (FDIC) insurance is actually encouraging risky lending behavior. These institutions can borrow short and lend long because — unlike George Bailey's bank — the federal government promises to make the depositors whole.¹ The 1980s Savings and Loan debacle showed what can happen. Institutions, which were essentially bankrupt, paid high interest to attract deposits from people with nothing to fear

¹ In limiting the amount of deposits it will insure at any given banks, FDIC imposes extra burdens on businesses and individuals who want to keep more than \$250,000 in a single bank account. Either they must monitor the bank's activities very closely or they must spread their cash among many banks, or they must "sweep" funds in excess of \$250,000 out of the bank and into a money market fund. For many businesses, this sweeping activity is a daily occurrence.

because the government was insuring repayment. The S&Ls then threw dice on very high-risk investments in a last gasp effort to survive. When the gambles did not pan out, the S&Ls went under, sticking taxpayers with a huge bill.

We hope the FDIC won't end up with an S&L-type crisis on top of the current debacle. It's already staring at \$4 trillion in potential liabilities, yet it holds only \$35 billion in reserves. Talk about financial malfeasance! Bernie Madoff was short \$50 for each dollar entrusted to his care. Uncle Sam is short \$114 for each dollar it has insured.

Were the public to digest this fact and withdraw its deposits en masse, the government would have to physically print 4 trillion more dollars. Doing so would likely produce a hyperinflation in which each dollar becomes less and less valuable as the clock ticks and everyone tries to unload her dollars as quickly as possible to buy claims to physical goods and assets. So there is a real reason for a national bank run even in the presence of FDIC insurance: to secure, not our dollars, but our real spending power before it's too late.

This problem is not new. We've had the basis for a national bank run ever since Franklin D. Roosevelt introduced FDIC insurance in March, 1933. Fortunately, Americans didn't call FDR's bluff by continuing their run on the banks (one third had already failed). Had they done so, they would have demonstrated that, with respect to their real money balances, FDR was insuring the uninsurable.

Argentineans learned this painful lesson during its 2002 financial crisis, when the government was rigidly pegging the peso to the dollar and promising, in effect, to insure the dollar value of peso bank accounts. After finance ministers began turning over on a weekly basis, people realized the gig was up and hit the banks running to get their dollars. But by the time they

got there, many found the dollars gone — given away to those who arrived first. And the pesos the banks handed out bought a pittance, thanks to the peso's immediate 70 percent devaluation.

The Argentine experience is instructive for another reason. The bank run took down not just the country's leading banks, but large chunks of the private sector as well. The specter of financial failure led to public panic and a self-fulfilling belief that times were tough. The belief was self-fulfilling because employers assumed households would spend less and, as a result, employed fewer workers; and households assumed there would be layoffs and spent less. Sound familiar?

Thus, a fractional reserve banking system in which a) George Bailey doesn't keep his *demand* deposits safe, b) George only keeps about 10 cents on the dollar in reserves against withdrawals, and c) the government can insure the nominal, but not the real values of deposits builds economic fragility right into the heart of our financial system.

Bailing Out Financial Firms. The government's second policy is bailing out companies whose failure would have major ripple effects on the domestic and international economy. Apart from the cost, bailouts lead institutions which are too big to fail to undertake undue risks. This has happened in spades in the current crisis. AIG alone issued over \$1.6 trillion in fancy insurance policies (called credit default swaps) to counterparties like Goldman Sachs, who knew full well that Uncle Sam would cover AIG's liability if AIG couldn't pay up.

And Uncle Sam has been paying up the wazoo to cover the losses of AIG, Fanny Mae, Freddie Mac, Bank of America, Citigroup, and many others. None of these "rescues" has, it seems, actually rescued the economy. All have been inframarginal; i.e., they didn't change incentives for institutions to act differently in the future than they have in the past. Meanwhile,

the government is running astronomical deficits and printing money like crazy. This year's federal deficit is projected at 12 percent of GDP, and the Congressional Budget Office (CBO) foresees trillion dollar annual deficits for the next decade. After that, the extraordinarily large costs of the paying Social Security, Medicare, and Medicaid benefits to the baby boomers will kick in. On the monetary side, the Federal Reserve is on course to triple the monetary base as it engages in its own purchase of troubled assets with newly printed greenbacks.

Bailing out failed businesses, borrowing like mad, and printing money like it's free (as opposed, ultimately, to a hidden inflation tax) are policies one would expect of third world countries, not the United States of America. And so far, none of it is working — at least, not very well. Indeed, there is reason to believe that in pushing so hard and so fast, the Treasury and the Federal Reserve have caused much of the panic they have been paying so much to prevent. And the bailouts are teaching corporate America a very bad lesson about looking to the government in times of trouble.

Beefing Up Capital Requirements. The big injections into the banks are meant to raise their capital so they'll lend more. Bank capital is the difference between a bank's assets and liabilities. It's the amount of skin shareholders have in the game. Given the current regulations, banks can lend about 10 times their capital. But if their capital shrinks to zero because the value of their assets drops, what they can lend out is also zero.

Buying Toxic Assets. After giving the troubled banks huge amounts of money, essentially gratis and in broad daylight, and watching them hand out large bonuses to their top management, the government has come up with a new means of trying to beef up the banks' balance sheets — i.e. giving banks money under the rug. The new game entails granting

preferential loans to hedge funds and other private third parties to buy up the banks' toxic assets at auction. Thanks to the loans, the third parties will bid up the prices received by the banks for their securities far beyond their current market values. But even if the sales go through, there is no guarantee the banks will lend out the extra money provided them courtesy of taxpayers. In this climate, they may simply pay higher dividends, invest in government bonds, or use it to "retain" top management.

Regulating Investment Portfolios. Looking forward, the government is considering raising capital requirements, meaning that a larger share of bank's investments would be owned by bank shareholders. The idea here is to get shareholders to be more careful with the bank's lending and other investments because more of it is their own money. But managers, not shareholders, are the ones making the investment decisions, particularly in the huge financial corporations with highly dispersed shareholders and precious little corporate governance. And the managers are pushing sales of the next "sure thing" because their bonuses are tied to sales. The more of the bank's assets they pour into the "sure thing," the more they can convince others to buy it. Hence, the bank's capital is part of the managers' me-first compensation strategy, not a precious resource to be preserved. And changing capital requirements, even doubling them, won't matter much to managers on the make.

Limited Purpose Banking

There is a better way to restore trust in our financial system and get our economy rolling. This alternative reform is called *Limited Purpose Banking* (LPB). It's a simple and essentially

costless change in our financial system, which limits banks to their legitimate purpose: connecting (intermediating between) borrowers and lenders and savers and investors.

Under Limited Purpose Banking, all financial companies with limited liability (e.g., C-corps, S-corps, LLPs) engaged in financial intermediation would function exclusively as middlemen who sell safe as well as risky collections of securities to the public. They would never, themselves, own financial assets. Thus, they would never be in a position to fail because of ill-advised financial bets.

No-risk banking? Yes, no-risk banking. Intermediation requires no risk taking whatsoever. And letting (bank) intermediaries bear risk jeopardizes their ability to fulfill their critical mission of intermediation.

Gas Stations Don't Gamble — Why Should Banks? Gas stations are a good role model for banks. They intermediate between refineries, who supply gas, and drivers, who demand it. Their job is boring, but critical. Were all gas station owners to close down due to gambling, our economy would be dead in the water.

Suppose gas station owners started gambling, not on their personal account, but with their gas station's money. Specifically, suppose they started selling gas-price guarantees to their customers, specifying the maximum price per gallon the customer would need to pay in the future. The sale of these certificates would generate lots of cash flow for the stations in the short run, but if the refineries started charging much more than the gas station owners contemplated, the stations, themselves, would go under, leaving the nation with no gas to drive its 250 million vehicles.

Were this to happen, we would probably pass a law saying “No gas stations can engage in risky securities transactions because gas stations are critical intermediaries and their potential failure would visit a major negative externality on the nation.” This law would not, of course, prohibit gas station owners from taking risky positions with their personal wealth (including speculating on the price of gas). But they wouldn’t be able to put their businesses at risk.

Banks as Mutual Funds. Although we are not proposing to regulate gas stations, we are proposing a new regime for banks. Under Limited Purpose Banking, banks would let *us* gamble, but they would not *themselves* gamble. Banks would operate exclusively as pass-through mutual funds. They’d simply sell mutual funds -- the 10,000 or so now on the market as well as new ones. These mutual funds would provide as much credit as the economy needs, allow us to engage in as much risk-taking as we want, and provide maximum liquidity.

The mutual funds now on the market include traded equity funds, private equity funds, real estate investment trusts, commercial paper funds, private mortgage funds, credit card debt funds, junk bond funds, Treasury put-option funds, inflation indexed bond funds, currency hedge funds, ... you name it. One noticeable absence from this list is *cash mutual funds* – mutual funds, which hold only cash. Under Limited Purpose Banking all banks would offer cash mutual funds as part of their mutual fund line of products. And the cash in these funds would be held by third-party custodians. Indeed, all securities held by all mutual funds, regardless of the bank issuing the fund, would engage third party custodians to hold their funds’ securities. A new federal regulatory authority — the Federal Financial Authority — would oversee these arrangements and ensure that no Bernie Madoff could ever again self-custody his clients’ assets and spend their money illegally.

In the case of cash mutual funds, the bank would hold cash. In the case of T-Bill mutual funds, the bank would hold T-bills, etc. All funds would be marked to market. Cash funds would obviously be valued at \$1 per share and could, therefore, never break or exceed the buck. All other funds could and would fluctuate in value. Owners of cash mutual funds would be free to write checks against their holdings. These cash mutual funds would be analogous to the demand deposits (checking) accounts we have today.

Eliminating FDIC Insurance Via 100 Percent Reserve Requirements. In requiring that cash mutual funds hold just cash, Limited Purpose Banking effectively provides for 100 percent reserve requirements on checking accounts. This eliminates any need for FDIC insurance and any possibility of future bank runs. Moreover, since no bank would hold any risky assets apart from the value of its furniture, buildings, and land, and holds no debts, apart from the mortgages on its property and any loans used to finance its operations, there would be no need for capital requirements.

One hundred percent reserve requirements on checking accounts was, by the way, advocated under the heading -- *Narrow Banking* -- by Henry Simons, Irving Fisher, and Frank Knight in the 1930s – three of the worlds’ leading economists of their day. But the world listened to John Maynard Keynes’ many deep insights, but, unfortunately, entirely ignored Simons, Fisher, and Knight.

A by-product of 100 percent-reserved checking accounts is that the government would have complete control of the M1 money supply. M1 is the sum of currency held in our pockets or under our pillow (i.e. currency held by the public) and our checking account balances. Since the government prints the currency in the economy and since it would either be held by the public or

sit as securities in the cash mutual funds, and since each dollar of checking accounts would correspond to a dollar of cash securities, the amount of currency the government prints will equal M1.

Currently, the government has only indirect control of the money supply because the extent to which checking account balances are created depends on the *money multiplier*, which is under the control of the banking system. When the banking system contracts its lending, as it is now doing, the money multiplier falls and M1 shrinks. Milton Friedman and Anna Schwartz argued strongly that the cause of the Great Depression was the collapse of M1. One can question their view, but the key point here is that M1 would be fully determined by the government under Limited Purpose Banking.

What about Other Institutions?

What about investment banking? If banks initiate mortgages and help companies float new issues of bonds and equity, how can they demonstrate that these securities are of high quality without their actually holding the securities? The answer is by having them rated and fully disclosed, not just by private rating companies, but by the Federal Financial Authority. Every security sold on the market, be it an individual mortgage, a commercial loan, or a share of stock, would be rated and fully disclosed by the FFA, with no exception. Those who wished to also have their securities rated by private parties would be free to do so. Indeed, the FFA could engage private rating companies to help in the FFA's rating, but only companies with no financial conflicts of interest of any kind with the companies they are rating.

Hence, under Limited Purpose Banking, a new mortgage, commercial loan, credit card, issuance of stock, new real estate trust, etc. would be initiated by a bank, sent to the FFA and private parties, as desired, for rating, income verification, and disclosure, and then sold by the bank to mutual funds, including mutual funds that the bank itself markets to the public. The new securities would fund upon sale to the mutual fund, so that the bank would never hold them; i.e., never have an open position. Once funded, the new securities would be held by the owners of the mutual fund, i.e., by people. This ensures that people, not institutions, hold risk. Government's role would be that of certification (not telling people how to invest their funds) and verification (assuring that financial institutions actually hold the assets they claim they hold).

What about foreign securities? Any foreign security included in a U.S. mutual fund would need to be rated and fully disclosed by the FFA. Full disclosure would, in many cases, take the form of the FFA indicating that it can't vouch for X, Y, and Z and that it, therefore, views the security as highly risky. This is no different from the FDA effectively rating herbal medicines by indicating to the public that they are not-FDA approved and, therefore, have not been subject to clinical testing.

What about individual investors? Individuals would be free to buy and sell individual securities outside of mutual funds. And banks would be free to brokerage those purchases and sales. But banks would not hold inventories of securities of any amount or kind. To facilitate their brokerage services, the FFA would establish an escrow service, effecting the transfer of money to sellers and securities to buyers once it had confirmed receipt of the money from the buyers and the securities from the sellers. I.e., the FFA, rather than broker-dealers, would clear securities markets.

What about hedge funds? Hedge funds would operate like any other bank. They would sell mutual funds that contain the FFA-rated securities whose return differentials they are attempting to arbitrage. But unlike the current system, the holdings of these mutual funds, and all other mutual funds, would be fully disclosed on a daily basis so that the public would know what they are purchasing.

What about venture capitalist firms? These firms would be banks specializing in taking startups public. Their principals would be free to purchase, as private individuals, the issues they helped initiate. And private equity firms? Such banks would sell mutual funds containing private equity. Is General Electric a bank under Limited Purpose Banking, given that it has a major subsidiary, GE Capital, which engages in financial intermediation? GE itself would not be a bank. But GE Capital most certainly would be.

What about non-financial corporations? Under Limited Purpose Banking, what prevents a corporation like Papa Ginos from borrowing to invest in risky securities, i.e., acting like a current-day bank? The answer is that corporations could borrow to expand their own business operations and to acquire other companies in their lines of business. But operations, like Papa Ginos buying stock in Dow Chemical, which constitute securities investing would be not be permitted. Nothing, however, would prevent Papa Ginos from establishing a subsidiary bank (e.g., The First Bank of Pizza) that operates, like all other banks, as a mutual fund.

What about financial firms organized as proprietorships and partnerships, which do not have limited liability?? Anyone who does not rely on the government to limit his or her losses is free to engage in any voluntary transaction, including making gambles and taking on all manner of risk. Is it fair to let wealthy individuals, proprietorships and partnerships, which do not

have limited liability, operate as conventional banks, which can borrow short and lend long? The answer is “yes,” since the owners of these banks would be personally liable for all their losses, including the loss of deposits, which the government would not insure.

Where Do Insurance Companies Fit In?

What is the role of insurance companies under Limited Purpose Banking? This is a good question because the difference between financial securities and insurance policies is simply a matter of words. Today we can purchase financial securities that insure us against the stock market crashing, the dollar falling, the price of oil rising, and company X’s bond defaulting. These are insurance policies no less than is your homeowner’s policy.

Given that today’s insurance companies are fundamentally engaging in the same business as today’s banks, insurance companies would be considered banks under Limited Purpose Banking. And like all banks under Limited Purpose Banking, they would be free to market mutual funds of their choosing. But the mutual funds that insurers would issue would be somewhat different from conventional mutual funds. The first reason is that their purchasers would collect payment contingent on personal outcomes and decisions as well as economy-wide conditions. The second reason is they would be closed-end mutual funds, with no new issues (claims to the fund) to be sold once the fund had launched.

Take, for example, a one-year homeowner’s insurance policy sold by The First Bank of Homes (FBH) via the sale of the *9-01-2010 to 8-31-2011 FBH Homeowners Mutual Fund*. Purchasers of this fund would buy their shares by September 1, 2010, but collect on August 31, 2011 only if they experience a fire, flood, robbery, etc. Like all other Limited Purpose Banking

mutual funds, FBH would be required to custody its securities. In this case, FBH would simply hold the amount originally contributed to the fund in one-year Treasuries.

The FBH payout on August 31, 2011 would divvy up all the monies in the fund between all those experiencing a loss, with the amount paid out depending on the size of one's loss (to be assessed by a claims adjuster) and the number of shares one had originally purchased of the mutual fund. Specifically, each dollar of loss would be multiplied (weighted) by the number of shares of the shareholder experiencing the loss. This would establish the number of loss shares for the shareholder. The sum of all loss shares would be divided into the total amount of money in the fund on August 31, 2011 to establish a payment per loss share for those experiencing losses. The payoff to anyone experiencing a loss would simply equal this amount times her number of loss shares.

Note that this payoff formula means that if two people, Joe and Sally, buy the same number of shares, but Joe's loss is twice Sally's, Joe's recovery will be twice as large as Sally's. In addition, if two people, Fred and Mark have the same loss, but Fred purchases twice the number of shares that Mark buys, Fred's recovery will be twice as large. Hence, Limited Purpose Banking permits people to buy as much insurance coverage as they'd like.

The other key feature of this system is that each insurance policy is, in effect, subject to separate reserving. It also pays off based not just on diversifiable risk, but also based on aggregate risk. That is, if lots of the buyers of the FBH fund lose their house to fire, the recovery per shareholder with a loss will be smaller.

This is not the case under our current insurance system where insurance companies typically a) combine the premiums from many different types of policies in a single general

reserve and b) promise to pay the same recovery amount no matter how many losses their clients experience. Thus, today's life insurance companies typically a) pool the risk of issuing life insurance together with the risk from issuing annuity insurance and b) promise to pay the face values of the life insurance policies issued to all decedents' estates no matter whether the black plague resurfaces as well as the annuities purchased to all surviving annuitants regardless of the discovery of a cure for cancer. In pooling life and annuity insurance reserves the thinking is that if the company does poorly on its life insurance policies because more people die than expected, it will do better on its annuity policies because fewer people will be around to collect their annuities. This logic breaks down once you consider the fact that the people who buy life insurance are younger than those that buy annuities and we can simultaneously experience a disease, like AIDs, that kills the young, and the discovery of a cure for cancer, that preserves the old.

The problem, then, with the current system is that it writes policies that can't be paid under all circumstances, while claiming that they will be paid under all circumstances. When pushed on this point, insurance companies will claim that their liabilities are covered by state insurance funds. But when there is an adverse aggregate shock, like the simultaneous occurrence of a youth plague and a cancer cure, the state insurance funds will be quickly depleted leading to widespread insurance company failure. Indeed, in the case of life insurance companies, the specter of such failure would invite runs on the companies by holders of whole life policies who will attempt to immediately withdraw their cash values.

To summarize, the current life and casualty insurance system, like the current depository system, offers to insure the uninsurable. This is really no different from AIG writing what appears to have been upwards of \$2 trillion in credit default swaps, which it knew it would not

be able to cover in the event of systemic risk. Moreover, AIG felt no compulsion to reserve against redemptions on these contracts.

What about Credit Default Swaps?

Speaking of AIG, how would credit default swaps be treated under Limited Purpose Banking? Via mutual funds, of course. Take the example of ABC bank that markets the ABC GM Defaults on Its Bonds in 2010 Mutual Fund. Under this closed-end fund, shareholders would specify in advance if they wanted to get paid off if GM were to default on its bonds in 2010 or paid off if GM were not to default on its bonds in 2010. All money put into the fund would be paid out to one of the two types of shareholders depending on whether or not GM defaults. The total pot in the fund would be handed to the winning shareholders in proportion to their purchase of shares of the fund. Hence, Limited Purpose Banking can accommodate CDS trades as well as any other insurance product. But what Limited Purpose Banking won't do is leave any bank exposed to CDS risk. Again, people, not banks, would own the CDS mutual funds.

Organizing risk-allocation mutual funds of this kind may sound difficult, so it's important to realize that they already exist. Indeed, arrangements of this kind, called *pari-mutuel betting*, have been in use sports betting around the world since 1867. Anyone who has ever placed a bet at a horse race has most likely done so through a pari-mutuel mutual fund of precisely the same type being proposed. At a horse race, pari-mutuel betters place their bets up to the start of the race. The race track then subtracts its percentage fee and the pool is divided up among the winners in proportion to the amount each winner bets.

Conclusion

Our financial system is in terrible shape and needs a fundamental overhaul. Limited Purpose Banking is the answer. This simple system would preclude financial crises of the type we're now experiencing. The system would rely on independent rating by the government, but permit private ratings as well. It would require maximum disclosure and provide maximum transparency. Most important, it would make clear that risk is ultimately born by people, not companies, and that people need and have a right to know what risks they are facing. Finally, it would make clear what risks are and are not diversifiable. It would not pretend to insure the uninsurable or guarantee returns that can't be guaranteed. In short, the system would be honest, and, because of that, it would be trustworthy.