

Reducing the poor's investment risk: introducing bearer money market mutual shares

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Now that micro-credit in general and the Grameen Bank in particular have finally received their due recognition [Yunus and Jolis (1998)], policymakers and international financiers can begin to focus on the other side of the poor's balance sheet, their assets or savings. As de Soto (2000) and others have pointed out, property rights in many countries remain precarious and formal protection of physical and intellectual property costly. In many places, not even the local currency can be trusted to hold its value for any significant length of time. Billions of people therefore have little ability or incentive to save.

Outsiders cannot impose democracy or property rights protections [Baumol et al. (2007)] and, as Stiglitz (2002), Easterly (2006), and others have argued, the IMF and World Bank can do precious little to thwart bouts of inflation, exchange crises, and financial panics in developing countries. Outsiders can, however, provide the world's poor with a safe, low transaction cost, and remunerative savings outlet. For several generations, poor people in many places throughout the globe have saved by buying U.S. Federal Reserve notes and the fiat currencies of other major economic powers. Although subject to physical risk (theft, burning, and so forth) and exchange rate fluctuations, such notes typically held their purchasing power much better than local notes or bank deposits denominated in local currencies. As the dollar weakens over the next few decades, as most expect it to do as the U.S. economy loses ground relative to Europe, a revitalized Japan, and the BRIC nations, its allure as a savings vehicle will fade. International financiers can fill the vacuum with a simple product, bearer money market mutual shares (B3MS), almost guaranteed to appreciate against all the world's fiat monies.

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Helping budding entrepreneurs to obtain loans, even for just a few dollars, is beyond noble. It is growth-inducing. Where oligarchs or the grabbing hand of government [Shleifer and Vishny (1998)] are not overpowering, micro-credit can summon forth productive work where before was only despair [Aghion and Morduch (2005), Khandker (1998), Yunnis and Jolis (1998)]. Micro-insurance is also gaining traction [Mijuk (2007)]. But what becomes of the entrepreneur who thrives and begins to accumulate assets? The small businessperson who, for any number of valid reasons, may not want to continue plowing profits back into her business? Who fears purchasing conspicuous physical assets lest they be seized by the state or brigands? Who wishes to avoid investing in financial assets issued by shaky, inept, or corrupt local intermediaries or denominated in a local currency of dubious value over the desired holding period, be it a week, month, year, or decade?

For the past several generations and up to the present, millions of such people worldwide have invested in U.S. Federal Reserve notes or the physical media of exchange of other major nations. Although subject to some physical risk of theft, loss, burning, and the like, the high value to bulk of such notes renders them ideal for saving for a personal rainy day or hedging against a local economic meltdown. Returns in terms of local purchasing power are not guaranteed, but Federal Reserve notes are perfectly safe from default risk and highly liquid, sometimes even more liquid than local notes or deposits. Their widespread use as personal savings and business working capital attests to the financial savvy of people worldwide [Allison (1998)].

The U.S. dollar has often been the best available savings option for the world's poor. Physical currencies are not, however, optimal investment instruments and the long-run outlook for dollar-denominated assets of all stripes is weak. Although the dollar long tended to appreciate vis-à-vis local currencies, short-term depreciations which temporarily reduce the purchasing power of Federal Reserve notes held by the poor are frequent and notoriously difficult to predict [Chinn and Frankel (1994)]. Moreover, in the future, the dollar may tend to depreciate as the U.S. economy loses ground relative to a united Europe, a resurgent Japan, and the growth of the BRIC (Brazil, Russia, India, China) economies [Vietor (2007)]. In fact, numerous central banks are already beginning to rethink their peg to the dollar and emerging market entrepreneurs will not be far behind [Slater and Phillips (2007)]. The poor could respond to a sustained depreciation of the dollar by substituting physical yen, euro, or other currencies in their portfolios but they would still face the risk of adverse exchange rate movements, to wit the appreciation of their local currencies. And of course no fiat currency pays interest or is immune from counterfeiting. Holding another country's paper currency as an investment instrument is ingenious but hardly foolproof.

International financiers could supply the world's poor with a similar but ultimately superior instrument, a liquid, low-cost, constantly appreciating bearer instrument with almost no default or counterfeit risk and low levels of physical risk. And they have economic reasons for doing so because the profit potential, especially for an aggressive first-mover, is enormous. Estimates vary but the consensus is that 60 to 70 percent of all Federal Reserve notes outstanding, about U.S.\$800 billion in 3Q 2008, circulate outside of the U.S. proper [Allison and Pianalto (1997), Lambert and Stanton (2001)]. Supplying the world with liquid bearer savings instruments is, in other words, approximately a U.S.\$500 billion business and growing.

Savers in emerging markets would prize a private instrument

more highly than dollars, euro, yen, or other fiat currencies if the returns of holding the private instrument were relatively higher and steadier and if it were as safe and liquid as fiat notes, less easily counterfeited, and less subject to physical risk. Such an instrument currently does not exist, but bearer shares issued by a money market mutual fund (B3MS) in an intelligent way could fit the bill. B3MS could provide the poor worldwide with a low-transaction cost yet remunerative alternative to fiat currencies while simultaneously generating considerable seigniorage profits for the fund(s) that provide the best product.

A money market mutual fund could sell physical bearer shares in itself in exchange for major or local currencies, immediately investing them in safe, short-term government and corporate notes denominated in dollars, euro, yen, and a basket of other currencies. Rather than crediting earned interest to an investor's account as money market mutual funds traditionally have done, a B3MS fund would simply keep reinvesting its profits. The market value (and net asset value, or NAV) of each bearer share would therefore increase, just as stock prices increase when corporations retain profits instead of paying them out as dividends. Just as traditional mutual fund shares 'appreciate' against the dollar (euro, etc.), so too would B3MS appreciate against (buy more of) all of the world's fiat currencies.

For example, a budding young entrepreneur in Ethiopia might purchase 100 B3MS for 9,000 Birr (roughly, U.S.\$90) today, but in a year's time he will be able to obtain, say, 9,200 Birr for his shares, either by redeeming them at the fund or, more likely, by selling them to another investor who is willing to give more Birr for the shares because their NAV would have increased due to a year's accrued interest. If a fund emerges with a strong product and a long lead time before competitors appear, it may be able to avoid ever having to redeem its shares because the secondary market for them could grow sufficiently deep that local investors would always find someone to take them off their hands. The shares could begin to pass from hand-to-hand like cash (albeit at slowly increasing local values) and domestic financial institutions could deal in them, perhaps even offering euro B3MS accounts and loans analogous to eurodollar accounts and eurocredit loans.

If this sounds like eighteenth and nineteenth century banking systems in Scotland and America, where banks issued bearer liabilities in the form of non-legal tender convertible notes, it should because the general principle is identical [Bodenhorn (2000, 2003), Checkland (1975), Perkins (1994)]. But unlike banks, the assets of which are notoriously difficult for outsiders to value and hence are subject to runs in the absence of deposit insurance [Diamond and Dybvig (1983), Jacklin and Bhattacharya (1988)], money market mutual funds invest transparently and safely and their liabilities are effectively marked-to-market. Money market mutual funds are therefore never run upon in any economically significant sense.

The worst that can happen, barring a global catastrophe, is that the NAV of their shares declines below par, but even that is a rare event [Collins and Mack (1994), Macey and Miller (1992)]. Particularly in developing economies, mutual funds are superior to deposit insurance, which induces banks to take on tremendous and potentially destabilizing risks [White (1995)].

If B3MS issuance would benefit both the fund managers and the shareholders, why has the product not yet emerged? One could just as well ask why were exchange traded funds (ETFs) not introduced until the early 1990s? Why did mutual funds not proliferate until after World War II? Why was life insurance the reserve of a tiny handful of people until the 1840s? The answers remain unclear [Eaker and Right (2006), Murphy (2005), Roe (1991)]. Perhaps no one has yet developed the idea or perhaps international financiers fear factors that could prevent B3MS issuers from earning a reasonable profit.

Some potential issuers may fear the wrath of government. Local governments, for example, may not like residents selling their currencies for B3MS. That may be, but governments have already shown that they can do little about it. Dollars and other foreign physical currencies already circulate in large numbers. Most countries realize that they cannot control what residents use for cash and may welcome the substitution of private instruments for dollars, which are a palpable symbol of U.S. hegemony and on an increasingly shaky economic footing. In other words, most governments realize they are already losing seigniorage and would rather lose it to an international mutual company than to the American government. In fact, since the U.S. government has the most to lose it represents the biggest threat to any fund issuing B3MS. Thankfully, offshore havens abound and the U.S. government would be hard pressed to take a principled stand against a private competitor. Another potential problem is that the world's poor may eschew B3MS for cultural reasons or from mere ignorance. The nature of the shares will certainly need explanation but much of the public education can be handled via websites and at the points of issuance and tender. As Prahalad (2006) and others have shown, the poor are astute value hunters. They will quickly learn the virtues of new savings instruments as they do other new products. Cultural barriers will be minimal in most places but some Muslims may object to holding B3MS because the fund issuing them invests in debt. The shares themselves, however, are equity instruments and no explicit interest is paid, so many Muslims will likely accept them [Obaidullah (2004), Vogel and Hayes (1998)].

Other potential problems are technical. If the fund gains significant market share it will be enormous and may come to influence the world's money markets. The fund's managers will have to pay much closer attention to foreign exchange markets than traditional money market mutual fund managers do and may well find it expedient to hedge exchange rate risks using futures markets or other derivatives. Optimal trading strategies are not clear a priori

so undoubtedly mistakes will be made. The managers must have incentives to earn low and safe returns and disincentives to taking on risks that could endanger the fund's principal [Wright (2008)].

Fund managers must also devise physical shares that are relatively immune from counterfeiting and the risks of physical destruction, carefully balancing the costs and benefits of different technologies. Paper is a relatively cheap and well-established material but is perhaps too easily counterfeited and destroyed. Shares made from plastic, metal, or composite materials, although more expensive to produce, may prove superior because they would be more robust physically and could incorporate stronger security and convenience features including visual, sub-visual, tactile, sonic, and electronic authentication devices. Although the B3MS concept probably cannot be patented, the technologies incorporated into its physical shares could be, providing a barrier to entry likely strong enough to dissuade free riders (numerous competing funds issuing B3MS) until the initial entrant(s) have gained significant market share. As Baumol et al. (2007) show, such barriers are often crucial considerations for innovative entrepreneurs. It may seem strange to invest in the technology of physical media of exchange in the early twenty-first century. The simple fact of the matter is that breathless predictions of an e-money revolution have proven to be hot air [Palley (2002)]. At best, an e-money evolution is underway but it will take decades and perhaps centuries to play out, particularly in the poorer parts of the world. Even in the U.S., Japan, and Europe, most people continue to find physical notes an indispensable way of making some types of payments. Because they are almost always issued by governments or small non-profits, physical notes are far behind the technological frontier. Consider, for example, the lawsuit regarding the unsuitability of Federal Reserve Notes for the visually impaired (<http://www.dcd.uscourts.gov/opinions/2006/2002-CV-0864-12:3:41~12-1-2006-a.pdf>). A private, for-profit issuer would have tremendous incentives to bring their physical bearer obligations to the bleeding edge.

The micro-finance revolution is a great first step toward breaking the cycle of political violence, oppression, and predation that relegates billions of human beings to lives of desperate poverty. But the world's poor face other risks as well. The entrepreneurial poor also need liquid, safe, and reliable savings instruments, the value of which are free of local political and economic disturbances. An idea born of centuries of experience with bank note issuance and money market mutual funds, B3MS could emerge as just such instruments. Alone, they are no panacea to widespread poverty, but combined with micro-finance and micro-insurance, bottom of the pyramid strategies [Prahaland (2006)], and other 'ground up' initiatives [Easterly (2006)], they could become an important component of the risk management strategies of the world's poorest and most vulnerable entrepreneurs.

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