Three Years Later

Unfinished Business in Financial Reform

Paul A. Volcker
About the Author

In the course of his career, Paul A. Volcker worked in the Federal Government for almost thirty years, culminating in two terms as Chairman of the Board of Governors of the Federal Reserve System from 1979 to 1987. Most recently, he was Chairman of President Barack Obama’s Economic Recovery Advisory Board. Pursuing his many continuing interests in public policy, Mr. Volcker is associated with the Japan Society, the Institute of International Economics, the American Assembly, and the American Council on Germany. He is Honorary Chairman of the Trilateral Commission and the Group of Thirty. He is also Chairman of the Trustees of International House in New York City.

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Three Years Later
*Unfinished Business in Financial Reform*

Paul A. Volcker
The William Taylor Memorial Lecture

This lecture series is dedicated to the memory of William Taylor (1933 –1992). William Taylor’s career in Washington, D.C. included 15 years at the Board of Governors of the Federal Reserve, where he rose to the position of Staff Director of Banking Supervision and Regulation, and culminated in his appointment as Chairman of the Federal Deposit Insurance Corporation in 1991. The lecture series is dedicated to honoring his long career of distinguished public service and to recognizing his dedication to ensuring the strength and stability of the financial system.

The lectures have traditionally been offered either at the biennial meeting of the International Conference of Banking Supervisors or, in intervening years, at the time of the annual meetings of the International Monetary Fund and the World Bank in Washington, D.C.
REMARKS OF

Paul A. Volcker
William Taylor Memorial Lecture
Washington, DC
September 23, 2011
Introduction

For the past eighteen years, lectures in honor of William Taylor have been presented around the time of the IMF/World Bank meetings. They collectively provide a record of expert commentary by those engaged in finance during a period of turbulent change, culminating in a destructive crisis.

This last of the Taylor Lectures is both symbolic and appropriate: Symbolic in the sense that the financial institutional markets in which Bill lived and worked have been transformed, and appropriate in that is time to think hard about new market structures and new approaches to regulation.

Bill’s life was cut short well before securitization reached a full head of steam. Complex financial engineering and active derivative trading was in its infancy. Collateralized Debt Obligations, Credit Default Swaps, Structure Investment Vehicles and mysterious conduits simply didn’t exist. Commercial banks hadn’t yet become investment banks and investment banks hadn’t yet acquired banking licenses. The innately conservative organizing principle for investment houses as partnerships has been dropped and increasingly aggressive and risky trading practices have come to take center stage.

In the process the major financial institutions have grown larger and larger, a lot more complicated, international in scope, interdependent,
impenetrable to outsiders and I fear to directors and many senior managers as well. I know all that because I’ve been re-reading past Taylor Lectures.

Those essays have been individually and collectively remarkable. Long before the financial crisis broke, several of the authors expressed strong concerns about the implications of the greater complexity, the need to develop more sophisticated and effective approaches toward risk management, and the difficult challenges for supervisors. ¹ There were concerns about the incentives toward risk-taking embedded in new compensation practices (and especially stock options). Significantly, as early as the mid-1990’s a senior European commercial banker raised questions about the seeming decline in ethical standards.² A decade later an experienced American central banker reiterated those concerns, suggesting that moral as well as practical issues were involved.³

More than a decade ago, a highly respected European official, Tommaso Padoa-Schioppa, raised questions about the implications for financial stability of the diminishing role for traditional (and highly regulated) commercial banking. The unspoken assumption of many was that the new investment bankers and both hedge and equity funds would in combination be capable of providing more competitive and stable markets and a more effective allocation of capital. But, the author asked, what about a stable core for the payments system, for the provision of liquidity, and for consumer services?⁴

One thing I found missing from the old lectures was a clear expression of an intellectual rationale for all the changes in the financial environment. Theorizing was lacking about market efficiency and rational expectations, which together would lead to stability and the optimal allocation of resources. The Taylor authors, after all, were not academics steeped in mathematical abstractions. They were central bankers, regulators, and market participants used to coping with the imperfections, excesses, and the frailties of human behavior. None were prepared to accept a “hands off” regulatory philosophy.

The “old world”, the world in which Bill Taylor worked, surely had financial crises enough. The Latin American debt crisis of the 1980’s, the savings and loan debacle, and the subsequent commercial bank

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¹ See, e.g Cartellieri 1996; Crockett 1998; Fischer 2002.
² Cartellieri 1996.
³ McDonough 2002.
⁴ Padoa-Schioppa 2000.
failures were no simple matters. Bill’s leadership was critical through those years. A progressive breakdown in markets and lasting damage to the real economy was avoided.

That was not easy. The costs were significant. And those crises, in their severity, were a reminder of the simple fact that traditional banking, while providing essential public functions, necessarily entails risk. Those risks are inherent in intermediation between borrowers and lenders, between investors seeking longer-term funds and lenders placing priority on liquidity, and between obligations denominated in different currencies. It was the effort to deal with those risks that propelled much of the new financial architecture. But somehow in the effort to define, separate and diffuse those risks, with its familiar slogan of “slicing and dicing”, sight was lost of the fact that this risk ultimately remained, however much it was relocated and re-priced. In fact, risk sometimes ended up in new concentrations, hidden from the view of supervisors, and too often from boards of directors and even top executives.

I well recall a conversation with Bill Taylor near the end of my Federal Reserve time. In stark terms he set out his concerns. As I recall the words, he put the point forcibly: “If you permit banks to securitize and sell their loans, they will lose interest in maintaining a strong credit culture and controls. And you are going to end up with even bigger crises.”

Well, I shortly after left office. Bill, soon Chair of the FDIC, remained to cope with the increasingly complex world of finance. Of course, no single man, no single institution, could stand in the way of the powerful technical and political forces pushing for change—change that had the potent combination of strong intellectual support and prospects for high compensation. For all the cautions expressed, the succession of Taylor Lectures did not counsel resistance to the deep-seated structural changes taking place. Rather, they called for better, more disciplined management and supervision, most particularly a review of capital standards.5

Now, we know all the seeming mathematic precision brought to task, epitomized by calculations of Value at Risk, complicated new structured products, the explosion of derivatives, all intended to diffuse and minimize risk, did not bear out the hopes. Instead the vaunted efficiency helped justify exceedingly narrow credit spreads and exceedingly

large compensation. By now it is pretty clear that it was faith in the
techniques of modern finance, stoked in part by the apparent huge
financial rewards, that enabled the extremes of leverage, the economic
imbalances, and the pretenses of the credit rating agencies to persist
so long. A relaxed approach of regulators and important legislative
liberalization reflected the new financial Zeitgeist.

If those remarks sound critical—and they are meant to inspire
care—let me emphasize that the breakdown in financial markets
and the “Great Recession” are the culmination of years of growing, and
ultimately unsustainable, imbalances between and within national
economies. These are matters of national policy failures and the absence
of a disciplined international monetary system.

Take the most familiar and egregious case. The huge external
surpluses of China reflect its perceived desirability of rapidly growing
export industries to support employment growth. Its willingness to
build up trillions of short-term dollar assets at low interest rates to
finance its surpluses kept the process going. Conversely, the United
States happily utilized that inflow of low interest dollars to sustain
heavy consumer spending, a growing budget deficit, and eventually an
enormous housing bubble. Or, look to the current European crisis. At
its roots are years of growing imbalances within the Euro Zone. As in
other parts of the world, the ability to borrow at low rates bridged for
a while the proclivities of some countries to spend and import beyond
their means, while others saved and invested, tending to reinforce an
underlying gap in productivity.

Those were fundamentally matters of public policy—taxing,
spending, and exchange rate decisions, not a reflection of financial
market characteristics. But neither can we ignore the fact that financial
practices helped extend the imbalances. In the end, the build-up
in leverage, the failure of credit discipline, and the opaqueness of
securitization—all the complexity implicit in the growth of so-called
“shadow banking”—helped facilitate accommodation to the underlying
imbalances and to the eventual bubbles to a truly dangerous extent.
In the end, the consequence was to intensify the financial crisis and
to severely wound the real world economy. Even today, four years
after the first intimations of the sub-prime mortgage debacle, high
indebtedness and leverage, impaired banking capital, and a pervasive
loss of confidence in a number of major financial institutions constrict
an easy flow of credit to smaller businesses, potential homebuyers and consumers alike.

By coincidence of timing, writing in the midst of the acute crisis in September and October of 2008, two Taylor lecturers set out perceptive analyses of the problems and anticipated the substance of much of the ensuing discussion of reform in the United States and other countries.6 Just before the crisis, insightful questions were raised about what we really mean, or should mean, when we talk about financial stability—what’s a reasonable objective, and how to reasonably align supervisory responsibilities.7

7 Davies 2005.
So, where do we stand?

The first international response has been to review collectively the capital standards of commercial banks. That’s an old story. Shortly after I left office a generation ago, Basel I was completed, setting out so-called risk-based capital standards to be adopted by all financially important countries. That was, indeed, a success. Standards were raised and a degree of international consistency achieved. Those goals remain critically important, and by and large, capital standards can be agreed upon and enforced by regulators rather than be dependent on legislation in individual countries.

Review of those capital standards for banks—now with the further consideration of standards for liquidity—is widely perceived as a central element in the current reform effort—some would contend it is the central element. I do not want to discount the importance of the work. We do need, however, to be conscious of its practical difficulties and limitations. Those problems have long been evident in the effort to enforce the established standards. Not surprisingly, they reappear in the negotiations to strengthen the standards.

There are differences in national perceptions, reinforced by intense lobbying by affected institutions. The tendency may be to bend toward a least common denominator, weakening the standards, and to uneven application. Resistance to those pressures must be a priority for regulation.
There is the larger conceptual and unsettled question of the extent to which such standards should be applied to “shadow banks” and what do we precisely mean by “systemically important” shadow banks, worthy of regulation. Those are matters for legislation, complicated again by the need for enough international consistency to resist “forum shopping”.

The need for regulators and supervisors to take account of new institutions and markets has spawned the new phrase “macro-prudential”, to me among the most cumbersome words with obscure operational content spawned by the crisis. “Systemic surveillance” or “broad market oversight” seem to better convey what is necessary and desirable. Someone, some agency, some group should be charged with taking a holistic view toward assessing financial markets and institutions, particularly alert to the interconnections. Potentially dangerous inconsistencies and instabilities need to be recognized and assessed. Whether that function need carry with it specific regulatory responsibilities and enforcement authority (for instance, setting and enforcing capital standards for “non-banks”) will likely vary country by country. But there can’t be much doubt that success will require international consultation, exchanges of information, and in some areas coordinated action.

These days, finance flows far more freely across national borders than trade. Technology tightly links the operations of big banks and markets. Hedge funds and equity funds, securitized products—even equity markets—are more and more international by nature. Only the most draconian and destructive regulatory measures could stop it.

Today in Europe we see all those realities play out in real time in extreme form. Even among nations dedicated to a common market and a common currency, the tensions are great. The plain implication, to me, is not to retreat from an integrated Euro Zone, but to develop a new institutional structure to enforce greater consistency in banking and financial standards and more broadly to require a certain discipline in fiscal and economic policies.

There is no compulsion to carry that process of integration so far in the world more generally. The financial breakdown and the resulting severe impact on economic activity does, however, point to the need for coordination beyond the accepted need for common capital standards.

Among the more obvious areas is agreement on international accounting standards. The ground work has been well advanced over a decade. Full success, however, still awaits a definitive decision by
the SEC in the United States. I would add to that a more elusive but equally important consideration: true auditor independence. Required rotation and other means to that end are now under consideration by American authorities.

Given the weaknesses and conflicts exposed by the crisis, the role and structure of credit rating agencies needs further review. So far, no fully satisfactory approach has been set out, but surely this is a matter for international consideration. Current efforts toward reform within the major firms should help, but other approaches need emphasis. Reliance on the formal ratings by an oligopoly could be reduced both by greater, perhaps more focused, competition and by placing more emphasis on the need for “in house” credit competence, matters touched upon by the Dodd-Frank legislation.

More immediately important, and it seems to me more amenable to structural change, is the role of money market mutual funds in the United States. By grace of an accounting convention, shareholders in those funds are permitted to meet requests for withdrawals upon demand at a fixed dollar price so long as the market valuation of fund assets remains within a specified limit around the one dollar “par” (in the vernacular, “the buck”). Started decades ago essentially as regulatory arbitrage, money market funds today have trillions of dollars heavily invested in short-term commercial paper, bank deposits, and notably recently, European banks.

Free of capital constraints, official reserve requirements, and deposit insurance charges, these money market mutual funds are truly hidden in the shadows of banking markets. The result is to divert what amounts to demand deposits from the regulated banking system. While generally conservatively managed, the funds are demonstrably vulnerable in troubled times to disturbing runs, highlighted in the wake of the Lehman bankruptcy after one large fund had to suspend payments. The sudden impact on the availability of business credit in the midst of the broader financial crisis compelled the Treasury and Federal Reserve to provide hundreds of billions of dollars by resorting to highly unorthodox emergency funds to maintain the functioning of markets.

Recently, in an effort to maintain some earnings, many of those funds invested heavily in European banks. Now, without the backstop official liquidity, they are actively withdrawing those funds adding to the strains on European banking stability.
The time has clearly come to harness money market funds in a manner that recognizes both their structural importance in diverting funds from regulated banks and their destabilizing potential. If indeed they wish to continue to provide on so large a scale a service that mimics commercial bank demand deposits, then strong capital requirements, official insurance protection, and stronger official surveillance of investment practices is called for. Simpler and more appropriately, they should be treated as an ordinary mutual funds, with redemption value reflecting day by day market price fluctuations.
The greatest structural challenge facing the financial system is how to deal with the widespread impression—many would say conviction—that important institutions are deemed “too large or too interconnected” to fail. During the crisis, creditors—and to some extent stockholders—were in fact saved by injection of official capital and liquidity in the aggregate of trillions of dollars, reinforcing the prevailing attitudes.

Few will argue that the support was unwarranted given the severity of the crisis, and the danger of financial collapse in response to contagious fears, with the implication of intolerable pressures on the real economy. But there are real consequences, behavioral consequences, of the rescue effort. The expectation that taxpayers will help absorb potential losses can only reassure creditors that risks will be minimized and help induce risk-taking on the assumption that losses will be socialized, with the potential gains all private. Understandably the body politic feels aggrieved and wants serious reforms.

The issue is not new. The circumstance in which occasional official rescues can be justified has long been debated.8 What cannot be in question is that the prevailing attitudes and uncertainties demand an answer. And that answer must entail three elements:

8 Greenspan 1996.
First, the risk of failure of “large, interconnected firms” must be reduced, whether by reducing their size, curtailing their interconnections, or limiting their activities.

Second, ways and means must be found to manage a prompt and orderly financial resolution process for firms that fail (or are on the brink of failure), minimizing the potential impact on markets and the economy without massive official support.

Third, key elements in the approach toward failures need to be broadly consistent among major financial centers in which the failing institutions have critical operations.

Plainly, all that will require structural change embodied in legislation. Various approaches are possible. Each is difficult intellectually, operationally, and politically, but progress in these areas is the key to effective and lasting financial reform.

I think it is fair to say that in passing the Dodd-Frank legislation, the United States has taken an important step in the needed directions. Some elements of the new law remain controversial, and the effectiveness of some of the most important elements is still subject to administrative rule writing. Most importantly, a truly convincing approach to deal with the moral hazard posed by official rescue is critically dependent on complementary action by other countries.

In terms of the first element I listed to deal with “too big to fail”—minimizing the size and “interconnectedness” of financial institutions—the U.S. approach sets out limited but important steps. The size of the major financial institutions (except for “organic” growth) will be constrained by a cap on assets as a percent of the U.S. GDP. That cap is slightly higher than the existing size of the largest institutions, and is justified as much to limit further concentration as by its role as a prudential measure.

The newly enacted prohibitions on proprietary trading and strong limits on sponsorship of hedge and equity funds should be much more significant. The impact on the sheer size of the largest U.S. commercial banking organizations and the activities of foreign banks in the United States may be limited. They are, however, an important step to deal with risk, conflicts of interest and, potentially, compensation practices as well.

The recent trading losses in Europe illustrate the case for restrictions on proprietary trading and limiting participation in sponsoring private pools of capital beyond American institutions. At its root, it is a matter of the culture of the banking institution.
The justification for official support and protection of commercial banks is to assure maintenance of a flow of credit to businesses and individuals and to provide a stable, efficient payment system. Those are both matters entailed in continuing customer relations and necessarily imply an element of fiduciary responsibility. Imposing on those essential banking functions a system of highly rewarded—very highly rewarded—impersonal trading dismissive of client relationships presents cultural conflicts that are hard—I think really impossible—to successfully reconcile within a single institution. In any event, it is surely inappropriate that those activities be carried out by institutions benefiting from taxpayer support, current or potential.

Similar considerations bear upon the importance of requiring that trading in derivatives ordinarily be cleared and settled through strong clearing houses. The purpose is to encourage simplicity and standardization in an area that has been rapidly growing, fragmented, unnecessarily complex and opaque and, as events have shown, risk prone.

There is, of course, an important legitimate role for derivatives and for trading. The question is whether those activities have been extended well beyond their economic utility, driven by what one astute observer has expressed as “trying to extract pennies from a roller coaster”.

There is one very large part of American capital markets calling for massive structural change that so far has not been touched by legislation. The mortgage market in the United States is dominated by a few government agencies or quasi-governmental organizations. The financial breakdown was in fact triggered by extremely lax, government-tolerated underwriting standards, an important ingredient in the housing bubble. The need for reform is self-evident and the direction of change is clear.

We simply should not countenance a residential mortgage market, the largest part of our capital market, dominated by so-called Government Sponsored Enterprises. Collectively, Fannie Mae, Freddie Mac and the Home Loan Banks had securities and guarantees outstanding that exceed the amount of marketable U.S. Treasury securities. The interest rates on GSE securities have been close to those on government obligations.

That was possible because it was broadly assumed, quite accurately as it has turned out, that in case of difficulty those agencies would be supported by the Treasury to whatever extent necessary to maintain their operations. That support was triggered in 2008, confirming the
moral hazard implicit in the high degree of confidence that government-sponsored enterprises would not be allowed to fail.

The residential mortgage market today remains almost completely dependent on government support. It will be a matter of years before a healthy, privately supported market can be developed. But it is important that planning proceed now on the assumption that Government Sponsored Enterprises will no longer be a part of the structure of the market.

We cannot, and should not, contemplate a financial world so constrained by capital requirements and regulation that all failures are avoided and innovation and risk-taking is lost. As I noted earlier, we need to develop arrangements to deal with such failures that do occur in a manner that will minimize market continuity and contagion.

Success will be dependent on complementary approaches in major markets—New York, London, Continental European centers and Tokyo, Hong Kong and before long other growing Asian markets. In essence, the authorities need to be able to cut through existing and typically laborious national bankruptcy procedures. The need is for new “resolution authorities” that can maintain necessary services and the immediate need for day-to-day financing while failing organizations are liquidated, merged or sold, whether in their entirety or piece by piece. Shareholders and management will be gone. Creditors will be placed at risk.

Such arrangements are incorporated in Dodd-Frank. I think it fair to say that there is a great deal of skepticism as to whether such arrangements will be effective in the midst of crises, and whether market participants will continue to presume that governments will again “ride to the rescue”. Surely, that skepticism is likely to remain until the most important of jurisdictions can be brought into reasonable alignment.

My sense is that efforts are, in fact, well underway to clear away some of the technical underbrush and to agree on procedures for intervention and exchanging information. An important element in that effort is the concept of requiring institutions to develop “living wills”. The idea is to have clarity as to the parts of their operations that could stand alone or be sold or merged as part of an orderly and rapid resolution process.

It is evident that there is not yet full agreement on elements of the basic structural framework for banking and other financial operations. Some jurisdictions seem content with what is termed “universal banks”, whatever the conflicting risks and cultural issues involved. In the
United States, there are restrictions on the activities of commercial banking organizations, particularly with respect to trading and links with commercial firms.

Financial institutions not undertaking commercial banking activities will be able to continue a full range of trading and investment banking activities, even when affiliated with commercial firms. When deemed “systemically significant”, they will be subject to capital requirements and greater surveillance than in the past. However, there should be no presumption of official support—access to the Federal Reserve, to deposit insurance, or otherwise. Presumably, failure will be more likely than in the case of regulated commercial banking organizations protected by the official safety net. Therefore, it is important that the new resolution process be available and promptly brought into play.

The Independent Commission on Banking in the United Kingdom—the so-called Vickers Committee—two weeks ago proposed a more sweeping structural change for organizations engaged in commercial banking. In essence, within a single organization the range of ordinary banking operations—deposit taking, lending, and payments—would be segregated in a “retail bank”. That bank will be overseen by its own independent board of directors and “ring fenced” in a manner designed to greatly reduce relations with the rest of the organization.

Apparently, customers could deal with both parts of the organization, and some limited transactions would be permitted between them. But as I understand it, the “retail bank” would be much more closely regulated, with relatively high capital and other stringent requirements. The emphasis is to insulate the bank from failures of the holding company and other affiliates. There seems to be at least a hint that public support may be available in time of crisis. That presumably would be ruled out for other affiliates of the institution.

I frankly have not absorbed all the practical and legal implications of the U.K. proposal. Surely problems abound in trying to separate the fortunes of different parts of a single organization, reflected in the length and detail of the Commission’s Report (which may come to rival Dodd-Frank!). Perhaps most fundamentally, directors and managements of a holding company are ordinarily assumed to have responsibility to the stockholders for the capital, profits and stability of the whole organization, which doesn’t fit easily with the concept that one subsidiary, the “retail bank”, must have a truly independent board of its own.
As an operational matter, some interaction between the retail and investment banks is contemplated in the interest of minimizing costs and facilitating full customer service. American experiences with “fire walls” and prohibitions on transactions between a bank and its affiliates have not been entirely reassuring in practice. Ironically, the philosophy of U.S. regulators has been to satisfy itself that a financial holding company and its non-bank affiliates should be a “source of strength” to the commercial bank. That principle has not been highly effective in practice.
Conclusion

In any event, while there are differences in the structural approaches in the U.S. and U.K., they are in fundamental agreement on the key importance of protecting traditional commercial banking from the risks and conflicts of proprietary activity. Both are consistent with developing a practical resolution authority. Widely agreed upon internationally, that will be the keystone in a stronger international financial system.

One thing is for sure, we have passed beyond the stage in which we can expect a new ‘Bill Taylor’—and his successors in central banks, regulatory authorities and Treasuries—to rely on ad hoc responses in dealing with what have become increasingly frequent, complex and dangerous financial breakdowns. Structural change is necessary.

As it stands, the reform effort is incomplete.

It needs fresh impetus. I challenge governments and central banks to take up the unfinished agenda. Only then can our recollections of Bill Taylor be appropriately rewarded.
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Collapse: The Venezuelan Banking Crisis of ‘94
Ruth de Krivoy. 2000

The Evolving Corporation: Global Imperatives and National Responses
Study Group Report. 1999

International Insolvencies in the Financial Sector
Study Group Report. 1998

Global Institutions, National Supervision and Systemic Risk
Study Group on Supervision and Regulation. 1997

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Clearance and Settlement Systems: Status Reports, Autumn 1992
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Clearance and Settlement Systems: Status Reports, Year-End 1990
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