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SUMMARY

The current global financial and economic crisis has come after two decades of unprecedented integration of global financial markets and financial innovation, a process that accelerated significantly in the new millennium. At the same time, the past decade has seen a widening of global financial imbalances to new and unsustainable levels. The convergence of these two trends is no coincidence, and financial globalization and global imbalances are two facets of the same phenomenon, which has resulted in the worst global economic and financial crisis since the Great Depression. By the same token, a long-term resolution of the global imbalances issue will require a strengthening of the infrastructure of the global financial system through a rethinking of national financial regulatory regimes and improved global cooperation on financial governance. In the medium term, the governments of the United States, Europe and the major emerging markets must focus on bringing the recession to an end and put the global economy back on a sustainable growth path. In the longer term, unless we bring financial globalization and global imbalances under control, we will be paving the way for the next financial and currency crisis, with incalculable consequences.

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Global Financial Architecture, Global Imbalances and the Future of the Dollar[1]

By Karim Pakravan

Financial Liberalization and Globalization

Financial liberalization has played a key role in the rapid expansion of the American and global financial markets, both in terms of size and influence on the world economy. Given the importance of the American economic and financial model in the global setting, it makes sense to look at the evolution of the global financial markets through the prism of the American experience: deregulation, concentration, and financial innovation.

Following the Great Depression, the US financial system went through a period of financial repression. The McFadden Act, which actually preceded the Great Depression, prohibited interstate banking. The Glass-Steagall Act of 1933 established the FDIC and also instituted the separation of commercial and investment banking. Regulation Q put a ceiling on interest rates. Moreover, faced with massive foreclosures of mortgages, the federal government entered the financial system directly through the creation of several so-called Government Sponsored Enterprises, (or GSEs): the Federal Home Loan Banks, the Federal National Mortgage Association, a.k.a. Fanny Mae, followed later by the Federal Home Loan Corporation, or Freddie Mac, and the Government National Mortgage Association, or Ginnie Mae. The mission of these GSEs was to promote home ownership both through loan guarantees and/or purchases of high quality (or conformable) mortgages from the banks. This structure, which I call "Banking 1.0," led to a long period of stability and market segmentation: commercial banks took deposits and offered industrial and commercial credits, saving and loans institutions collected savings at a fixed rate and offered long-term mortgages, and investment banks raised funding on the capital markets, underwrote securities and offered brokerage services.

[1] *This brief is based on a paper delivered at the Dubai School of Government on December 20, 2009.*

However, Banking 1.0 was gradually dismantled in the 1980s with the start of an era of rapid deregulation in the United States, leading to the banking system that emerged by the mid-1990s, or Banking 2.0. The deregulation wave was especially prevalent in the banking system, with the gradual undoing of the regulatory constrictions of the previous half century. Under the Reagan administration, the constraints on saving and loan institutions were gradually removed, allowing them to act more as commercial banks. The 1980s and 1990s saw the reemergence of interstate banking, the eventual repeal of Glass-Steagall, and the beginning of a major wave of interstate bank consolidations, which led to an increased concentration of the banking system and the rise of full-service financial behemoths such as Citibank and JPMorgan.

By the early 2000s, the financial landscape was dominated by Citigroup, JPMorgan, Bank of America and a few lesser names, as well as foreign players such as UBS, Deutsche Bank and HSBC. These banks became major players in the area of investment banking, competing with the established investment banking institutions and leading together to the emergence of the so-called “shadow banking system”—underregulated and highly-leveraged players thriving on complex, financially-engineered products. The deregulation/concentration trend was repeated worldwide and reinforced by a series of cross-border deals that created truly global financial institutions that spanned developed countries and emerging markets.

Financial innovation, whether on the retail wholesale or market side, has been a major factor in the expansion of banking and finance. Advances in technology and financial theory and the migration of mathematicians/statisticians to Wall Street accelerated the trend in the 1980s and 1990s. Several financial innovations should be mentioned in particular: credit default swaps (CDSs), securitization and collateralized debt obligations (CDOs). Both derivatives and securitization were already fairly common in the early 1990s. By the end of the 1990s, Wall Street’s financial alchemists saw that by combining securitization with CDSs, you could create new complex instruments called collateralized debt obligations. CDOs extended the traditional concept of securitization by slicing the instruments into tranches with different risk characteristics, which could be sold to investors with different risk tolerance. However, the real time bomb started ticking by 2004, when subprime mortgages became the main raw materials of CDOs. Moreover, the financial alchemists went further, once someone realized that anything with a cash flow could be securitized. New securities, CDO2s, were created from mezzanine tranches. The next step for the issuers of CDSs was to securitize their cash flow into so-called “synthetic CDOs.” In the process, Wall Street created an increasingly precarious and complex structure, based on dubious assumptions about correlations and supported by arcane mathematical models. In 2006 alone, $470 billion of CDOs were issued.

Few understood these instruments, either in the banking or regulatory worlds. Moreover, they created an unprecedented degree of financial risk on both the micro and macro levels. At the micro-financial level, they led to a major dilution of credit standards. At the macro-financial level, by creating a significant level of correlation and interconnectedness, they led to the emergence of an unprecedented level of systemic risk. However, the shadow bankers waved these risks away by invoking the stamp of approval of the main rating agencies. The notional amount of over-the-counter derivatives outstanding rose from $12.3 trillion in 2000 to a peak of $683 trillion at the end of June 2008. Furthermore, the notional value of credit default swaps rose from $20.8 trillion at the end of 2006 to a peak of $57.3 trillion in June 2008. ***However, the havoc that was created by the combination of deregulation and financial innovation would not have been possible without the massive amount of liquidity generated by rising global imbalances.***

Global Imbalances

Global imbalances are both a simple problem and a complex one. At the simple level, we know that the "twin deficits" macroeconomic equation always holds at the level of a country:

Net Exports (current account) = Savings Gap (excess of savings over investments)

The complex root of the problem is the role of the dollar as the main currency vehicle in the global monetary system since its inception at Bretton Woods in 1944. For several decades, the US dollar underpinned the global financial system by providing international liquidity, deep financial markets and stability. While this unique position has given the United States the means to systematically live beyond its means over the past 50 years, the problem has become a significant threat to global financial stability in the past decade.

Essentially, the problem boils down to excessive US external deficits financed by a savings glut resulting from excessive external surpluses of China, Asian NICs and the GCC countries. Over 1999-2007, the United States accumulated $4.8 trillion in current account deficits (up from less than $1 trillion in the 1989-1998 period), offset mostly by $3.4 trillion surpluses from Asia and the GCC. By the end of 2007, the US gross external debt reached $13.4 trillion. In 2008, the US deficit and the East Asian/GCC surplus respectively totaled $706 billion and $720 billion, with the United States accounting for 43.4% of global capital inflows.

What are the causes of these global imbalances and how did the deterioration accelerate in the past decade? We can list the following set of five key factors: easy monetary policies, unregulated financial innovation, regulatory failure in US financial markets, the collapse of fiscal discipline in the Bush presidency, and de facto pegged and undervalued Asian currencies. These all contributed to the widening of the US savings gap and the resulting explosion in external deficits.

Easy Money

The quarter century following the early 1980s recession saw the triumph of central banking, as the convergence of monetary policy across the world around inflation

targeting, combined with rapid productivity growth, led to two decades of disinflation and the so-called "Great Moderation" of the first few years of this millennium—stable and sustained economic growth across the world's regions, combined with low inflation. The late 1990s recession and the 9/11 terrorist attacks on the United States also heralded an extensive period of monetary easing in the US and across the G-10, with the Fed funds rate target kept at 1% until June 2004. The Fed's monetary easing was complemented by surging liquidity resulting from the so-called "global savings glut" resulting from the accumulation of large current account surpluses by China, South Korea, Taiwan and the GCC oil producers, as well as the large cash positions of multinational corporations. This translated into a rapid growth in global bank credit, particularly in the United States, where the ratio of bank credit to GDP increased to a peak of 355% by the end of 2007. Concerns about inflation led the Fed to begin tightening by June 2004, with other major central banks began following suit. The Fed funds rate was raised to 5.25% in 25 bp increments over the next three years. However, the rise in global liquidity had complicated the conduct of monetary policy, resulting in a flattening of the US yield curve relative to previous monetary tightening episodes.

Financial Innovation

Financial innovation has been the lifeblood of banking, and has allowed the expansion of financial markets and services required to sustain a modern economy. Left uncontrolled, however, financial innovation has also led with alarming regularity to financial crises. The growth of syndicated credits in the 1970s resulted in the Latin American debt crisis of the 1980s, junk bonds led to the savings and loans collapse of the 1980s, and sub-prime mortgages and credit default swaps are the principal villains in the current financial crisis.

Starting in the late 1990s, securitization, the proliferation of off-balance sheet entities (SPVs, SIVs or conduits) and an increased reliance on complex mathematical and statistical risk-management models led to the emergence and explosive growth of the so-called "shadow banking" system. By the end of 2007, the balance sheet of these off-balance sheet entities reached $1.3 trillion, about 11% of total US commercial bank assets. This system was characterized by an extremely high level of leverage (over 30-to-1 in the case of investment banks), short-term funding, and powerful negative financial feedback loops, a surefire recipe for disaster. The combination of the "originate-distribute-repeat" model and the growth of the unregulated CDS market led to a gross underpricing of risk and rapid decline of lending standards.

Regulatory Failure

As mentioned before, the repeal of Glass-Steagall in 1999 completed the dismantling of the US regulatory framework put in place during the Great Depression. However, deregulation alone was not at the root of the 2008 financial crisis; the real culprit was regulatory failure. The regulatory authorities in the United States had the tools required to prevent the asset price surge from developing in a bubble, but that ideological rigidity of key players in the Bush administration and the Fed, combined with congressional laxity, led to a casino mentality in the US financial system and resulted in the 2008 financial catastrophe.

Whether by sins of omission or commission, the regulators did not do their jobs. Several major elements of that failure stand out: failure to prevent excessive leverage of investment banks, the inability to regulate the risks posed by the proliferation of off-balance sheet structures, failure to prevent the banks from gaming Basel-II, and the decision to allow the GSEs to take on lower quality assets. These factors led to the explosion in subprime mortgages in 2005 and 2006.

US Fiscal Indiscipline

Going back to the "twin deficits" equation, we can break up the savings gap into three parts: public (or government), household and business sector. While private savings continued their secular decline (eventually becoming negative in the early 2000s), the Bush economic program was also to blame: massive tax cuts and the costs of two wars reversed the fiscal discipline of the Clinton years and saddled the United States with a significantly wider structural deficit. Over 2002-2007, the US fiscal deficit reverted from the Clinton surpluses to deficits of an average of 3.5% of GDP, with the federal net debt increasing from 37% to 42 % of GDP over the same period.

Chinese Yuan Undervaluation

We come now to the other side of the global imbalance equation. China has been vocal in the past year as the largest holder of US government securities in demanding that the US put its fiscal house in order. However, the Chinese also bear their share of responsibility in creating the global imbalances. The undervaluation of the Chinese yuan has remained a contentious issue in US-Chinese relations (as well as in China's relations with the European Union and other Asian countries). Following July 2005's one-time 2.1% revaluation of the yuan in the context of an exchange rate regime change, the yuan exchange rate has been tightly controlled, despite the theoretical ±0.3% per day fluctuation range. The yuan gained 17% against the US dollar over the July 2005-July 2008 period, but has remained in a de facto peg to the US dollar since the beginning of the financial crisis. China's soaring current account surplus has been complemented by large capital inflows, forcing the People's Bank of China to continually intervene to maintain the de facto dollar peg, accumulating foreign exchange reserves of $2.3 trillion in the process. This has transferred China's large savings surplus to the United States and fed both the US credit surge and real estate bubble.

The US Dollar

In the past few years, the US dollar (as measured by the Dollar Index) has been on a declining path both structurally and cyclically. The Dollar Index peaked in February 2002 at 117.28, but by the end of 2009 had fallen by 22%. The fall in the dollar has been closely linked to the widening of the US current account deficit, from an average of 2% of GDP in 1995-99 to 5% in 2000-2007. Since the beginning of the financial crisis, the dollar benefitted from two cyclical factors: the narrowing of the US current account deficit, which fell by 54% from a peak of $800 billion in 2006 to the end of 2009, and the flight to safety after the Lehman collapse of September 15, 2008. However, the recovery of global equity markets since the lows of March 2009, combined with clear indications of an incipient economic recovery and extremely low US interest rates, has pushed

the dollar down once again. The greenback has declined by 5.6% between March and December of 2009.

The US current account deficit had been on an unsustainable path before the financial crisis. These deficits were financed not only by large but increasingly vulnerable capital inflows and high US interest rates, but also, and more importantly, by the willingness of the surplus countries of East Asia and the GCC to finance rising US fiscal deficits. The financial crisis has led to a major deterioration of the US fiscal position, raising global concerns over the sustainability of these deficits and their impact on global financial stability. Restoring the US fiscal position to sustainable levels has been complicated by the triple impact of the current recession on the US fiscal deficit. In combination, the automatic stabilizers, the financial system bailout and the stimulus package resulted in a surge of the federal budget deficit to about 12% of GDP in FY2009. Even under the optimistic Obama administration assumptions, the fiscal gap will remain at 4% of GDP by 2014. In addition, the US will have to compete for global funds with the other G-10 countries, which have also suffered similar deteriorations of their fiscal positions. The required adjustments will not be possible without resorting to tax increases, a politically sensitive subject, to say the least.

Recommendations and Conclusion

This is only part of the story, however, and the surplus countries of East Asia—in particular China—which have been part of the problem with their undervalued and/or de facto pegged currencies, must also be part of the solution. ***Financial adjustment will take place, involving a significant rebalancing of global demand and realignment of currency rates, as well of a revision of the role of the dollar in the global economy. The key question for the G-20, the IMF and the global financial markets is whether it will be market- or policy-driven. In other words, will it be disruptive or gradual?***

Two key issues are central to the future of the US dollar: first, the role of the dollar as a reserve currency, and second, the ability of the major players to cooperate in the context of a new global financial architecture to gradually reduce global imbalances and move towards a more sustainable international financial system. Only then will we be able to mitigate what Larry Summers has called the "financial balance of terror."

The dollar remains the world's major reserve currency, although its share of total reserves has dropped to about 65% in recent years. While this has given the United States a significant advantage, it also has also allowed imbalances to build up in the US economy. Therefore, a gradual reduction of the dollar's global role would also be beneficial for the US economy, forcing it to live within its means.

The Chinese and other countries have called for a reduction of the role of the dollar as a reserve currency, hinting at a new yuan-based monetary bloc to challenge the dollar hegemony. However, the reality is that while the yuan could be used as a trade vehicle on a regional basis, it doesn't have the minimum characteristics of a reserve

currency—deep and liquid financial markets, an efficient interest rate term structure, free capital flows and the availability of currency risk management instruments—and is unlikely to achieve them in the medium term. In addition, the global trade and financial markets infrastructure is mostly dollar-based. Thus, the dollar cannot be easily replaced—although the euro and the yen are already reserve currencies, and both could increase marginally. An attractive alternative (or complement) to the US dollar are Special Drawing Rights (SDRs)[2], which currently account for approximately $250 billion, or about 4% of the total of about $6 trillion in global foreign exchange reserves. Increasing the SDRs over the next few years to $1 trillion would allow the gradual substitution of SDRs for dollars without causing significant currency swings.

However, the gradual retreat of the US dollar from its central global role over the next decade will only work if two other steps are taken. First, the other party to the global imbalance equation, China, has to accept the fact that it cannot have it both ways. It should allow its currency to appreciate significantly and, in the process, reorient growth away from exports to domestic markets. Second, the US must reduce its fiscal and external imbalances to manageable proportions—considered to be about 3% of GDP for each of the fiscal and current account deficits—over the next decade. This means that the deleveraging process that was started by the financial and economic crisis has to continue at both the private and public levels. We have already witnessed a positive impact on household balance sheets, which show evidence of deleveraging and rebuilding household net worth and savings. Unfortunately, the crisis has added significantly to the federal debt burden, complicating the deficit reduction task.

What conclusions can we draw for the dollar? We should expect the US dollar to continue to depreciate on a secular basis as emerging markets continue to diversify their foreign assets away from the greenback. A weaker dollar will also help in the revival of US manufacturing and the narrowing of its external deficits. In the medium term, the Fed's exit from extra-easy money will have implications for the dollar, and the undoing of the dollar-funded carry trade could lead to greater short-term volatility.

Ultimately, the global financial crisis has been one of excessive leverage, a problem to which global financial imbalances have been a major contributor. These imbalances benefited all the parties involved, while at the same time laying a trap from which they cannot escape without a high degree of global coordination. China and East Asia were hooked on exports, while the real estate boom and easy money in the US fuelled a consumption-driven economic upswing. The world paid a high price for the consequences of the excesses of this decade. While the lessons we have learned may collide with the messy realities of national and global politics, it should be evident that in this interconnected global financial world, we will ultimately sink or swim together.

[2] *SDRs are a weighted sum of contributions of four major currencies, reevaluated and adjusted every five years, and computed daily in terms of equivalent US dollars.*

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