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Basel III, BIS and Global Financial Governance

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Abstract

This paper analyzes the following aspects of global financial governance:

- Proposed BASEL III reforms for more stringent capital requirements and their implications for the developing world in particular.
- BIS proposals for better regulation of financial derivatives, including commodities futures, by moving away from OTC transactions towards organized exchanges.

The Basel reforms and the BIS proposals for regulating the derivatives markets have many positive features. However, they have not been designed with the needs of DCs and LDCs in mind. The consequences of Basel I and II and proposed Basel III are analyzed from the perspective of the developing countries. It turns out that specific concerns of developing countries have not received adequate attention within the Basel Reform Initiatives and more can be and needs to be done.

Keywords: dynamic complex adaptive economic systems, finance for development, financial architectures, financial crises, regional cooperation, BASEL III reforms, the BIS proposals.

JELClassifications:

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LIST OF ABBREVIATIONS

AESAN	Association of Southeast Asian Nations
AFC	Asian Financial Crisis
ASA	ASEAN Swap Agreement
BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
BITs	Bilateral Investment Treaties
BOP	Balance of Payments
BRIC	Brazil, Russia, India and China
CAR	Capital Adequacy Ratio
CCP	Central Counterparty
CDS	Credit Default Swap
CET	Constructive Evolutionary Theory
CFTC	Commodity Futures Trading Commission
CPSS	Committee on Payment and Settlement Systems
CRPRID	Center for Poverty Reduction & Income Distribution
CSO	Civil Society Organizations
DCAES	**Dynamic Complex Adaptive Economic Systems**
DHS	Demographic and Health Surveys
FCL	Flexible Credit Line
FTAs	Free Trade Agreements
FX	Foreign Exchange
FYDP	Five Year Development Plan
GDP	Gross Domestic Product
HDI	Human Development Index
HIPC	Heavily Indebted Poor Country
HDR	Human Development Reports
ICT	Information, Communication and Technology
IGO	Inter Governmental Organization
IMF	International Monetary Fund
INGO	International Nongovernmental Organization
IOSCO	International Organization for Securities Commissions
IPS	Integrated Package Services
LDC	Least Developed Country
LIC	Low-Income Country
MAG	Basel Committee Macroeconomic Assessment Group
MDGs	Millennium Development Goals

MDGR	Millennium Development Goals Report
MDRI	Multilateral Debt Relief Initiative
MICS	Multiple Indicator Cluster Survey
MOF	Ministry of Finance
BOJ	Bank of Japan
MPND	Ministry of Planning and National Development
MPO	Management and Planning Office
MTEF	Medium Term Expenditure Framework
NAPEP	National Poverty Eradication Programme
NEEDS	National Economic Empowerment and Development Strategy
NGO	Non Governmental Organizations
NPC	National Planning Commission
ODA	Official Development Assistance
OTC	Over the Counter
PC	Planning Commission
PRS	Poverty Reduction Strategy
PRSP	Poverty Reduction Strategy Papers
SBA	Stand-by Arrangement
SDR	Special Drawing Rights
SEC	Securities and Exchange Commission
SFT	Securities Financing Transactions
SIV	Structured Investment Vehicle
SPV	Special Purpose Vehicle
Stats SA	South Africa Statistics Office
TB	Tuberculosis
TWGs	Technical Working Groups
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
US	United States
VIE	Variable Interest Entity

1. INTRODUCTION AND BACKGROUND

As the Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System put it:

> "…the standard policy nostrums—that countries should have sound macroeconomic policies strong governance, transparency, and good institutions – may be less than helpful. Countries that held themselves out as models of best practices have been shown to have had deeply flawed macroeconomic policies and institutions and to have suffered from major shortfalls in transparency."

Against this backdrop, there have been many calls for changes in the global financial and economic governance architecture that would lead to a more stable and less risky international financial system. For example, internationally, there is momentum around BASEL III, a package of proposals to strengthen global capital and liquidity regulations. The United States government and various EU countries had introduced legislation aimed at reforming financial institutions under their jurisdiction.

Changes in the world financial and economic order have consequences for developing countries directly, through banking regulations and global/regional policies, and also indirectly through the impact on developed countries themselves, which can affect lending, foreign investments as well as international aid. In this context, it is possible to find the motivations for undertaking a study that will examine the principal changes that have taken place (or are likely to do so) as a result of the financial and economic crisis. These changes can also include alterations in financial and economic governance mechanisms and policies given the general economic context in which countries, in particular developing countries, are operating.

This paper documents the nature and scope of these principal changes, and analyzes their consequences for developing countries in particular. It also explores the important policy space issue by exploring analytically the conditions for their most effective responses. Without being exhaustive, the developments covered include:

- Proposed BASEL III reforms for more stringent capital requirements and their implications for the developing world in particular.

- BIS proposals for better regulation of financial derivatives, including commodities futures, by moving away from OTC transactions towards organized exchanges.

The methodological approach adopted here is a type of *constructivist* and *evolutionary* analysis of our complex international economic system and political economy. The technical work on aspects of this dynamic complex adaptive economic systems or DCAES in short, has been done in Khan(2004, 2011; Lin et.al. 2008) among other sources**.** The institutions I discuss and the alternatives I propose here are all path dependent, but in a non-deterministic manner . Social practices based on collectively held ideas by both elite and non-elite groups can matter in crucial ways. However, given the structural aspects of global financial and economic system and the conflicting ideas and norms, there are serious contradictions at all levels of the system. Recognition of such contradictions and conflicts at both ideational and material levels dialectically forms the "critical" part of my constructivist adaptive complex systems approach(Khan 2004,2006,2011).[1]

In analyzing the above in the context of the Developing Countries (DCs) in particular, the following features of DCs are highlighted among others:

a. DCs have fewer resources for coping with financial crises, particularly one which is global in its scope;
b. Most DCs lack automatic stabilizers due to the embryonic nature of their fiscal and social protection systems;
c. They have limited ability of borrow in international financial markets and this limits their ability to pursue countercyclical policies;
d. These threats are often exacerbated by global financial market integration and Free Trade Agreements (FTAs) and bilateral investment treaties(BITs). Many WTO commitments also affect the DCs adversely. IMF pro-cyclical Structural Adjustment Policies can also constrict the policy space.

[1] At the same time corporate actors are legitimate under some conditions. In this my analysis is similar to Wendt's (1987, 1999) constructivist approach which does not contradict a deep and sophisticated version of Scientific Realism. Indeed, both Wendt and I build upon a scientific realist ontology avoiding narrow determinism. See also Khan (2003a,b; 2008c), Best(2010) and Abdelal (2007).

The social and political construction of global and regional financial arrangements also depends critically on a supporting structure of complementary institutional network (CIN), norms, ideas and practices. Global financial architecture (GFA) and Regional financial architecture (RFA) both depend on their respective CIN within a global system of nation states and international organizations. Given the real interdependence within the system, all actors have some stake in sustained growth and stability with equity. At the same time part of the complexity of the global financial system arises from various contradictions and asymmetries in the system itself. Thus the central argument of this paper is that sustainable policies at the national level require a supporting network of GFA and RFAs that go some distance towards resolving the key issues arising from such contradictions and asymmetries. Appropriate national policies in their turn can contribute to the sustainability of the GFA and RFA. It can be shown that following an evolutionary theory of international financial institutions, two broad types of possible Global Financial Architectures can be identified.[2] In this paper, following Khan (2002c) the first is called an *overarching type*, exemplified by the classical gold standard and the defunct Bretton Woods system. The second is called a *hybrid form* that allows for the existence and coevolution of some Regional Financial Architectures as well. The changing roles of the IMF and national economic policies can be examined within these two possible financial architectures under globalization. The ongoing politics of re/construction of IMF along a more functional and equitable line is and will remain complex and require a separate treatment that is beyond the scope of this paper and therefore is not attempted here. However, the tentative steps taken towards regional cooperation in Asia since Asian Financial Crisis (AFC) are discussed to illustrate the opportunities and challenges posed by the need to evolve towards a *hybrid* GFA. The opportunities and challenges arising from the current global crisis are analyzed in this context.

In light of the above observations, in this paper I will discuss the problems of creating and expanding national macroeconomic policy space and economic governance for the developing countries in particular within a framework of overall global and regional financial architectures. The context of the current global financial and economic crisis gives such an exercise an

[2] For specific models and arguments see those developed in Khan (2001, 2002c, 2004 and 2005,2006) and Khan *et. al*. (2008). Khan (2001; 2005) formalizes various types of path dependence. In Khan (2002c) a specific argument called "the extended panda's thumb" is advanced to urge the utilization of the existing IMF with some modifications in a new, hybrid GFA. The arguments developed here also are consistent with Griffith-Jones(1998). See also Griffith-Jones et al.(2003,2006,2010 and 2013), Eichengreen(2013a,b;1999), and Eichengreen and Dincer(2013).

undeniable urgency. However, the theoretical approach towards a type of constructivist analysis which respects the structural complexities of a global real-financial economy with serious asymmetries, problems of managing risk and uncertainty and uneven development may have broader applicability beyond the current crisis. Whether state capacities exist for formulation and implementation of national economic policies may depend in large measure on the kind of global and regional financial architecture in existence at any point in time---with or without financial crises.

The structure of the paper is as follows. In section 2, the proposed Basel III reforms and their implications for the developing world are discussed. Controlling portfolio capital flows; particularly in the form of derivatives are an important dimension of preventive measures which can overlap with deregulated banking but still go beyond this. For this reason, section 3 takes up BIS proposals for better regulation of financial derivatives, including commodities futures, by moving away from OTC transactions towards organized exchanges in the context of the developing countries' special needs. The final section concludes.

2. Proposed BASEL III reforms for more stringent capital requirements and their implications for the developing world

The banking and finance world is now witnessing a transition from Basel I and II to Basel III. Drafted in 1988, the Basel I Accord was the first to set minimum capital requirements for international banks. The goal was to stop international banks from evading national regulators. Equity capital and published reserves from post-tax retained earnings (Tier I capital) were required to be equivalent to 8% of risk-weighted assets. Tier 2 capital requirements (reserves to cover losses, subordinated debt holdings, gains from the potential sale of assets, etc. were set at the same levels for Tier I capital. Much of the accord focused on delineating the appropriate risk-weights for assets. Risk weights were drawn to privilege sovereign debt, public sector

entities and long term claims on other banks. Mortgage and private sector debt were weighted much higher (50% and 100% respectively). The 1998 accord allowed national supervisors to implement stronger/supplementary measures of capital adequacy for nationally chartered institutions.

Drafted in 2004, Basel II represented a significant revision of the 1988 accord. It expanded the scope of the 1998 accord to cover alternative approaches to a variety of topics. The goal of the accord was to promote the adoption of stronger risk management practices by the banking industry. The three pillars rationale (minimum capital requirements, supervisory review and market discipline) was developed as a conceptual framework on the revision of the initial accord. While many of the key elements of the Basel I were kept in place (general requirement for banks to hold capital equivalent to at least 8% of risk-weighted assets, 1996 Market Risk Amendment, and the definition of eligible capital), a major change in the way risk was assessed was put into place. It allowed risk to be assessed under Bank's own internal models, thus relying upon banks to largely self-monitor their own risk-taking strategies. National supervisors were to buttress internal risk assessments by assuring minimum compliance to national standards. And banks were required to provide more public disclosures related to its capital positions. The Basel II framework was more risk sensitive than the 1998 Accord. Operational risk and market risk was separated from credit risk.

Table 1: Key Features of Basel I and II

Key Features	Basel I	Basel II
Capital Adequacy Requirements (CAR)	Tier I Capital Requirements: • Equity capital and Disclosed reserves • Had to be held at 4% of risk weighted assets Tier II Capital Requirements: • Miscellaneous debt • Held at 8% - Tier I holdings	1. Tier I & II requirements were not changed. 2. Assets of holding companies were included into requirements of banks. 3. Capital Reserves = 8% * Risk Weighted Assets + Operational Risk Reserves + Market Risk Reserves
Risk Weighting	Categories of risk weights: 1. 0%--included cash, sovereign debt held in domestic currency, OECD debt 2. 20%--development bank debt, OECD bank debt, short term non-OECD debt 3. 50%--mortgage debt 4. 100%--private sector debt	1. Sovereign debt was weighted according to its credit rating. 2. Bank debt could be indexed to sovereign debt ratings or to their specific ratings. 3. Private corporate debt rated junk was weighted at 150%. 4. Home mortgages were risk-weighted at 35%; corporate mortgages 100%.
Other Features	• Promoted the harmonizing of national regulations • Allowed national regulatory specificities into capital requirements	Banks could choose between three approaches to risk weighting: • Standardized Approach • Internal Ratings (IRB) Approach • Advanced IRB Approach Operational risk and market risk was separated from credit risk. Bank disclosures were made public. Regulators were given additional powers: • Creating capital buffers requirements • Intervene into internal risk modeling

Further Evolution: Going from Basel II to Basel III

Under Basel III, banks will be required to hold more capital against their assets than under Basel I and II. Among other things, this will have the effect of decreasing the size of their balance sheets and their ability to leverage themselves. The minimum amount of equity, as a percentage of risk-weighted assets, will increase from 2% to 4.5%. There is also an additional 2.5% buffer requirement, the so-called 'capital conservation buffer', bringing the total equity requirement to 7% [Caruana 2010, 4]. Total risk-adjusted capital requirements will remain unchanged at 8% [Demirguc-Kunt, Detragiache and Merrouche 2010, 4]. Deferred tax assets, mortgage servicing rights and other obscure forms of capital are now not allowed to be used to boost capital levels. Deployment of capital and payment of dividends will be constrained more. In effect, banks will be required to triple core Tier I capital ratios from 2% to 7% to hold against potential losses. They have until 2019 to implement these requirements [Masters, Hughes and Tait 2010].

There is also agreement on tough new liquidity rules. With the so-called "*liquidity coverage ratio*, "for the first time that Basel rules have specified a notional global target for liquidity needs [Masters 2010]. The rule would require banks to hold enough cash and sovereign debt to survive at least a month-long market crisis. Banks will have to hold reserves equal to 100% of undrawn corporate borrowing lines. This could be potentially problematic for developing market banks in countries without liquid government bond markets. A second liquidity rule, the "*net stable funding ratio*," would seek to reduce banks' dependence on short-term funding. Like much of the agreement, there is considerable delay over when banks have to begin formally observing the rules. For the new liquidity rules, banks have until 2015 to put them into place [Masters 2010].

Basel III imposes tougher requirements on the bonds that banks can count towards their regulatory capital. So-called hybrid securities which sit between equity and debt and were intended to act as a buffer to soak up unexpected losses must now include a mechanism (so-called 'bail-in' mechanism) for taking losses. This would allow them to be converted into equity or written off [Hughes and Masters 2011]. This rule will have to be implemented domestically (through national regulatory laws) or individually (through each bond issue) by 2013. Hybrid forms of debt like this and preferred shares are used to bolster regulatory capital and are cheaper

to issue than equity. However, Basel III will force the phasing out of these types of protected forms of debt.

The Basel Committee has also proposed a countercyclical buffer that could be imposed when aggregate credit growth is rapid enough to build up system-wide risk [Caruana 2010, 5].The buffer would be as large as 2.5% of risk-weighted assets and would be released on the judgment of domestic authorities to help absorb losses. Systemically important banks may also be asked to operate under more stringent rules. Capital surcharges, contingent capital, bail-in debt arrangements and peer reviews are policies that could be employed under rules delineated for these kinds of institutions [Caruana 2010, 5]. Basel III also embeds a reciprocity agreement into the operation of the agreement's countercyclical capital buffer:

> "Consider the case of a country in the region receiving strong capital inflows and experiencing rapid credit growth and buoyant asset prices. Before Basel III, any tightening in capital required of locally incorporated banks would lead to the objection that foreign banks could lend to firms from offshore without being subject to the more rigorous capital requirements. With Basel III, however, internationally active banks would be required by their home regulators to calculate the countercyclical capital buffer add-on for exposures to the country whether booked in the local subsidiaries or offshore" [Caruana 2010, 5].

In 2008, the Basel Committee opened its membership to large emerging markets in the hope that a more globally relevant set of standards could be conceived [Taylor 2010]. In some ways, developing countries *were able* to help shape a couple of the rules. New capital rules would have penalized countries which require international banks to take on local partners by requiring these banks to strip equity held by local partners from their Tier I capital totals. However, in July of 2010, a compromise was agreed upon to the benefit of these emerging economies [Masters 2010]. For **key milestones** of Basel III upto 2018, the reader is referred to the **Appendix. As of July 22, 2013, the US and EU have accepted many provisions. For example, it was announced recently for the US:**

The federal banking agencies have just adopted comprehensive regulatory capital rules that will implement **Basel III** in the U.S. In turn, it is time for banking organizations to understand the new rules and bring themselves into compliance with them by the beginning of 2015 (2014, for the largest banking organizations). The new rules make important changes to the definitions and components of, and minimum requirements for, regulatory capital; revise the required regulatory deductions from, and adjustments to, regulatory capital; and create a new "standardized approach" framework for the risk-weighting of assets on the banking and trading books of U.S. banks. In addition, the federal banking agencies have made some important changes to the "advanced approaches" regulatory capital framework that applies to the largest U.S. banking organizations.

Topics of discussion will include:

- The revised minimum capital requirements, and the new definitions of capital;
- Required deductions from and adjustments to capital;
- The new "standardized approach" framework for the risk-weighting of on-balance sheets assets and off-balance sheet exposures;
- Changes to the advanced approaches capital framework;
- The major changes made in the final rules from the June 2012 proposed capital rules;
- The agencies' proposed supplemental leverage ratio requirements for the largest U.S. banks; and
- Other recent and prospective regulatory capital developments.[3]

However, Andrew Cornford is on the mark when he states:

While the inclusion of the leverage ratio in Basel III is an attempt to strengthen the Basel capital framework, it only sets regulatory minima and is soft international law.[4]

Capital Adequacy Ratios (CAR) and Developing Markets

Stricter definitions on what constitutes core Tier I capital is of interest to developing market banks. Banks are going to have to hold much higher levels of common equity to satisfy their Tier I requirements [Caruana 2010, 4]. Resilience and capability will be judged, then, by the soundness and depth of equity markets in developing countries. No doubt, domestic debt and equity markets must be strengthened to provide space for banks to raise fresh capital. Improving the quality and depth of debt and equity markets in developing countries will be quite a task, especially for countries who currently have very limited markets.

Boosting capital adequacy requirements may indeed lead to institutions being perceived as safer, lowering their costs of capital. Larger banks would benefit most by being able to issue debt more cheaply. Banks and corporate firms that are guaranteed through large banks will probably see their costs of issuing debt decrease. This will occur, because bonds issued by these institutions will be an attractive investment for firms wishing to purchase assets that are lower risk-weighted.

[3] See http://www.lexology.com/library/detail.aspx?g=5afa5218-6a75-4801-9efa-90699fd7d2af Last consulted on Aug. 1, 2013

[4] See the Triple Crisis Blog, http://www.triplecrisis.com/(last checked on Aug. 3, 2013) and also Cornford(2013) at the IDEAS site http://www.networkideas.org/news/jul2013/news19_Basel_III.htm (last checked on August 3, 2013)

The effects of higher CARs on banks are nuanced and difficult to tease out. Simulations done on the effects of Basel II and increased capital adequacy ratios on the Brazilian and Mexican economies showed that GDP in each country would be adversely affected [Barrell and Gottschalk 2010]. The analysis showed that a credit crunch would occur in each of these cases, and accompanied by an increase in lending rates. Although the Basel II reforms were never implemented fully, marginal changes in the nature of capital requirements will most likely not affect the results of the econometric analysis. If anything, tougher capital restrictions and more stringent ratios might affect GDP even more adversely.

From a different perspective, econometric evidence by Ediz, Michael and Perraudin (1998) showed that UK banks responded to regulatory pressures to add to their individual CARs not by lowering their risk or lending profile, but by actually increasing their capital provision. As a result, risky portfolios were complemented by raising new capital [Gottschalk and Sen 2010, 22]. In the wake of Basel III then, it might be more difficult to tease out how even the developed country banks could respond to more stringent capital requirements. That the success of raising capital in equity markets was buoyed in 2010 can be noted here. As regards developing countries, banks in search of returns may therefore not shy away from ramping up lending and investment operations. Indeed, it is feasible that the total amount of credit to developing countries may continue to increase. More important, where and to whom will that credit go?

This result should be compared against the finding by Montgomery (2005) which indicated that since Basel I was implemented, international banks based out of Japan reduced their risk profile. This was, in part, caused by regulatory pressures from the MOF and BOJ.

Econometric analysis on developing country banks showed that poorly capitalized banks reduced risk when under regulatory pressure (from Basel I and II regimes), as opposed to raising new capital [Gottschalk and Sen 2010, 23]. More stringent CARs under Basel III will force poorly capitalized banks in developing countries to make difficult choices over how they will provision capital and furthermore, how they will dole out credit.

Banks in large developing markets have had to hold CARs higher than the 8% minimum under Basel for some time now [Gottschalk and Sen 2010, 24]. This is a result of domestic regulatory regimes which were more stringent than Basel I and II regimes. As a result of these regulatory regimes, higher banking concentration occurred in Brazil. Credit to the private sector declined, and holdings of sovereign securities went up significantly [Gottschalk and sen 2010,

25]. This is directly related to the risk-weighting formula imposed by earlier Basel regimes. The same effects have also been seen in India [Gottschalk and Sen 2010, 28-29]. Increases in bank credit have notably lagged behind increases in deposits and holdings of sovereign debt by large Indian banks. Credit towards SMEs (as a percentage of total credit) fell by half between 2000 and 2007 [Gottschalk and Sen 2010, 29].

Credit Access under Basel III

New leverage requirements on Tier I and Tier II capital may mean that banks will be induced to reduce both their exposure to riskier assets to a significant degree [Gottschalk and Sen 2010, 20]. For developing economies, the implications are serious for much of the formal economy. Evidence of credit rationing from earlier Basel implementation is pertinent here. The introduction of Basel I in Brazil and India in the 1990s helped lead to a continual decline in total credit (as a percentage of GDP). Credit expansion in India slowed over the same period [Gottschalk and Sen 2010, 17]. Under Basel II simulations, access to household credit in large developing nations did fall significantly. However, higher interest charges vis-à-vis higher capital ratios would most likely lead to a decrease in household wealth and consumption [Barrell and Gottschalk 2010]. Basel II accords meant that domestic and foreign banks in emerging markets would have to ration credit away from SMEs and towards larger institutions (for standard risk and information-gap reasons) [Calice 2010].

Under Basel III, pressure from regulatory authorities may lead to further rationing in developing markets by commercial banks. Less credit to SMEs in the formal sector and to others in the informal sector will obviously play a role in reducing the overall economic activity of the country in question. Informal sector-formal sector linkages may further exacerbate the problem, as the SAM-CGE modeling in another context by Sinha and Khan(2010) shows.[5]

Developing World Banks and Competition under Basel III

Basel II had already presented tremendous implementation challenges for banks in developing countries [Gottschalk 2010, 3]. The challenges included the need to build large databases to run sophisticated risk models and to import the human capital necessary to assess,

[5] See Anushree Sinha and Haider A. Khan, 2010. “The Gains from Growth for Women in India: A SAM- and CGE-based analysis,” in Amelia Santos-Paulino and Guanghua Wan ed. *The Rise of China and India: Development Strategies and Lessons*, Palgrave/Macmillan,

monitor and act on such models [Gottschalk 2010, 4]. These costs were detrimental to competition against large foreign banks which had the resources to use these models to their advantage. Complying with Basel II meant that developing country banks had to divert resources away from activities that directly benefit economic growth and poverty alleviation in developing countries [Gottschalk 2010, 7]. Some of the PRSP documents allude to this problem. Clearly, this has implications for MDG goals and MDGRs that will need further exploration for which the LDCs in particular are poorly equipped.[6]

Technically, Basel III is going to be very difficult to implement for banks in the developing world. Proposals involve sophisticated stress testing that goes beyond the capacities of banks in developing markets [Taylor 2010]. While banks have until 2019 to meet Basel III requirements, domestic financial markets will face global concerns that will constrain their ability to meet requirements. Loose monetary policy in the developed world will continue to funnel cheap money to developing markets. Reigning in this money by meeting Basel III standards would be beneficial and relatively painless. Emerging markets, though, face pressure to continue to allow cheap credit to flow in and not risk alienating foreign investors [Taylor 2010].The unevenness and asymmetry of the current global economy and finance is particularly striking in this context.

Because developing country banks are going to be held to the same risk and regulatory standards as banks in the developed countries, it will be critical to see to what extent developing country banks can realistically handle all of these new requirements.. The Basel Committee “has raised the bar for the supervisory review of risk management practices” [Caruana 2010, 3]. Areas that are more fully addressed in the new management rules include: firm-wide governance[7], capturing off-balance sheet exposure risk and securitization activities, valuation processes for financial instruments, stress testing programs, risk concentrations and aligning risk and return incentives. Transparency is also being stressed. New rules from the Committee require that banks “disclose all elements of the regulatory capital case, the deductions applied and a full reconciliation to the financial accounts” [Caruana 2010, 3].

[6] See Haider A. Khan, 2006b. “An In-Depth Review of the Country Millennium Development Goals Reports,”(submitted to UNDP) which anticipates some of these problems.

[7] This was already an issue in the aftermath of the AFC for the Asian economies. See Khan (2004) chapter 6, pp.98-144 on corporate governance for a detailed discussion.

As regards capital requirements, leverage ratios for Tier I capital will not probably be of much relevance to developing market banks which rely mostly on equity, reserves and deposits. Their Tier I ratios are already high. Most big banks in China and India hold core Tier I ratios above 9% [Masters 2010]. A slowdown in the proliferation of financial products means less to these kinds of banks.

One of the major critiques against Basel I and II was its bias towards bank concentration and towards less diversity in financial sectors in terms of ownership, role and size. Financial innovation was also hampered [Gottschalk 2010, 4]. Unless developing market banks can, over this decade, bring up to speed the risk-management and supervisory capacity that exists elsewhere, they face serious competitive issues. Further liberalization of financial markets in accordance with the Washington consensus will only compound this issue. This has serious implications for borrowers who may get shut out if international finance comes to predominate in domestic banking systems. The most serious problems may arise in the SME financing for employment and development.

States as Collective Corporate Actors and Basel III

National regulatory authorities will have to begin incremental implementation of Basel III on January 1, 2013. Implementation will end on January 1, 2019 [Caruana 2010, 6]. To implement the new rules, authorities must be able to engage in an ongoing dialogue with senior bankers on business and risk models, have a more intensive and effective presence in the banking sector and be capable of developing the capacity to have broad power for early intervention and corrective action [Caruana 2010, 7]. Regulators will need clear mandates, independence, accountabilities, tools and resources adequate enough to do their job in using Basel III to strengthen domestic financial and banking systems. Risk management systems to be imposed domestically by Basel III face serious impediments in developing markets. Implementing and monitoring such systems require high levels of human capital and other things not readily available in emerging markets: independence, legal protections and integrity to challenge corruption at the State level [Taylor 2010].

Domestic banking systems which implemented Basel I and II saw a distinct trend towards higher banking concentration, more distinct division of labor between larger and smaller banks (and between foreign and domestic banks)' and changes in banks' portfolios away from credit to

the private sector and towards government securities. These systems also saw a trend away from corporate credit and towards consumer credit [Gottschalk 2010, 2]. Basel II had an implicit bias against SME borrowers towards larger corporations. As capital requirements and definitions are more stringent this time around, the major focus for States will be how to make up for the impending problem of credit rationing by domestic banks away from small but productive businesses in the economy.

To address this problem, some options do exist under Basel III. States in the developing world will see their ability to issue sovereign debt buoyed by Basel III. Because sovereign debt carries a very low risk weight, it will continue to be a preferred method of asset creation through loan expenditure by international banks. Developing countries must thus be wary of the attractiveness of its sovereign debt to banks that are looking to manipulate their capital and risk structures. Simulations done on the effects of Basel II on sovereign access to credit and spending showed that countries would be more likely to increase their spending and deficit levels [Barrell and Gottschalk 2010]. As we already know, Basel capital requirements have forced banks to disburse an increasing portion of priority credit towards more profitable, but not necessary productive, endeavors [Sen and Ghosh 2010]. These sources include many forms of consumer credit. "Social priorities of credit" have been negatively affected by the Basel regimes [Gottschalk 2010, 12]. Fiscal policy, whether direct or through policy banks may not be able to make up for the credit gap that forms as Basel regimes hit smaller banks in developing countries. The attractiveness of sovereign debt then could provide means for the State to channel more financing towards State development banks or to firms directly. As such, they must traverse a thin line between excessive and perhaps anti-developmentalist fiscal conservatism and one that promotes expenditures/lending for pro-poor and development activities without much fiscal prudence. Critical to this cause, the IMF and the World Bank must allow for countries to use their policy space to further promote growth and development priorities, especially under the new Basel regime.

Thus for developing market banks, States will have to find creative and reliable means for their banks to meet capital requirements more easily. For this purpose, the nurturing of nascent equity and bond markets will be critical. Developing new instruments and financial markets are tedious and time- and resource-consuming. If developing market banks are not able to increase their buffers through equity or bond markets, then they face serious competitive

issues from international rivals. This will especially be the case in countries that have liberalized their financial markets. The Basel Committee has sought to allay these worries by lengthening the time over which the developing country banks need to come into compliance. With that said, any push to strengthen financial market depth and maturity could lead to fewer resources going to generate sustainable growth and pursue poverty- reduction.

It must also be emphasized that inadequate regulatory capacity will make it difficult for developing markets to cope with financial innovation, and ultimately to keep the financial system stable. Multilateral institutions will have to be ready to provide technical support and resources to help countries deal adequately with the implications of Basel III on regulatory authorities. States will also have to find ways to hang onto to critical regulatory staff. Regulatory staff proficiency has been a recurrent problem in developing countries, because many competent staff are hired away into the private sector [Prasad 2010, 13].

Finally, the Basel Committee Macroeconomic Assessment Group (MAG) has produced an estimate of the implications of Basel III on the global economy. Its results show a maximum decline in the world's GDP of 0.22% over the next decade from its baseline forecast [MAG 2010, 2]. These estimates include the potentiality of spillovers across countries. Countries that rush to put Basel III in place may face relatively larger reductions in GDP and growth [Prasad 2010, 6]. Firms that are already well stocked with capital and/or are able to shift their risk profile towards safer assets will fare much better over the next decade. They will be able to offer debt more cheaply and avoid cutting back on lending volumes [MAG 2010, 2].

Lending volumes are projected to fall by 1.4% relative to baseline estimates over the next decade [MAG 2010, 5]. Lending spreads are projected to widen by 15.5 basis points during the same period. To ensure positive effects of spreads and lending volumes on future growth is critical. Based on the MAG models, tighter lending requirements in the face of Basel III could have a larger negative effect on world GDP than in models that weight the effect of credit spreads on volumes more heavily. Models also forecast that growth will be lower for countries that do not (or cannot) employ monetary policy to address the effects of higher capital requirements [MAG 2010, 6].

In light of these econometric estimates, further emphasis here is placed on the ability of States to use fiscal and monetary policy to support the growth of their economies. Because poor States are already fiscally constrained (whether through tax capacity, IMF/WB conditionality,

economic shocks/hardships), Basel III further complicates the growth and poverty-alleviation picture. Unfortunately, it means that these States will need to become more reliant on each other to implement the reforms and support regional development initiatives. Failure to do so will then mean that States will have to become more reliant on international technical expertise and resources. In this light that fact that the States have a full decade to delineate and implement a proper course is not as long a time horizon as it first appears to be. Even if the banking sector is adequately reformed, the proper use of financial markets will also require an enabling global financial architecture and an overall reduction of systemic risk. In the next three sections I take up these topics. The next section discusses risks arising from the OTC derivatives markets. The two sections following discuss the role of a reformed IMF and regional financial architectures in promoting financial stability for pursuing development policies leading towards equitable and sustainable growth and poverty reduction.

3. BIS proposals for better regulation of financial derivatives, including commodities futures, by moving away from OTC transactions towards organized exchanges.

Pre-Crisis Buildup of Problems

Recently BIS annual report summarized its current position as follows:

> Since 2007, actions by central banks have prevented financial collapse. Further accommodation is borrowing time for others to act. But the time must be used wisely. The focus of action must be on balance sheet repair, fiscal sustainability and, most of all, the economic and financial reforms needed to return economies to the real growth paths authorities and the public both want and expect (Chapter I). After reviewing the past year's economic developments (Chapter II), the remaining economic chapters of the 83rd Annual Report cover the critical policy challenges in detail: reforming labour and product markets to restore productivity growth (Chapter III), ensuring the sustainability of public finances (Chapter IV), adapting financial regulation to ensure resilience of the

increasingly complex global system (Chapter V), and re-emphasising the stabilisation objectives of central banks (Chapter VI). [8]

The hallmarks of the global financial crisis were the contagion and counterparty risks taken on by financial institutions. Both of these arose at least in part from banks involving themselves in capital market activities for which they did not carry enough capital. Securitization and its warehousing on and off-balance sheets proved to be an intractable problem even for the firms involved. In the U.S., Variable Interest Entities (VIEs) to which banks are linked had to be consolidated onto balance sheets if banks became insolvent or if liquidity of funding became problematic. Capital regulations simply could not cope. Similarly, counterparty risk became a major issue with the failures of Lehman Brothers and AIG [Blundell-Wignall and Atkinson 2010, 5].

During the pre-crisis period, financial firms were able to increase the asymmetry of information and costs for consumers in the OTC and exchange-traded derivatives marketplaces through the internalization of information. This led to higher bid-ask spreads that benefitted financial firms' fee schedule. Customers were left in the dark on the intricacies of contracts, the risk of holding such contracts and were forced to pay more for the contracts than they would otherwise. Had these contracts been transparent and competitive, the price would have been much lower. This lack of transparency and a noncompetitive, imperfect market structure is coupled with sheer size of the derivatives industry. At its peak in June 2008, the outstanding notional amount of contacts stood at $760 trillion, equivalent to the value of everything produced on Earth in the previous 20 years [Financial Times 2010].

Emerging Markets

Daily turnover in derivatives in emerging markets has expanded fourfold over the past decade, to over 6% of emerging market GDP [Mihaljek and Packer 2010, 44]. Daily turnover derivatives was about $1.2 trillion daily last year [Mihaljek and Packer 2010, 44]. While this daily turnover is still less than a tenth of the turnover in advanced economies, the figures are notable. Since 2001, turnover has increased by over 300%, a faster rate than the increase in the daily turnover in advanced financial markets (~250%). Both OTC and exchange-traded

[8] See http://www.bis.org/publ/arpdf/ar2013e.htm
Last consulted on August 1,2013.

transactions are substantial. Most of these derivatives are foreign exchange derivatives (around 50% of the total daily turnover) [Mihaljek and Packer 2010, 45].

A growing majority share of these transactions are being completed cross-border and offshore. Counterparties to FX derivatives trades are increasingly doing cross-border business; cross-border shares have risen to 67% in 2010 from 59% in 2004 [Mihaljek and Packer 2010, 48]. This ratio now mimics that found in advanced economies. Offshore trading of currency has increased substantially as well. For example, more than 90% of trading in the Brazilian real, the Mexican peso, the Hungarian forint, the Polish zloty and the Turkish lira takes place offshore [Mihaljek and Packer 2010, 55].

OTC markets are more important for derivatives trading in emerging markets. Half of turnover occurs on OTC markets in these countries. In advanced countries, the ratio is more like 60/40 [Mihaljek and Packer 2010, 44]. Of the OTC derivatives transactions in emerging markets, nearly 90% are foreign exchange derivatives [Mihaljek and Packer 2010, 45]. This makes any proposals coming out of the BIS on OTC reform especially important for derivatives markets that are maturing in emerging economies.

The financial crisis did not work to reverse the proliferation of OTC and exchange-traded derivatives in emerging markets, unlike in advanced economies. The total daily turnover of derivatives (both markets) increased by a quarter from 2007 to 2010 [Mihaljek and Packer 2010, 46]. Notable and expected, lightly-regulated traders (pension, insurance, hedge funds) have increased their share of total turnover by nearly a third during this time period as commercial and investment banks have had to slow operations. Reporting dealers constituted only 43% of daily turnover in OTC FX trading in 2010 [Mihaljek and Packer 2010, 49]. This could be particularly problematic as reform on these transactions goes further.

As countries continue to develop their financial markets and their economies grow, the proliferation of OTC and exchange-traded derivatives markets will occur making the institution of a proper regulatory structure a clear imperative[Mihaljek and Packer 2010, 55].

Financial Derivatives

World OTC derivatives markets have seen shrinkage in volume during the last couple of years. Despite the proliferation in OTC markets in emerging markets, the value of outstanding contracts fell 4% in the BIS latest figures [Van Duyn 2010]. Most of the shrinkage has been in

the market for credit default swaps, as companies and countries have largely (save Europe) been able to recover from the financial crisis.

Leading regulatory figures have stressed that derivatives markets must become more transparent, not only amongst themselves, but with the public as well. In the wake of the crisis, firms which have large derivatives trading desks have had to vastly increase the information they provide to regulators about their positions [Mackenzie 2010]. More is going to be asked of these traders in the future. It is hoped that greater transparency will allow customers to both have more knowledge of these products and be able to demand smaller bid-ask spreads [Mackenzie 2010]. As part of new Basel III proposals, banks will be required to apply tougher and longer margining periods as a basis for determining regulatory capital when they have large and illiquid derivative exposures to a counterparty [Blundell-Wignall and Atkinson 2010, 9].

Commodity Futures

Financial market dynamics have played a part in fuelling the most recent commodity-boom. Regression analysis has shown that commodities are uncorrelated or negatively correlated with traditional asset classes of equities and bonds. Such analysis has allowed investment portfolios to hold commodities to reduce risk and enhance returns. More non-traditional players have entered the market as the financial crisis deepened and spread.

Global turnover in commodity derivatives has grown significantly over the past several years [Kiang 2008, 1]. According to BIS statistics, the notional value of OTC commodity derivatives contracts outstanding reached $6.4 trillion in mid-2006, about 14 times the value in the late 1990s [Domanski and Heath 2007, 53]. By the middle of last decade, the share of commodities in overall OTC derivatives trading reached nearly 2% [Domanski and Heath 2007, 53]. Outstanding commodity derivatives contracts peaked in 2008 ($13.3 trillion notional amount outstanding) and have declined rapidly in the wake of the crisis. In June 2010, the notional amount outstanding was around $3 trillion [BIS Quarterly Review 2010, A121]. Compared with physical production, the volume of exchange-traded derivatives was around 30 times larger for major minerals in 2005 [Domanski and Heath 2007, 54]. At that time, 90% of swaps and options trading in oil was done in the OTC market. Speculation on U.S. commodity exchanges now probably constitutes the majority of all interest/positions on these markets.

Fund managers and other investors have also piled money into commodities markets. During asset bubbles or even during a partial downturn, the return on going long in these markets is compared with many other asset classes [Domanski and Heath 2007, 55-56]. High commodity prices will continue to shape manufacturing decisions and future trade flows. Elevated shipping costs and scarcity in some commodities markets raise the stakes on ensuring that exchanges and markets in the future are conducted in a fair and licit manner. Needless to say, prolonged political turmoil can inevitably complicate the picture.

Thus commodities markets now are very similar to mature financial markets and exchanges. The BIS admitted as much in a paper on financial investors and commodity markets back in 2007 [Domanski and Heath 2007, 54]. The increasing diversity and complexity of financial instruments in commodities markets demand an increasing need for infrastructure and regulation to protect actual supply and demand interests [Kiang 2008, 2]. The 2007 BIS paper acknowledged that evidence pointed to price levels and volatility in commodities markets that could not be justified by economic fundamentals [Domanski and Heath 2007, 61-62]. Prices were supporting speculative investor/ interests, as opposed to sound commercial interests.

Organized Exchanges for OTC transactions

Counterparty risk arising from the use of OTC derivatives was one of the key hallmarks of the crisis. Regulatory arbitrage and shifting promises was an important contributor to the explosion in credit default swap(CDS) use. Tax arbitrage too has allowed promises to be transformed with strong implications for bank on- and off-balance sheet activity. In 2009, key regulatory officials from the BIS and around the world sought to discuss and then formulate ways to regulate OTC markets. As it stands, the interest rate swap market is the only OTC derivatives market in which actors and financial institutions rely on central clearing mechanisms in any way. Forty five per cent of this market is based in London. The uses of clearing houses for other OTC transactions are virtually non-existent [Cecchetti 2010]. Currently, only about 11% of positions have been shifted to CCPs, exchanges or clearing houses [Van Duyn 2010].

The BIS has specifically called for the requirement that all standardized OTC derivatives be cleared through central clearing houses [BIS 2010, 61]. In their “Review of the Differentiated Nature and Scope of Financial Regulation,” the BIS stressed that these CCPs impose robust margin requirements, necessary risk controls and minimize the use of customized OTC

derivatives [BIS 2010, 61]. It also stressed that unregulated traders in these markets (hedge funds, SPVs etc.) ought to be placed under a regulatory architectures, especially given their proliferation in CDS and insurance markets in the past several years [BIS 2010, 70]. Collateral requirements on derivatives exposure (even for firms with high credit ratings) is another option being debated within the BIS.

The chief economist at the BIS and the US Fed Chairman Bernanke both have spoken about the need to require corporate derivatives users to rely on central clearing houses. Encouragement would come through requiring additional capital for contracts not cleared through a CCP [Cecchetti 2010; French *et. al*. 2010]. CCPs would have to be very well designed (strong operational controls, appropriate collateral requirements, sufficient capital, etc.) to guard against the issue of concentrating risk onto the clearing houses. Officials also spoke of the need to encourage market participants to create standardized exchange traded derivatives for all risk types currently handed in OTC transactions. Non-standardized contracts would then be place higher capital requirements on financial institutions. In the future, more serious consideration could be given towards the introduction of product registration and ‘consumer’ protection for financial innovations, products and contracts. This kind of consumer protection, product registration scheme would be akin to a “pharmaceutical style warning system” [Financial Times 2010].

Another goal of early discussion would be to increase transparency in the CDS market so as to improve the ability of market participants to identify potential problems [Cecchetti 2010]. Increasing transparency would have to involve targeting the “index and single-name CDS contracts that are relatively liquid and standardized…[and] introducing trade-reporting similar to that in the TRACE system, which provides post-trade price transparency for US corporate bonds” [Cecchetti 2010].

U.S. And EU legislation will require financial institutions to trade through CCPs, but many market participants would be exempt from any legislation. Regulators are pushing for a narrow exemption rule to be into place that only allows non-financial end-users to be exempt from having to clear through exchanges or clearing houses [Mackenzie 2010]. Dodd-Frank Act implementation will mean that many of the world’s largest derivatives traders will be subject to have transactions cleared through CCPs and other types of exchanges [Van Duyn 2011]. Specific rules for firms doing business within the U.S. should be set this summer. Dodd-Frank will place

two agencies, the Commodity Futures Trading Commission (CFTC) and the Securities and Exchange Commission (SEC), in charge over directly overseeing these OTC markets [Van Duyn 2011]. Delineation of rules by these agencies will certainly play an important role in how the BIS and other regulators will oversee these markets in the years ahead.

Critical to the BIS proposal to move OTC transactions onto organized exchanges, banks under the new Basel III regime will qualify for a 2% risk weight for counterparty risk exposure if they deal with centralized exchanges (that meet regulatory criteria). Qualifying CCPs will receive a low risk weight (2%) [BIS CCP Proposal 2010, 1]. Default fund exposures to a CCP will be capitalized according to the estimated risk from such a default fund. This proposal creates incentives to use these centralized exchanges since higher risk weight charges will apply for bilateral OTC derivatives:

> As part of the Basel III reforms, the Committee has materially changed the CCR regime. These changes significantly increase the capital charges associated with bank OTC derivatives and SFTs and thereby create important incentives for banks to use CCPs wherever practicable. [BIS CCP Proposal 2010, 2].

Rules arising from the consultation on the BIS proposal will be finalized in September this year (following an impact study) and plans to be implemented beginning in 2013. CCPs will ultimately under the regulatory reach of the CPSS-IOSCO. Any CCP that does not qualify under CPSS-IOSCO rules will force any financial institution to hold significantly more capital to protect against default of that CCP [BIS CCP Proposal 2010, 6]. The use of trade repositories (TRs) will also be boosted. TRs for CDS and interest rate derivatives already exist. They feature electronic databases of open OTC positions and publish statistics on volumes and market activity. Very little of this information is available, however [Cecchetti 2010].

In addition, the CPSS-IOSCO has issued recommendations on improving the accessibility and capacity of trade repositories. Augmenting trade repositories would provide much greater transparency to OTC derivatives markets by making available data on open trades available to the public [CPSS 2010]. Repositories standardize and make information widely accessible to all market actors.

It should be emphasized that the pervasive discussions and many proposals on OTC markets, commodity rules and CCPs are in their relative infancy. Most of the specifics are still in the consultative phase. It is hoped that by September of this year[9], a more thorough regulatory

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[9] That is, 2011.

regime will be developed. There are many controversial areas as Blundell-Wignall and Atkinson (2010) and others have pointed out. According to the former:

Prior domestic and international regulatory regimes were unable to properly gauge to what extent securitization dampened (hid) balance sheet credit growth in the past, leading to false signals that there were no leverage problems. The same could very well occur in Basel III, where future developments in the shadow banking system could lead to similar distortions that would be impossible for supervisors and other policy makers to identify.

They also claim:

> Measures/proposals from Basel and the BIS to get more OTC derivatives onto exchanges should create more reliable traded price data and improve the modeling of some of these exotic instruments. Firm-specific requirements of non-financial and financial firms for tailor-made derivatives suitable to individual needs, however, will likely contribute to the already large size of the OTC market. Individual derivatives (continually innovating) are neither conducive nor really able to be traded on exchanges. This presents a significant regulatory problem in the future [Blundell-Wignall and Atkinson 2010, 11].

The argument that there may be over-regulation of securities and derivatives markets has also been advanced. The OECD points to the activity of hedge funds, who act like "capital-market oriented banks" [Blundell-Wignall and Atkinson 2010, 13]. They are lightly regulated, issue securities in their own name and invest with leverage on behalf of investors. Market discipline in the absence of public guarantees help keep leverage ratios significantly lower for these institutions. If regulations on banks are ramped up (especially on diverse, exotic transactions), there will be a corresponding shift in the quantity and nature of business conducted within the shadow banking system [Blundell-Wignall 2010, 14].

Despite the proposal to move OTC transactions onto exchanges, Basel III "does not deal with the most fundamental regulator problem identified: that the 'promises' that make up any financial system are not treated equally – in particular banks can shift them around by transforming risk buckets with derivatives (particularly credit default swaps) to minimize their capital costs – including shifting them beyond the jurisdiction of bank regulators – e.g. to the insurance sector in a least regulated jurisdiction. The extent of activities in the shadow banking system also a part of the problem related to how similar promises are treated by regulators. This has many implications for the reform process" [Blundell-Wignall and Atkinson 2010, 21].

It has also been claimed that increasing capital requirements on counterparty risks provides a strong incentive to push OTC transactions onto CCPs and other exchanges. It is likely

that a significant amount of activity will be pushed here, concentrating risk onto members of the clearing houses and onto the clearing houses themselves. The total risk might be lower overall, but its concentration introduces new systemic concerns over the integrity of exchanges [S&P 2010, 6].

Furthermore, questions can be asked about the ability of CCPs and other exchanges to effectively manage the centralization of risk onto their books [Financial Times 2010]. Lack of availability of prices, limitations of market liquidity and product differentiation is going to make it hard for any exchange to model and contain risk. Lack of liquidity within these markets may arise if capital requirements on counterparty risk are increased. This could adversely affect the integrity of the clearing system [Financial Times 2010]. Tighter derivatives markets may be good for the future of the entire financial system, but it will certainly have a short- to medium-term impact on real economic activity.

As Das [Financial Times 2010] thoughtfully remarks:

> The credit quality of the CCP is crucial. Currently, private clearing houses are contemplated. The CCP's capitalisation and financial resources as well as the risk management systems will be important in ensuring its credit standing. Commercial motivation (for market share and profit) may conflict with risk management requirements. It is not immediately apparent how these competing pressures will be accommodated. The US believes that privately-owned clearing houses are the solution. The CCP is designed to reduce systemic risk but in reality, the CCP may become a node of concentration. The heavy investment required to establish the infrastructure to clear contracts through the CCP will mean that a few large derivative dealers (probably US and European) will quickly dominate the business. Other dealers will inevitably be forced to clear and settle trades through these dealers creating different counterparty credit risk and perversely increasing systemic risk. Maximisation of benefits of central clearing requires a single clearing house. Currently, multiple CCP appear likely, as different commercial clearing houses compete for the latest frontier land grab in financial markets. National prejudices, inherent mutual distrust, promotion of national champions as well as feared loss of sovereignty and control of financial markets will mean multiple CCPs located in different jurisdictions. This will require, if feasible, inter-operability, cross margining and clearing arrangements between exchanges and jurisdictions. Instead of decreasing risk, this may create new and complex exposures. For example, international regulators are yet to agree on the definition of a standardised contract or the market participants required to transact through the CCP. It is also not clear who will regulate and oversee the system, especially where it transcends national boundaries.

From the perspective of DCs and LDCs these controversies point to an increasing need for multilateral solutions within a global framework. This leads us to a consideration

of the need for a new GFA and its possible structural requirements which are discussed in a companion paper.

4. Summary and Conclusions

The history of financial crises shows that they cannot be prevented once and for all in a globalized monetary economy with unpredictable ebbs and flows in capital movement. This history also shows that financial markets have short memories and limited long-term learning capacity. Thus there needs to be--- within the limits of human fallibility--- a well-designed set of institutions capable of dealing with the tendencies towards financial instability and crisis.

Given the unevenness in the structure of the global economy, the developmental consequences of financial crises are particularly important to analyze when designing institutions to contain and manage such crises. In this paper, particular attention has been given to the fact that the negative consequences for output growth, employment, income distribution and poverty reduction are relatively more severe for the DCs and LDCs. At least partly this occurs because of the following characteristics among others:

a. DCs and LDCs have fewer resources for coping with financial crises, particularly one which is global in its scope;
b. Most DCs and all LDCs lack automatic stabilizers due to the embryonic nature of their fiscal and social protection systems;
c. They have limited ability of borrow in international financial markets and this limits their ability to pursue countercyclical policies;
d. These threats are often exacerbated by global financial market integration and Free Trade Agreements (FTAs) and bilateral investment treaties (BITs). Many WTO commitments also affect the DCs adversely. IMF pro-cyclical Structural Adjustment Policies can also constrict the policy space.

In areas such as the derivatives markets and portfolio capital flows, the shortfall in regulatory capacities for these countries can leave them vulnerable. Even in banking, the well-intentioned Basel regulations can either not be implemented, or worse, as this paper illustrates, there are

aspects of Basel II and Basel III that can harm the developmental processes. Thus a careful rethinking of these issues and further capacity building for DCs and LDCs will be necessary. In light of the econometric estimates discussed earlier, this paper emphasizes the need for enhancing ability of DCs and LDCs to use fiscal and monetary policy to support the growth of their economies. Because poor States are already fiscally constrained (whether through tax capacity, IMF/WB conditionality, economic shocks/hardships), Basel III further complicates the growth and poverty-reduction picture.

The analysis here leads to the conclusion that these States will need to become more reliant on each other to implement the reforms and support regional development initiatives. Failure to do so will then mean that these States will have to become more reliant on international technical expertise and resources which may or may not be forthcoming. This may be the time for multilateral agencies to devote significant resources towards building capacities in DCs and LDCs with the help of experts with combined technical and area specializations.

In this light, the fact that the States have a full decade to delineate and implement a proper course is not as long a time horizon as it first appears to be. Even if the banking sector is adequately reformed, the proper use of financial markets will also require an enabling global financial architecture and an overall reduction of systemic risk.

As an earlier paper (Khan2009) showed, analyzing the challenge of meeting the MDGs which justifiably, has high priority in both the UN and the affected countries presents us with the fact that some important gaps still remain.[10] In one way or another, these all involve problems of capacity building and cooperation among national, sub-national and international actors both at the governmental and civil society levels. Related to this, the interests of those who live in rural areas, more remote regions and are disadvantaged for that reason would need greater representation. The combined disadvantages of gender, location and ethnic identification raise particularly salient issues for widespread deliberation. Concrete step-by-step plans of action with identifiable outcomes need to be communicated clearly, and followed through properly. All these are made much more difficult if not impossible to achieve specially for LDCs during times of crisis and global contraction.

Given the features of the real economic world, an evolutionary comples dynamic adaptive systems approach admits of multiple evolutionary equilibria, and a need for realistic

[10] This applies particularly to those countries targeted to receive Integrated Package Services (IPS).

institutional design that recognizes path dependence and the role of alternative theories and interpretations without the disabling and in most cases incorrect slogan that there is no alternative. Although social and political construction of new institutions and arrangements are difficult, except for rare circumstances, there are usually more than just one possibility. Real struggles among competing ideas, norms and politics at different levels are necessary aspects of the process of choosing among these possibilities. The limits of Basel III proposals a nd the role of BIS with respect to the developing countries must be looked at in this light and remedies found by including a broad spectrum of ideas, particularly heterodox ideas from these countries.

Appendix

Basel III Key Milestones

Capital requirements

Date	Milestone: Capital Requirement
2014	**Minimum capital requirements:** Start of the gradual phasing-in of the higher minimum capital requirements.
2015	**Minimum capital requirements:** Higher minimum capital requirements are fully implemented.
2016	**Conservation buffer:** Start of the gradual phasing-in of the conservation buffer.
2019	**Conservation buffer:** The conservation buffer is fully implemented.

Date	Milestone: Leverage Ratio
2011	**Supervisory monitoring:** Developing templates to track the leverage ratio and the underlying components.
2013	**Parallel run I:** The leverage ratio and its components will be tracked by supervisors but not disclosed and not mandatory.
2015	**Parallel run II:** The leverage ratio and its components will be tracked and disclosed but not mandatory.
2017	**Final adjustments:** Based on the results of the parallel run period, any final adjustments to the leverage ratio.
2018	**Mandatory requirement:** The leverage ratio will become a mandatory part of Basel III requirements.

Liquidity requirements

Date	Milestone: Liquidity Requirements
2011	**Observation period:** Developing templates and supervisory monitoring of the liquidity ratios.
2015	**Introduction of the LCR:** Initial introduction of the Liquidity Coverage Ratio (LCR), with a requirement of 60%. This will increase by ten percentage points each year until 2019.
2018	**Introduction of the NSFR:** Introduction of the Net Stable Funding Ratio (NSFR).

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