



**‘CRISIS? WHAT CRISIS?’
ANATOMY OF THE REGULATORY
FAILURE IN FINANCE**

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Abstract

Despite the global financial crisis and the prospect of severe economic recession, debates on future financial regulation take little if any notice of reasons why the previous regime of financial regulation failed so spectacularly. The paper identifies the key presumptions underlying efforts to strengthen the ‘international financial architecture’ (IFA) over the past decade.

At the core of the IFA is a set of standards of ‘best practice’ and the assumption that ‘market discipline’ rewards and punishes economies according to their degree of compliance with standards. Further, the IFA assumes that ‘market-sensitive’ risk management promotes the resilience of the international financial system and that the ‘soundness’ of financial systems may be assessed by aggregating measures of the soundness of individual financial institutions. Historical analysis of the correlation between international capital flows and domestic policy reforms, as well as quantitative studies of the correlation between compliance and the cost of capital, demonstrates that financial markets by no means reward and punish economies in accordance with compliance. Evidence further suggests that the current approach to detecting financial vulnerability is misleading and that the promotion of ‘market sensitive’ risk management undermines rather than increases the stability and resilience of the international financial system.

Introduction

After a series of financial crises in the 1990s,¹ a period followed with only two major financial crises: in Turkey and Argentina in 2001 and 2002. In neither case did these crises spread to other countries, as had been the case with many of the crises of the 1990s. The lower frequency of financial crisis was to many a sign that efforts by the international community to strengthen the ‘international financial architecture’ (IFA) had been successful. By early August 2007, large-scale turmoil in financial markets resurfaced, however. With fears of a global liquidity crisis on the rise, central banks joined forces in an exceptional intervention, injecting \$120bn of cheap liquidity into banks, hoping to “shore up confidence in the global financial system” (Milne and MacKenzie 2007). Paul de Grauwe commented that although the large-scale bail-out of banks might calm markets here and now, they would likely be “sowing the seeds” for a full-scale financial crisis in the not too distant future (de Grauwe 2007). Indeed, despite a number of large-scale government bail-outs and repeated extraordinary liquidity injections by the Fed and other central banks, financial turmoil escalated to a full-blown global financial crisis a year later. In recent weeks, commentators have talked about a fundamental crisis of capitalism (Buiter 2008; Plender 2008; Rosner 2008; Stephens 2008) and even of a ‘catastrophe’ lurking in the not too distant future (Economist 2008).

Generally, there is a widespread tendency to grossly underestimate the *regulation crisis* implied in the financial crisis.² The assumption seem to be that apart from massive government bail-outs of financial institutions worldwide, little more is needed than an expansion of the scope of financial regulation, to encompass non-bank financial institutions, and a raising of capital adequacy requirements, as the ‘catch-all’ regulatory response (FT 2008). Such a response would grossly

¹ Japan in 1989-1991; Finland, Italy, UK, Sweden in 1992; Mexico in 1994-1995; East Asia in 1997; Russia in 1998; and Brazil in 1999, not to mention the near-collapse of the LTCM hedge fund, avoided only by a large US Treasury-led bail-out.

² Commentators typically attribute the crisis to either greed (Weitzman 2008), moral hazard (Authers 2008), short-selling (MacKintosh 2008), or deregulation (Ferguson 2008). The tendency to underestimate the regulation crisis was evident, however, not just in much financial press coverage of the crisis but also in government interventions such as the US government \$700bn rescue plan. As noted by Paul Krugman, the plan assumed the crisis to be a liquidity crisis confined to the US mortgage market, as opposed to a general financial crisis involving substantial solvency issues (Krugman 2008). It was as if the regulatory response in the US and elsewhere assumed that if the US mortgage market mess could be sorted out and confidence among large banks could be restored then the crisis would be resolved.

underestimate the regulation crisis implied by the global financial crisis. Curiously, in the debate on the current financial crisis there is little if any scrutiny of the IFA. Instead, it seems as if confidence in this approach to financial regulation is unwavering; only marginal adjustments are considered. This untainted confidence in the IFA approach to financial regulation is hugely problematic. A new approach to financial regulation should be anchored in a solid understanding of the reasons why its predecessor failed. If financial regulation reform is limited to more or less marginal adjustments, the next financial crisis will be an accident waiting to happen. There is, in brief, a need to thoroughly examine the regime of financial regulation of the past decade which has failed so spectacularly.

This paper provides a critical review of the currently prevailing regime of international financial regulation, launched from the late 1990s onwards, in the name of strengthening the ‘international financial architecture’ (IFA).³ The Financial Sector Assessment Program (FSAP)⁴ represents the IFA in a prism and hence the focus of the analysis is on the FSAP. More specifically, in analysing and discussing the key presumptions of the IFA, I draw upon evaluations of the FSAP undertaken by the IMF itself and by its Independent Evaluation Office (IMF 2003a, 2003b, 2005b, 2005c; IEO 2006a),⁵ as well as upon a body of literature on international financial regulation centred on the notion of ‘liquidity black holes’ (Borio 2004, 2006; Eatwell 2004; Persaud 2004a,

³ The first use of the term has been attributed to a speech by Robert Rubin, then Secretary of the US Treasury, stressing the need to strengthen the ‘architecture’ of the international financial system in the wake of the financial crisis in East Asia in 1997-1998. The term ‘international financial architecture’ (IFA) was soon widely adopted in the debate. In the academic debate, use of the term said little about the policies proposed in the name of reforming or ‘strengthening’ it. In the political arena, however, the architecture metaphor was soon invested with substantial regulatory content. The literature on the ‘international financial architecture’ is extensive. For key contributions, see Acharya (2001), Best (2003a, 2003b), Cartapanis & Herland (2002), Eatwell (2004), Eichengreen (1999), Griffith-Jones and Bhattacharaya (2001), Kaiser et al. (2000), Kenen (2001), Rodrik (1999), Singh (2004), Soederberg (2005) and Wade (2007).

⁴ A modification of IMF financial facilities was attempted through the launching of the Contingent Credit Lines (CCL). This part of the IFA turned out to be a failure, however; no countries signed up for the CCL, and the facility was abandoned in 2003. For more on this, see Vestergaard (2008a). For more on private creditors and collective action clauses and debt resolution issues, see Kenen (2001).

⁵ Less than a year after the launching of the FSAP pilot, in March 2000, a first review on progress and lessons was conducted. This was followed by a new review later that year, in December 2000, which resulted in upgrading the FSAP to regular programme status. Since then, two full-scale programme reviews have been made; first in March-April 2003 and then again two years later, in February-March 2005. More recently, a review of the FSAP was conducted by the IMF’s Independent Evaluation Office and published in January 2006 (IEO 2006a).

2004b, 2004c; Nugée and Persaud 2006).⁶ The IFA may be said to consist of two main crisis prevention strategies: crisis prevention by encouraging economies to become ‘proper’ economies, in and through the adoption of standards of ‘best practice’, and crisis prevention by means of increased ‘market-sensitivity’. Whether in terms of ‘early warning systems’, operated by authorities, or in terms of new, more market-sensitive risk management practices of banks and other financial institutions, this increased ‘market sensitivity’ intends to assist authorities and institutions in detecting signs of weaknesses and vulnerabilities as early as possible.

The IFA is predicated upon three key presumptions about financial markets and their regulation. First, the IFA presumes that there is a force, or mechanism, in operation which one may term ‘market discipline’, which rewards and punishes economies according to their degree of compliance with ‘best practice’. Second, financial vulnerability may be detected, the IFA presumes, by assessing the ‘financial soundness’ of financial systems through an aggregation of measures of the financial soundness of individual financial institutions. Third, the IFA presumes that standardized, ‘market-sensitive’ risk management practices predicated upon sophisticated mathematical models promotes the resilience of the international financial system. Each of these three presumptions is at odds, however, with the actual dynamics of financial markets. Whether in terms of historical analysis of the correlation between international capital flows and policy reforms, or in terms of quantitative studies of the correlation between compliance with standards and the cost of foreign capital, evidence demonstrates that the notion that financial markets reward and punish economies according to their degree of compliance with ‘sound policies’ and standards of ‘best practice’ is an illusion. Evidence further suggests that the current approach to detecting financial vulnerability, whether at the level of the individual financial institution, or in national or international terms, is inadequate and misleading, and that the promotion of ‘market sensitive’ risk management practices undermines rather than increases the stability and resilience of the international financial system.

After a brief explication of its components, the results of the FSAP in terms of country enrolment and in terms of its ability to ‘predict crises’ are asserted. It is shown that enrolment has fallen far short of expectations and that serious problems have been encountered in terms of its

⁶ The key contribution in this literature is an edited volume; Persaud (2004). Avinash Persaud is former Head of Research at JP Morgan and State Street Corporation, now founder and chairman of *Intelligence Capital*. Other key contributors to this literature include Claudio Borio, Head of Research and Policy Analysis at the Bank for International Settlements (BIS) and Professor Charles Goodhart, Programme Director of the Regulation and Financial Stability research at London School of Economics.

‘early warning system’ objectives. Further, it is noted that the FSAP for at least a couple of years have found itself in a sort of paralysis: despite increasing acknowledgement of many rather severe limitations of the FSAP, no rethinking of it has been undertaken by the IMF, the World Bank or any of the other involved international organizations. On this background, the paper sets out to analyze and problematize the three key presumptions of the IFA in some detail. A final section summarizes key findings and briefly reflects upon the essential elements of a more effective, future mode of international financial regulation.

Strengthening the international financial architecture (IFA)

The IFA initiative focused on five major regulatory issues: transparency; developing and assessing international accepted standards; financial sector strengthening; involving private creditors in crisis prevention and crisis resolution; and modifying IMF financial facilities (IMF 2000a). The first three of these five dimensions, which became the core of the IFA initiative, were jointly ‘operationalised’ in and through the Financial Sector Assessment Programme (FSAP). FSAP may hence be seen as the quintessential manifestation of the regime of international financial regulation launched from the late 1990s specifically to enhance the stability and resilience of the international financial system.

When the FSAP was launched in May 1999, to be operated jointly by the World Bank and IMF, it reflected an emerging consensus in the ‘international community’ that new policies, tools and methodologies were needed to foster financial stability and development. “Financial instability can significantly harm growth and cause major disruptions, as was seen in the financial crises of the 1980s and 1990s”, the IMF explained (IMF 2005a: 2). If countries were to reap the benefits of access to international capital without ‘excessive risk’ of financial instability, they would have to strengthen their financial systems on account of its alleged ability to increase financial stability while at the same time contributing to economic growth.

The FSAP pursued a dual objective, in other words: to reduce the frequency and severity of financial sector crises and to foster economic growth (IMF 2007a). More specifically, the FSAP purported to identify the “strengths, vulnerabilities, and risks” of national financial systems and, ultimately, “help design appropriate policy responses” (IMF 2005a: 325). To achieve these goals, countries were to monitor their financial system soundness, assess the effectiveness of their

monetary and financial policies, and to adopt standards and codes of ‘best practice’.⁷ Overall, FSAPs consisted of two main components, corresponding to the two main dimensions of efforts to strengthen the IFA: assessment of compliance with standards and assessment of the stability of the financial system. On the basis of these two types of assessment, FSAPs endeavoured to identify the reform and development needs of a country’s financial sector (Hilbers 2001: 2).

STANDARDS AND CODES

Standards and codes of ‘best practice’ became a “prominent component” of efforts to “strengthen the international financial architecture”.⁸ Standards were developed for twelve areas, in three main categories: policy transparency, financial sector integrity, and market integrity (IMF 1999a).⁹ *Policy transparency* involved standards for transparency in data dissemination, transparency in fiscal policy, and transparency in monetary and financial policy. In the area of *financial sector integrity*, standards were developed for banking supervision, securities, insurance, payments systems, and anti-money laundering. And finally, with respect to *market integrity*, standards were developed for corporate governance, accounting, auditing and insolvency and creditor rights.¹⁰

Compliance to standards of ‘best practice’ was expected to benefit countries in five main ways. First, compliance was expected to strengthen a country’s its economic institutions, its financial system, as well as its economy more generally. Second, compliance was expected to countries easier and cheaper access to foreign capital on the presumption that financial markets would reward increased compliance with a lower cost of capital. Third, in case of a crisis in a neighbouring

⁷ In face of these challenges, there was a strong need for guidance; hence the launching of an FSAP Handbook and the provision of technical assistance through FSAP assessment missions. “A key purpose” of the Handbook was, the IMF explained, to “help country authorities conduct their own assessments of the soundness, structure, and development needs of [their] financial system” (IMF 2005a: 2).

⁸ A wide range of public and private institutions – including “all major standard setting bodies” (IMF 2005a: 329) – contributed to the development of standards and codes. For an overview; see Vestergaard (2008a).

⁹ Nomenclature for the three different areas varies. The FSAP Handbook uses the categories transparency standards; financial sector and financial integrity standards; and financial infrastructure standards. In other IMF reports, the following three categories are used: policy transparency; financial sector regulation and supervision; and market integrity. In the section above, I have combined these two nomenclatures, to arrive at a simple yet informative version.

¹⁰ For each standard, responsibility was assigned to one or more institutions and standard-setting bodies (cf. parentheses in the table). Responsibility for coordinating the efforts was assigned to the IMF and the World Bank. IMF coordinated efforts in the first two main areas of standardization (policy transparency and financial sector integrity), and the World Bank for the latter (market integrity).

country, the risk and severity of contagion was expected to be smaller for countries complying with standards because access to foreign capital could then be maintained longer than otherwise possible. Fourth, as a consequence of the lower cost of foreign capital, achieved by compliance to standards, the solvency of governments would be higher – and thus compliance would in some cases help prevent financial crisis (IMF 2003a: 26). In sum, these factors were expected to combine to increase the stability of domestic financial systems. At the international level, compliance to standards would increase transparency, result in “better informed lending and investment decisions”, allow for “more effective market discipline”, and thereby result in “greater financial stability” (IMF 1999c: 2, 2006b: 2).

Table 1 Overview of standards of ‘best practice’

<i>Policy transparency</i>	<i>Financial sector integrity</i>	<i>Market integrity</i>
<ul style="list-style-type: none"> ▪ Data dissemination (IMF) ▪ Fiscal policy transparency (IMF) ▪ Transparency in monetary and financial policy (IMF) 	<ul style="list-style-type: none"> ▪ Banking supervision (Basle Committee) ▪ Securities (IOSCO) ▪ Insurance (IAIS) ▪ Payments systems (CPSS) ▪ Anti-money laundering 	<ul style="list-style-type: none"> ▪ Accounting (IASB) ▪ Auditing (IFAC) ▪ Corporate governance (WB; OECD) ▪ Insolvency and creditor rights (UNCITRAL; IMF; WB)

Assessments of standards relating to financial integrity and policy transparency are usually prepared within the framework of the FSAP, whereas standards for market integrity “are typically assessed on a stand-alone basis” by the World Bank (IMF 2005a: 339), with results published in Reports on the Observance of Standards and Codes (ROSCs).¹¹ In the former case, assessments of compliance are reported to authorities in the form of so-called ‘detailed assessment reports’, summaries of which are “included as part of the FSSAs [Financial Sector Stability Assessments] that are presented to the IMF Board in the context of Fund surveillance” (ibid.) This procedure is seen as important because it situates assessments of compliance with standards in the “broader

¹¹ Only when “appropriate”, is one or several of these market integrity standards assessments conducted in the context of an FSAP. FSAPs will, however, draw upon any such stand-alone assessments of market integrity standards that might be available. In so doing, the focus of FSAPs here will be on “financial sector aspects of corporate governance, accounting and auditing, and insolvency regime, as part of the assessment of preconditions for effective supervision” (IMF 2005a: 338-339). In general, ROSCs and the FSAP are seen to “have reinforced each other to achieve the shared objectives” (ibid.).

context of risks and vulnerabilities that affect the financial system”, and thus make it possible to assess the link between standards compliance and overall financial risks. “Gaps in compliance with standards also provide an input into identifying development needs and desired structural reforms”, the IMF stresses, “to strengthen institutions, markets, and infrastructure” (IMF 2005a: 338). This is a key reason why “standards assessments are an integral part of the FSAP” (ibid.).¹²

FINANCIAL STABILITY ANALYSIS

In the analytical framework of the FSAP, financial stability refers to avoidance of financial institutions failing “in large numbers” and avoidance of “serious disruptions to the intermediation functions of the financial system”, be that payments, savings facilities, credit allocation, or risk mitigation and liquidity services (IMF 2005a: 35). Financial stability is perceived as a continuum on which financial systems can be “operating inside a stable corridor, near the boundary with instability, or outside the stable corridor” (ibid.). A key purpose of financial stability analysis is to assess the position of financial systems on this continuum, and in the process identify potential threats to financial system stability, as well as devise policy recommendations for enhancing stability and reducing vulnerability on the basis of these analyses. ‘Exposures’, ‘linkages’, ‘vulnerabilities’, and ‘buffers’ are key terms of the FSAP, bearing witness that financial systems are today perceived as precarious entities which call for careful regulation and vigilant surveillance.

Early warning system (EWS) models

A key presumption of the FSAP is that surveillance of financial markets may provide information that can be crucial in assessing the risk that some macroeconomic shock – or combination of shocks – will hit and potentially threaten the stability of the financial sector. The cornerstone of such surveillance is ‘early warning system’ (EWS) models. EWS models are by their nature *forward-looking*. On the basis of different types of indicators they strive to assess the likelihood that an ‘extreme shock’ hits the financial system.¹³ Drawing upon a vast literature on the different types of factors that are seen to cause financial crises, EWS models endeavour to combine a number of indicators into a single measure of the risk of a crisis, while seeking to minimize the twin dangers of ‘false alarms’ and ‘missed crises’. EWS models “do not have perfect forecasting

¹² A significant body of literature on ‘transparency’ and ‘standards and codes’ as a means of international financial regulation has emerged. For key contributions; see Best (2005, 2006), Hansson (2003), Mosley (2001), Price (2003), Seabrooke (2006), Vestergaard (2004, 2008a) and von Furstenberg (2000).

¹³ EWS models are usually constructed on the basis of the ‘indicators approach’, the ‘limited dependent variable probit-logit’ approach, or some combination of the two (IMF 2005a).

accuracy”, the IMF acknowledges, but do offer a “systematic method to predict crises” (IMF 2005a: 36).¹⁴

Macroprudential analysis

Although EWS models exist in many forms and as a whole may be said to provide a comprehensive analytical apparatus, the IMF stresses that EWS models should be seen as just “one of a number of inputs into the IMF’s surveillance process” (IMF 2005a: 37). Whereas EWS models focus on vulnerabilities in the *external* position, macroprudential surveillance focuses on vulnerabilities in *domestic* financial systems arising from macroeconomic shocks. One might say that EWS models assess the likelihood and severity of a shock, but leaves the analysis of the likely domestic impact of such a shock to macroprudential analysis. The IMF emphasises that macroprudential surveillance assesses the soundness of the financial sector as a whole, as compared to microprudential surveillance, which assesses the soundness of individual financial institutions. Macroprudential surveillance reflects, the Handbook argues, a need to “identify risks to the stability of *the system as a whole*, resulting from the collective effect of the activities of many institutions” (IMF 2005a: 38, emphasis added). Two types of indicators are deployed in macroprudential analysis: financial soundness indicators and macroeconomic indicators. Whereas the macroeconomic indicators to a large extent are ‘the usual suspects’ (exchange rate volatility, interest rates, current account deficits, etc.), financial soundness indicators represent a “new body of economic statistics” (IMF 2005a: 22).

Financial soundness indicators (FSIs)

The monitoring of ‘financial soundness indicators’ (FSIs) is a key component of the FSAP. FSIs include thirty-three indicators covering a range of aspects from capital adequacy and asset quality, to profitability and market risk sensitivity. FSIs are grouped into a ‘core’ set and an ‘encouraged’ set. The core set applies to banks, reflecting that banking sector FSIs are considered “essential for surveillance in virtually every financial system” (ibid.). The core set includes indicators on regul-

¹⁴ In endeavouring to predict financial crises, the EWS literature distinguishes between three main types of crises. First, ‘*currency crisis*’ refers to a sudden and sizable depreciation of the exchange rate and significant loss of reserves; second, ‘*debt crisis*’ refers to large scale default or restructuring of external debt; and third, ‘*banking crisis*’ refers to rundown of bank deposits and consequent widespread failure of financial institutions (IMF 2005a: 38). Another distinction in the EWS literature is between three “generations” of crises models, with each generation focusing on a different set of determinants. Thus, whereas first generation models focused on macroeconomic imbalances, the focus of second generation models was on speculation, contagion, and weakness in domestic financial markets, while in third generation models emphasis is on moral hazard as a cause of excessive borrowing, suggesting that asset prices can be a key indicator of crises.

atory capital to risk-weighted assets, nonperforming loans to total gross loans, and liquid assets to short-term liabilities.¹⁵ The encouraged set, on the other hand, aim to monitor the balance-sheet weaknesses in non-bank sectors which constitute a potential “source of credit risk for banks” and hence may provide a means of detecting “banking sector vulnerabilities at an earlier stage” (ibid). The encouraged set thus includes indicators for ‘other financial corporations’, ‘non-financial corporations’, ‘households’ and ‘real estate markets’.¹⁶

FSIs are collected for individual institutions and these institution-level data are then aggregated to become material for macroprudential analysis. The IMF notes that since FSIs themselves are “either backward-looking or contemporaneous indicators of financial soundness”, one should complement these with “various market-based indicators, which are forward-looking indicators of soundness and are available with higher frequency” (IMF 2005a: 23-24).

Stress-testing

In terms of the ‘alerting’ objective, a crucial technology in the FSAP is ‘stress testing’. Stress-tests endeavours to assess the vulnerability of financial systems to “exceptional but plausible events” (IMF 2005a: 39). Originally, stress-tests were developed for use at the portfolio level, to enable an understanding of changes in the value of a portfolio as a consequence of larger changes in some of its risk factors. Over the years, such tests have become increasingly used for risk management purposes by financial institutions, culminating with attempts to undertake stress-testing of entire financial systems. “System-focused stress-testing”, the IMF explains, examines “key vulnerabilities in the system” and provide a “rough estimate of sensitivity of balance sheets to a variety of shocks” (IMF 2005a: 46). Stress tests differentiate between six main types of risk: interest rate risk, exchange rate risk, credit risk, liquidity risk, equity and/or real estate price risk and commodity price risk. Stress-testing may involve one or more of these types of risk, as well as one or more of the following types of analysis: *Sensitivity analysis*, which seeks to identify the vulnerabilities of the financial system to changes in individual financial variables (such as interest rates, exchange rates, and equity prices); *scenario analysis*, which endeavours to assess the resilience of the financial

¹⁵ See Appendix A for a full list of the core set of Financial Sector Indicators (FSIs).

¹⁶ The core set of FSIs are perceived as relevant to all countries, whereas the encouraged set may be relevant “in many, but not all, countries” (ibid.). A key advantage of this two-tiered approach to FSI compilation is, the IMF argues, that it helps avoid a “one-size-fits-all approach” (IMF 2001: 23). Countries should be careful not to settle for the ‘core set’ of FSIs, however. “Although the core set provides an initial prioritization”, the IMF explains, “the choice should not be limited to this set”, but complemented with a range of encouraged FSIs, selected on the basis of the specific characteristics of the country’s financial system, the importance of non-financial institutions, etc. (IMF 2005a: 39).

system to scenarios that entail simultaneous changes in a number of macroeconomic variables; and *contagion analysis*, which aims to assess the impact of a shock transmitting from an individual financial institution to the rest of the financial system. In and through ‘system-focused’ stress-testing, FSAPs endeavour to “marry a forward-looking macro-perspective with an assessment of the sensitivity of a collection of institutions to major changes in the economic and financial environment” (ibid.). Such stress-testing is particularly useful, the IMF argues, because it provides “a quantitative measure of the vulnerability of the financial system to different shocks” (IMF 2005a: 47). This measure may then be used along with other FSAP assessments to “draw conclusions about the overall stability of a financial system” (ibid.).

FSAP or mishap?

In the period from 2001 to 2006, FSAPs were made for 120 countries (IMF 2005c: 10; IMF, 2007b). Participation varied from “virtually complete coverage of European economies” to substantial “under-representation of East Asian economies” (IMF 2005c: 9). At times countries would be enrolled not in a full FSAP, but in an assessment of their compliance with one or more of the standards of ‘best practice’, published in the form of an ROSC. By the end of 2006, 130 countries had undertaken at least one ROSC, and a total of 600 ROSCs had been made; 71 in Africa, 81 in Asia and the Pacific, 286 in Europe, 81 in Middle East and Central Asia, and 81 in the Americas.¹⁷ Two of the world’s largest and systemically most important economies – China and India – have participated only to very limited extent, if at all (see Table 2 below). The pattern of near-complete coverage of European countries and modest involvement of other countries repeats itself in the case of ROSCs, in other words. In general, the participation of emerging market economies in ROSCs has fallen far short of expectations:

¹⁷ For an overview of all Reports on the Observance of Standards and Codes (ROSCs) undertaken in this period, see Appendix B.

Table 2 ROSCs for large emerging market economies, 1999-2006

	<i>Banking supervision</i>	<i>Securities</i>	<i>Insurance & paym. Systems</i>	<i>Anti-money laundering</i>	<i>Accounting and auditing</i>	<i>Corporate govern.</i>	<i>Insolv. & creditor rights</i>
Argentina	Apr 99						Dec 02
Brazil				Jun 05			
Chile	Aug 04	Aug 04		Mar 05	Dec 04	May 03	Dec 04
China							
Colombia					Mar 04	Aug 03	
Egypt					Jun 03	Sep 01, Mar 04	
India					Jun 05	Jan 01, Jun 04	
Indonesia					Sep 06	Sep 04	
Malaysia					Dec 00, Jun 06		
Mexico	Oct 01	Oct 01	Oct 01	Dec 05	Mar 04	Sep 03	
Pakistan	Jul 04	Jul 04			Jan 06	Feb 06	
Peru					Jan 06	Aug 04	
Philippines	Apr 04	Mar 04	Jan 05		Jan 02, Jun 06	Sep 01	
Russia	May 03	May 03	May 03				
S. Korea	Mar 03	Mar 03	Mar 03		Nov 04	Mar 03	
S. Africa				Apr 04	May 03	Jul 03	
Thailand						Sep 05	
Turkey						Apr 01	

Source: IMF 2007d.

In its comprehensive evaluation in 2006, the IMF's Independent Evaluation Office (IEO) stressed that “current incentives for participation” were insufficient to ensure coverage of countries that have not yet participated in the FSAP (IEO 2006a: 7). Further, the IEO noted, incentives to motivate countries that have done FSAPs in the past to embark on FSAP Updates also seemed insufficient (*ibid.*). On account of this reluctance, “a significant proportion of FSAPs ... are becoming dated”, the IEO evaluation stressed, to the extent that “actual participation” was not “in line with the broader objectives of the initiative” (*ibid.*).

The FSAP was from the outset characterised by four inherent dilemmas. First, while participation in FSAPs is officially and formally voluntary, this voluntary nature of the programme was ‘inconvenient’ and at odds with the rationale and objectives of the programme. Proceeding in the terrain of this inherent dilemma has not been easy, and have lead at times to ‘delicate’ formulations. The FSAP Handbook, for instance, speaks of the need to “balance the voluntary nature of participation in the FSAP with the need to... encourage countries to participate” (IMF 2005a: 326). Second, although the FSAP guaranteed confidentiality with regard to ‘sensitive’ information, the very rationale of the IFA – and hence of the FSAP – was to increase transparency by

publicizing as much data as possible. Third, FSAPs soon proved to be costly. A key recommendation of the 2003 FSAP review hence was “to exercise greater selectivity in the numbers of standards and topics assessed in detail so as to reduce the average resource costs while tailoring the assessments to country-specific circumstances” (IMF 2005a: 334). Since it was still seen as important that assessments of compliance with standards were as comprehensive as possible – not least to “minimize the risk of missing key vulnerabilities” – the preferred solution which emerged was to endeavour to “spread out the assessments over time so that some of the standards or topics not initially assessed in the first FSAP engagement could be taken up as part of future FSAP updates” (ibid.). But, as we have seen in the preceding, the FSAP encountered severe problems in motivating countries to engage in FSAP Updates. Finally, the FSAP was to large extent predicated upon the presumption that financial markets would use data disseminated through FSAP assessments.

A recent evaluation of the FSAP concluded, however, that “while many authorities identified the ‘signalling role’ to markets” as a key motivation for participating in the FSAP exercise, the impact of FSAP data “on the views of financial market participants appear modest” (IEO 2006a: 13). In fact, interviews with a wide range of market participants indicated that most had “limited knowledge” of FSAP data (ibid.).

In addition to fundamental problems such as ensuring broad enrolment of countries and encouraging use of FSAP data by financial market participants, the FSAP has proven unable to perform its ‘early warning’ function in a number of cases. In the words of the IEO, FSAPs have not always led to “timely changes to forestall problems” (IEO 2006a: 12). Instead of undertaking in-depth analysis of the limitations of FSAP financial stability analysis, the IEO regard such ‘missed opportunities’ as instances of ‘exceptional’ circumstances beyond the sight of an FSAP. Consider briefly the example of the Dominican Republic, where a banking crisis broke out less than a year after its FSAP had been completed. The Dominican banking crisis was “triggered by the discovery of massive fraud”, the IEO notes, and as an FSAP cannot be “expected to detect accounting fraud”, the FSAP cannot be blamed for not foreseeing the crisis (IEO 2006a: 40). Yet, the FSAP did diagnose “severe and widespread vulnerabilities in the Dominican banking system”, the IEO argues, but these conclusions never had the effect on policy that they ought to have had (ibid.). On one hand, the IEO argues that an FSAP cannot possibly detect the types of problems that triggered the Dominican banking crisis. On the other hand, it argues that the Dominican FSAP

did in fact identify “severe vulnerabilities” and flag “warning signs” – and that by ignoring these the Dominican government set itself up for the crisis (*ibid.*).¹⁸

Although the IEO attempted to ‘explain away’ the limitations of the FSAP with regard to foreseeing financial crises, it acknowledged that the FSAP found itself “at a critical cross-roads” (IEO 2006a: 6). There was a danger, the IEO argued, that that “achievements made” in the initial phases would “erode” if the FSAP was not subjected to “significant modifications” (*ibid.*). The IEO was particularly concerned with insufficient incentives for participation, reluctance to engage in FSAP Updates, and with the limited use of FSAP data by financial market participants.

Despite awareness of key limitations of the FSAP, there are no signs that the FSAP has indeed been subject to any major reforms. On IMF’s FSAP website one finds no entries for ‘policy papers’ nor for ‘other related FSAP material’, dated later than the IEO-evaluation. This certainly does not reflect that the FSAP in the past two-three years has *overcome* its problems. On the contrary, the credit crunch of 2007-2008 has left the FSAP in an even deeper crisis than was the case in 2006. In the period from August 2007 to July 2008, as little as four new FSAP assessments and three FSAP Updates have been made.¹⁹ With respect to ROSCs, the vast majority of assessments made in this same period have been of policy transparency standards, with almost no assessments made in the areas of financial sector integrity and market integrity.²⁰

The FSAP was predicated upon the finance and corporate governance institutions of the Anglo-American model of capitalism (Vestergaard 2008a). In the course of the credit crunch, however, faith in the Anglo-American model of capitalism has faltered. Today, “US credibility and the

¹⁸ The inconsistency of the IEOs account – arguing that the FSAP couldn’t possibly but did in fact identify severe vulnerabilities and warning signs – is troubling in itself, of course. Even more troubling, perhaps, is the overall character of the narrative: acquitting the FSAP and the international institutions behind it from responsibility, attributing blame one-sidedly to the local authorities.

¹⁹ New FSAP assessments made for Montenegro, Sri Lanka, Turkey, and United Arab Emirates, and FSAP Updates made for Austria, Canada and Croatia.

²⁰ More specifically, in this period, nine ROSCs were made in the area of Data dissemination (Chad, Chile, Dominican Republic, Grenada, Kazakhstan, Mongolia, Netherlands, St. Kitts and Nevis, St. Vincent and the Grenadines), five for fiscal transparency (Costa Rica, Kenya, Kyrgyz, Mozambique, Pakistan), two for Anti-money laundering (Sri Lanka, Switzerland) and two for banking supervision (Haiti, Sri Lanka).

credibility of US financial markets is zero everywhere in the world”, Stiglitz recently noted.²¹ The paralysis with regard to rethinking and reforming the FSAP, and international financial regulation more generally, could well be seen to reflect the loss of credibility of Anglo-American finance and corporate governance institutions and a general bewilderment with regard to what do to instead. In light of this paralysis, it is important to develop an understanding of the limitations of the FSAP and base a new approach to international financial integration on such analysis. ‘Missed opportunities’ such as the Dominican FSAP – not to mention the largely unforeseen collapse of US financial institutions, from AIG, Bear Stearns and Lehman Brothers to Fannie Mae and Freddie Mac – should instigate efforts to examine whether there are inherent features of current financial regulation that make it ineffective in assessing financial sector vulnerabilities and warning signs as envisaged. Contrary to the account given by the IEO, I argue in the following that the failure of the Dominican FSAP, and other similar occurrences, are not coincidental, but rather the result of an approach to financial risk regulation that not only *does* not work, but *cannot* work (Persaud 2004b: 190).

Anatomy of a regulatory failure

THE ILLUSION OF ‘MARKET DISCIPLINE’

Market discipline is a key presumption of the FSAP, the IMF stresses (IMF 2000b: 2). The mechanism presumed with the reference to market discipline may be depicted as follows: International governmental organizations such as the IMF and the World Bank assess and make data on compliance with standards and with FSI norms and benchmarks in individual countries available to financial markets. Financial markets then reward or punish economies according to their degree of compliance with standards and financial soundness benchmarks. Countries with a high degree of compliance receive higher amounts of foreign capital at a lower price (interest rate), as compared to countries that have a low degree of compliance.

Peter Kenen was among the first to express scepticism with regard to this key presumption – discussed briefly in the previous section – observing that “the private sector seems to know little

²¹ “Anybody looking at this from the outside says, “There’s been a lot of hot air coming out of the US, so why should we listen to these guys when they didn’t know how to manage risk?”. Stiglitz, cited from International Herald Tribune, 2008, June 17.

about the various standards and codes or the Fund's efforts to publicize its findings concerning compliance with them" (Kenen 2001: 110-111). Hence, Kenen concluded, "it may be imprudent to rely mainly on market discipline" (ibid.). At closer scrutiny, Kenen laudable scepticism understates the severity of the problem, however. In fact, an 'international financial architecture' predicated upon a notion of 'market discipline' amounts to no architecture at all. A range of evidence suggests that there is no such thing as a mechanism of market discipline in operation, rewarding and punishing economies according to their degree of compliance:

Argentina for many years strictly followed IMF's macro-policy recommendations and was one of the first emerging market economies to make considerable efforts to comply with standards.²² Yet, in 2001 international investors withdrew capital large-scale, causing deep financial crisis in Argentina.²³ Malaysia, on the other hand, when afflicted by the Asian crisis in 1997, did the opposite of what the IMF advised (imposing capital controls, etc.), and made little effort to comply with standards. Yet, soon after the onset of the Asian crisis, foreign capital flowed plentiful into Malaysia again. Argentina, which strove to comply with standards, was punished by financial markets, whereas Malaysia, doing nothing to comply, was rewarded.²⁴

This absence of a positive link between, on one hand, the degree to which the policies pursued by countries were perceived 'sound' by the IMF and the World Bank and, on the other hand, foreign capital flows, is not a recent phenomenon. When Chile achieved huge capital inflows in the 1850s and 1860s, it was attributed to 'free market reforms', but similar capital inflows were received simultaneously in Russia, the Ottoman empire, Egypt, Colombia, Tunisia, Spain, Austria-Hungary, Peru, Romania and the Confederate States of America. "It is hard to argue", Michael Pettis stresses, that these countries "followed a common set of policies", rewarded by foreign investors (Pettis 2001: 191). On a more recent note, if capital flows did indeed reward domestic policy, one would have expected capital flows to Mexico, Chile, Brazil, and Argentina, in the past three decades, to be correlated with reform implementation. Yet, "in spite of the huge timing differences in the reform process", Pettis observes, "the timing of capital flows ... was virtually

²² For these latter efforts, Argentina received considerable praise from the IMF (Rodrik 2003; IMF 1999b). See also Blustein (2005).

²³ This was a repetition of the Mexican case; Mexico had also for years been the 'star pupil' of the IMF, when the financial crisis in Mexico in 1994-1995 occurred.

²⁴ For interesting work on how the Argentine crisis marked a new practice in sovereign debt rescheduling, which eventually led to change in international bond issuing, so that 'collective action clauses' are now a standard element of these; see Helleiner (2005).

identical: the massive capital inflows of the 1970s were wholly cut off in 1982-83 and resumed again in 1989-91 to reach their apogee in 1995-1997” (Pettis 2001: 50).

In light of the absence of a link – even in times of liquidity abundance and investment optimism – between compliance with perceived ‘sound policies’ and with standards of ‘best practice’, on one hand, and international capital flows on the other hand, it should be no big surprise that when a shock to ‘investor confidence’ occurs, one observes little, if any, influence of domestic policy on the degree of capital outflows. When a financial crisis occurs, Avinash Persaud explains, “fund managers sell off assets in places that *resemble in any way* the trigger spot” (Williams 2006: 162, emphasis added). Hence contagion, the phenomenon by which a financial crisis spreads to neighbouring countries (Desai 2003; Frenkel & Fendel 2004; Eatwell & Taylor 2000; Eichengreen et al. 1996; Sell 2001), is likely to occur irrespective of the degree of compliance in those neighbouring countries.²⁵

As noted in the previous section, financial markets have shown ‘limited knowledge’ in FSAP data. On this background, it is no big surprise that quantitative studies examining the impact of compliance on the cost of foreign capital have failed to demonstrate the presumed significant link.²⁶ In the cautious phrasing of the IEO, econometric studies on the impact of FSAP data “generally suggest a small impact, at best, on market spreads” (IEO 2006a: 59).²⁷ Overall, the evidence in support of the presumed existence of an effectively operating mechanism rewarding or punishing countries according to their degree of compliance with standards is not exactly overwhelming.²⁸

²⁵ The compliance-with-standards approach has little to offer in terms of countering the problem of contagion, in other words. A serious disincentive problem thus results: why strive to comply “if the good and the bad are both caught”? (Kumar & Persaud 2002: 21).

²⁶ A number of studies have adopted the methodology of examining the impact of compliance with standards on the cost of foreign capital, measured by interest rates on foreign currency-denominated government bonds. See Chortareas et al. (2001), Gelos & Wei (2002), IMF (2003a), and Schneider (2003, 2005).

²⁷ Though one of the more comprehensive of these studies – carried out by IMF economists – argued that compliance with standards does indeed reduce the cost of foreign capital (IMF 2003a: 6), it was apparent at closer scrutiny that there was only a robust impact with regard to one of twelve areas of standardization, namely standards for property rights protection (IMF 2003a: 16). A significant impact was found also for accounting standards, but this impact disappeared when the analysis focused on post-Asia crisis data.

²⁸ This conclusion supports the assertion recently made by Thirkell-White: the notion that “mere market discipline” can “secure widespread implementation” of the standards “seems misplaced” (Thirkell-White 2007: 34).

LIMITATIONS OF FINANCIAL STABILITY ANALYSIS

Liquidity risk

In early 2007, the IMF's Global Financial Stability Report (GFSR) noted that although "financial markets may well adjust smoothly" in a transition from favourable liquidity conditions to "to historically more normal levels", there is "a risk that the adjustment will be less smooth" (IMF 2007c: 29). The credit crunch that started unfolding later that year may be said to be, at least in part, the expression of such an 'adjustment process'. The adjustment is ongoing and though much remains to be seen, it seems safe to say that 'smooth' is not the word for it. It is important to stress that in adjustment processes, liquidity is the crucial factor: absence of liquidity may severely "amplify the market effect of external shocks" (Goodhart 2006: 3421).²⁹ On this background, it is troubling that the approach to financial regulation launched with the IFA neglects liquidity risks. Only in 4 out of a sample of 28 FSAPs had stress-tests addressed liquidity risk (IMF 2003b: 6-7). FSAP stress-tests focused instead on interest-rate risk (25 out of 28), exchange rate risk (24 out of 28), and credit risk (26 out of 28). It is important to stress that this problem is not confined to FSAPs. By focusing "unrelentingly on bank capital adequacy", central banks have effectively "taken their eye off liquidity" (Goodhart 2006: 3421). "The capital that an institution is *forced* to maintain to meet regulators' requirements is *not free* to be used to meet adverse eventualities", Goodhart stresses (ibid.).

Focus on banks

The functional dividing lines between banks and other financial intermediaries have become increasingly blurred over the past decade. As a consequence non-bank financial institutions may today be as crucial to financial stability as banks themselves. Given these developments, FSAPs would have had to focus not only on banks but also on non-bank financial institutions, such as insurance companies, hedge funds and pension funds, if they were to adequately assess financial sector vulnerabilities. In one of the first IMF policy documents on the FSAP, a main conclusion was indeed that there was a need to focus not just on banks but also on a number of other "sectors and markets that have proven relevant in assessing financial vulnerabilities", including mutual funds, pension funds, insurance companies, and hedge funds (IMF 2000b: 12). Nevertheless, in

²⁹ While liquidity is not an easily defined concept, the Bank for International Settlements recently suggested a definition it thought would be acceptable to most. A liquid market, by this definition, is a market where participants 'can rapidly execute large volume transactions with a small impact on prices' (cited from Spratt 2004: 106). Most literature perceives liquidity as consisting of three main components; tightness, depth and resilience. Whereas tightness refers to the cost of turning round a position over a short period, depth refers to the volume of trade needed to significantly affect prices, and resilience to the speed by which prices return to equilibrium (ibid.).

the vast majority of cases, FSAPs carried out stress-testing of banks only. Only in 7 of 28 FSAPs were stress-tests made for non-bank financial institutions (IMF 2003b: 9). This relative neglect of non-bank financial institutions in stress-tests was further reinforced in the process of identifying a ‘core’ set of financial soundness indicators; all core FSIs targeted banks, whereas non-bank financial institutions were covered only through the wider set of ‘encouraged’ indicators.

Off-balance sheet positions

Current stress-testing methodology “relies almost exclusively on balance-sheet data” and therefore “has serious shortcomings as regards the assessment of risk exposures of complex institutions with substantial derivatives positions”, the IMF acknowledges (IMF 2003b: 16). Because stress-tests “largely do not take account of the effect of derivatives positions”, even the “*direction* of exposures to financial shocks derived from balance-sheet positions can be misleading because off-balance sheet positions can qualitatively and quantitatively alter on-balance-sheet exposures” (ibid.). It was for long conventional wisdom that banks had successfully sliced up and solid on its credit risks – thereby making banks and the financial system as such safer.³⁰ The recent turmoil in financial markets suggests that this was little but wishful thinking, however. Banks may have “shown risks out the front door by selling loans”, but these risks seem to have returned through “the back door” (Economist 2007: 63).

Domestic inter-linkages

Stress-tests carried out in the context of FSAPs tend to be ‘macro/micro’. Such stress-tests assesses how the positions of an individual financial institutions “would respond to a given chosen change in some macro-variable” (Goodhart 2006; Eatwell 2004). In assessing stress-testing efforts, it is important, however, to distinguish between the role of an individual bank supervisor, such as the UK Financial Services Authority (FSA), and the role of a Central Bank. For the former type of authority macro/micro stress-tests are in principle satisfactory, but for a central bank – responsible for *systemic* stability – macro/micro stress-tests are, at best, of limited value. A macro/micro test is usually a single factor exercise, assessing the impact of, say, a rise in interest rates, on a single financial institution. “But such a rise”, notes Charles Goodhart, will affect not

³⁰ The *Financial Times* explains the originate and distribute model as follows: “Most mainstream economists have long preached the benefits of the securities-based Anglo-American model, in which banks originate loans but sell them on to investors, rather than keeping them on their books. The argument is that by slicing up risk in ever more sophisticated ways and dispersing it widely, securitisation made the financial system more resilient, as well as more efficient. In particular, it was supposed to shift risk away from the banking system, insulating the flow of finance to households and businesses from even large credit losses” (Guha & Tett 2007).

just the financial institution examined, but “all other banks, financial institutions, borrowers, and other economic agents”, and how the individual financial institution is to “assess the resulting inter-linkages within the whole economy is left unclear” (Goodhart 2006: 3417). “What may appear sound at the micro-level”, Goodhart continues, “may be quite fragile and flawed at the macro level” (ibid.). “Actions that may appear compelling and fully rational from the perspective of individual market participants can lead to undesirable aggregate outcomes for the market as a whole”, Claudio Borio notes (Borio 2004: 234). While “much attention has been given to the micro stress testing of individual banks”, Goodhart stresses, “there has been relatively little empirical work aiming to do a similar exercise for the banking system as a whole” (Goodhart 2006: 3418).

The IMF has been aware of this problem quite early on too. Among the key problems highlighted in an internal IMF review of the FSAP was that “linkages among different financial institutions are often complex and little understood” and that accordingly, “there is a risk that potential systemic vulnerabilities related to linkages among sub-sectors or non-financial institutions may be overlooked” (IMF 2003b: 20). Despite this awareness, FSAP stress-tests have been carried out for the entire banking system only in a minority of cases, and not once for an economy as such.³¹ Although much work has been done to “address market distress by improving the *market infrastructure* and the risk management at *individual* financial institutions”, Borio stresses, the “link between collective actions of individual market participants and market dynamics” remains largely unexplored (Borio 2004: 237).

Supra-national dimensions of financial risk

A focus on the domestic economy *as a whole* would by far be a sufficient revision of the FSAP, however. Systemic risk is not confined to the domestic economy. In the words of the IEO, FSAPs “have generally been limited to the segments and risks of the financial system that have domestic implications” and “made limited inroad into the broader global and regional dimensions” of financial risks – and thus, in terms of “identifying and highlighting potential spill-over channels and effects”, the contribution has been “limited” (IEO 2006a: 35). It is not without irony, in the current era of promoting global financial integration, that the FSAP remains firmly confined to nation states, both conceptually and in terms of the quantitative methodologies deployed, hence systematically neglecting *global* systemic risks.

³¹ Ultimately, what is needed is macro/macro stress-tests, argues Goodhart, which studies “the economy as a whole” – including the real economy, as well as the banking sector and the non-bank financial sector – “of the effect of a given shock on all main component sections of the economy simultaneously (Goodhart 2006: 3418; Borio 2006).

THE PROCYCLICALITY OF THE IFA

Unfortunately, efforts to strengthen the international financial architecture by encouraging the adoption of standards of ‘best practice’ have had pronounced procyclical effects. In this sense, the IFA has undermined rather than strengthened the resilience of the international financial system. Two key features of the procyclical nature of the IFA are the promotion of ‘market-sensitive’ risk management and the promotion of Fair Value accounting (FVA) in and through standards of banking supervision (Basle Committee) and accounting (IASB), respectively.

‘Market-sensitive’ risk management

A key aspect of efforts to strengthen the International Financial Architecture (IFA) is the attempt to encourage the adoption of mathematical risk management models that are highly ‘sensitive’ to shifts in market valuations. This reflected a “growing fashion in risk management” over the past decade or more, to “move away from discretionary judgments about risk” toward “more quantitative and market-sensitive approaches” (Persaud 2001: 60). The problem is, however, that this approach fails to take adequate account of herding, one of the most salient features of globally integrated financial markets.

‘Herding’ denotes what investors or bankers do when they “buy what others are buying, sell what others are selling, and own what others own” rather than making investment decisions based on their own evaluations of the risks involved.³² “In a herding environment”, Persaud explains, “tighter market-sensitive risk-management systems and more transparency actually make markets *less* stable and *more* prone to crisis” (Persaud 2004a: 85):

The observation of safety creates risk (as the herd chases after what was safe and investors become overly concentrated) and the observation of risk creates safety (as the herd avoids what was risky). In this way, market-sensitive risk-management

³² Bankers and investors herd partly because, in a world of uncertainty, ‘the best way of exploiting the information of others is by copying what they are doing’ and partly because they are ‘more likely to be sacked for being wrong and alone, than for being wrong and in company’ (Persaud 2001: 59).

systems could in one sense be said to manufacture risk and they certainly add to the pro-cyclicality of capital flows (Persaud 2004a: 98).³³

This “perplexing dilemma”, Persaud argues, is rooted partly in the homogenization of market-sensitive risk management systems – which make individual institutions invest according to the same models, on the basis of the same data on past volatility and correlation – partly in the “use of short-term windows to report returns” (Persaud 2004a: 100). If success is measured on a short-term basis, a narrow group of strategies will generate positive returns and “investors will converge to those strategies adding to illiquidity, and to related phenomena such as bubbles and crashes” (ibid.). The problem is, in brief, that the current approach to international financial regulation, with its focus on homogenizing the risk management of individual institutions, effectively makes “investors identify and then select the same optimal investment portfolio” which – when all pursue it – “will no longer be high-return, low-volatility and low-correlation assets, but the *precise opposite*” (Persaud 2004b: 181). When everyone searches out investment positions which had high returns, low volatility and correlation in the past, these will inevitably “become overvalued assets, incapable of outperforming others in the long run and vulnerable to bad news” (ibid.). “Joining a crowded hunt for the portfolio that had the right balance of risk and return in the past, in the hope that it will deliver the same in the future, is not futile”, Persaud stresses, “it is dangerous” (Persaud 2004b: 194). The move towards more quantitative, market-sensitive risk management practices reinforces herding behaviour and market volatility in a “vicious circle”.³⁴

Fair Value accounting (FVA)

Only if accounting and auditing practices are of “high quality” may disclosure of financial information to relevant stakeholders be “reliable and transparent”, the IMF argues (IMF 2005a: 247). Such disclosure of reliable and transparent financial information is crucial for “informed financial decisions, efficient resource allocation, and effective functioning of markets” (ibid.). Indeed, high

³³ There are interesting parallels to the LTCM debacle. Prior to its near-collapse, many financial market participants imitated the investment strategy of the LTCM, which was perceived to be highly successful. With large numbers of financial market investors replicating the investment strategy of the LTCM, a radical reduction in the diversity of investment portfolios resulted and this, ultimately, made an otherwise highly successful investment strategy fail spectacularly (MacKenzie 2005, 2006).

³⁴ Compare these observations with points made by Boris Holzer and Yuval Millo: “[T]he application of models-based risk management may result in the creation of second-order dangers” which “raises questions about the recent move of financial regulators worldwide toward an integration of mathematical risk assessment tools in the regulatory framework” (Holzer & Millo 2004: 17).

quality accounting is “regarded as one of the key basic areas of financial reform *necessary to prevent a financial crisis*” (IMF 2005a: 247, emphasis added). Ultimately, ‘high-quality’ accounting and auditing influence the cost and availability of capital, the IMF explains, and hence “foster financial stability through strengthened market discipline” (IMF 2005a: 248). On this background, the IFA endeavours to assist countries in “implementing international accounting and auditing standards for strengthening the financial reporting regime” (World Bank 2006).

The promotion of ‘high-quality’ accounting entails, essentially, the promotion of Fair Value accounting (FVA), at the expense of other modes of accounting, such as Historic-Cost accounting (HCA). Instead of valuing assets at their acquisition price, FVA values assets in terms of their current market price. In definitional terms, FVA is “the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm’s length transaction”³⁵ As compared to historic-cost accounting, FVA “represents a significant shift in thinking because it removes the direct link between what a firm paid for an asset and the value the firm attributes to that asset in its statutory financial statements” (Perry & Nölke 2006: 562).

The rationality behind FVA is that by replacing valuation anchored in *historical* values (acquisition prices) with valuation tied to *current* values, one achieves a more adequate, or fair, valuation of productive activities, assets and liabilities. *Fair* value is *market* value, in other words. In many instances, however, fair value accounting is complicated by the absence of knowledge of market values because the asset in question is not traded. In such cases, recourse must be taken to various forms of model-based estimations of market value. Irrespective of this complication, the rationality of FVA is that it contributes crucially to the efficiency of economies. Capital markets use financial accounting data to assess the likely future income streams of companies, and for this purpose FVA provides much more suitable data than does HCA. Whereas HCA is believed to ‘distort’ economic reality by ‘under-reporting’ asset values, “there is nothing more real than the value of an asset today”, in the words of the vice-chairman of the IASB (cited from Perry & Nölke 2006: 564). FVA is therefore expected to provide the best possible data to capital markets and this is crucial in today’s global economy, for only by optimizing the quality of financial reporting data may the efficiency of resource allocation be optimal, the contention goes.

In the course of the credit crunch of the past year, FVA has become the subject of increasing criticism from banks and insurance companies arguing that “applying it to financial instruments

³⁵ International Accounting Standards Board (IASB) 1999, IAS19, Section 7: definitions.

in the current turmoil risks undermining the financial system” (Hughes 2008).³⁶ Earlier this year, Martin Sullivan, Chief Executive of the US Insurance company, American International Group (AIG), thus urged a rethinking of fair value accounting (Guerrera and Hughes 2008). Sullivan argued that FVA “forced companies to recognise losses even when they had not intention of selling assets at the current prices”, and said that this practice created a “vicious circle whereby companies recorded huge losses, lost investors’ confidence and were then forced to raise funds at unfavourable prices” (ibid.). Instead, the AIG proposed that companies were to “estimate the maximum losses they were likely to incur over time and only recognise these” in their accounts (ibid.). Accounting regulators have so far rejected such proposals, with the widespread support of the financial press. A key argument has been that it is not the role of accounting to ensure financial stability. But surely, it is not the role of financial accounting to exacerbate financial instability either? For now, suffice it to stress that FVA reinforces the business cycle, both in the boom and the burst.

Concluding remarks

The approach to international financial regulation launched in the name of strengthening the ‘international financial architecture’ (IFA) may be said to consist of two main crisis prevention strategies; crisis prevention by means of restructuring economies to become ‘proper’ economies, in and through standards of ‘best practice’, and crisis prevention by means of increased ‘market-sensitivity’ in the risk management practices of governments and financial institutions, in order to enable authorities and institutions to detect and respond to signs of vulnerability as early as

³⁶ A number of other reservations have been expressed with regard to FVA. First, some authors have argued that while FVA may in principle provide a better input for comparative risk assessments in capital markets, in reality the FVA is itself based on so many complex and subjective assessments that financial statements based on FVA are not comparable between different firms, not to mention between different time periods (Bernstein 2002). Without such comparability, the envisaged efficiency gains will not result. Second, some have warned that the FVA paradigm “reduces the manager’s voice in favour of the market’s voice” (Barlev and Haddad 2003: 384), shifts power from managers (executives) to shareholders (investors), and reduces the influence of stakeholders. Third, it is argued that FVA takes the perspective of finance, whereas HCA takes the perspective of production, and that FVA thus reflects and reinforces ‘financialization’, the process by which the “proportion of corporate profits made from financial activities rise sharply relative to that made directly from production” (Nölke and Perry 2007; Perry & Nölke 2006).

possible.³⁷ This approach to international financial regulation entailed a significant shift in terms of types of data perceived relevant to assessing economies. Both markets and authorities had previously focused their attention on a relatively small set of macroeconomic variables, and on a limited set of economic policy issues seen to be particularly important for the growth and development prospects of a country. The IFA – and hence the FSAP – did not discard these modes of representing economies to financial market participants and authorities. The ‘usual suspects’ – current account deficits, inflation, interest rates, etc. – were still there. But these were now to be complemented by new types of data, including financial soundness indicators and data on compliance with standards. Such data would be critical, said the IMF, “in producing reliable assessments of the strengths and vulnerabilities of financial systems” (IMF 2000b: 1).

The IFA and the FSAP miss the target in a number of ways, however. First, the focus is on banks despite the fact that today insurance companies, hedge funds and pension funds are equally important to financial stability. Second, the substantial off-balance sheet positions of banks is generally overlooked. Third, stress-testing not only emphasises *individual* banks rather than financial systems as such – neglecting spill-over effects among and between domestic institutions as well as cross-border contagion issues – but carry out those far too narrow stress-tests in a manner that gets the dynamics of financial market behaviour upside-down. Fourth, there is a widespread tendency to neglect liquidity risk, despite the importance of liquidity to adjustment processes and hence to the resilience of financial systems. Fifth, the IFA remains firmly confined to nation states, conceptually as well as in terms of the quantitative methodologies deployed, thus neglecting global systemic risks. Sixth, the general thrust of the currently prevailing approach to financial regulation is to promote homogenization – not only of financial risk management practices, but also of data available about economies – all of which reduces rather than increases the resilience of the international financial system, which thrives on diversity.

“Right now there is huge uncertainty as to where risk resides”, an anonymous international economic official noted August last year as the credit crisis started (Guha & Tett 2007).³⁸ More than a

³⁷ The time horizon of these two components, or strategies, differ in the sense that whereas the former is presumed to be effective in the short run, the latter is likely to be effective only on a medium to long-term basis, giving that the implied restructuring efforts take time.

³⁸ “We are in a minefield”, commented Drew Matus, economist at Lehman Brothers; “no one knows where the mines are planted and we are just trying to stumble through it” (Atkins et al. 2007). A year later, Lehman Brothers imploded spectacularly. The full impact of the damage done to other financial institutions, linked to Lehman through derivative contracts, remains to be seen.

year later, 'huge uncertainty' certainly remains. Indeed, the week following the passing in the US Congress of a \$700bn rescue plan – intended to calm the markets – saw global financial markets in full panic. “The world economy is now entering a major downturn in the face of the most dangerous shock in mature financial markets since the 1930s”, the IMF observed (Beattie 2008). A regulatory regime endeavouring to promote the stability and resilience of the international financial system by enhancing ‘transparency’ has failed spectacularly. If financial market turmoil is threatening the stability and resilience of not just the financial system but the global economy as such, perhaps a new approach to financial regulation is needed, rather than mere marginal adjustments?

Unfortunately, neither the IMF nor the IEO sees it as their task to evaluate the effectiveness of the currently prevailing regime of international financial regulation. “We do not evaluate”, explains the IEO, whether the current regulation of international finance “is better than other possible approaches, since such questions go well beyond the role of the IMF” (IEO 2006a: 17). The IMF have “not been at the forefront of the debate” about what may “be done to reduce the cyclicity of capital movements through regulatory measures targeted at institutional investors in the source countries”, the IEO noted, recommending that “IMF’s analysis and surveillance should give greater attention to the supply-side factors of international capital flows and what can be done to minimize the volatility of capital movements” (IEO 2005: 4, 7).

What is needed is a shift from modes of regulation that are pro-cyclical to new ones that are counter-cyclical. Unfortunately, however, there is a rather strong tradition of rejecting counter-cyclical regulation. Allan Greenspan, acting as Federal Reserve chairman at the time, famously proclaimed after the dotcom crash in 2002 that central banks had little power to stop bubbles inflating and then bursting. All central banks and policy-makers could do, Greenspan argued, was to “focus on policies to mitigate the fallout when it occurs” (cited in FT, May 15, 2008).

However, central bankers are re-examining the ‘hands-off approach’ in the light of two major critiques. One type of criticism argues that ignoring bubbles as they build up and waiting to clean up the mess until afterwards is an expensive strategy in the sense that the implied monetary policy will eventually cause rising inflation. In the current situation, where massive government bailouts and central bank liquidity injections are taking place in the context of a deepening economic recession, there is substantial risk that we need to start worrying about deflation rather than inflation (Muelbauer 2008; Roubini 2008). The point remains, however, that once things have gotten out of hand, authorities have little choice but to adopt whatever measures necessary to rescue the financial system from a collapse, even if those measures sow the seeds for different types of severe price instabilities in the medium- to long-term. It is of paramount importance,

therefore, that regulation strives to dampen the economic cycle, to *prevent* things from getting as out of hand as they are at current. Another type of criticism contends that bubbles create ‘mis-leading price signals’ and thus will eventually divert productive resources to unproductive ends, cause high levels of macroeconomic volatility and eventually, when the bubble bursts, threaten financial stability.

With the occurrence of the US subprime mortgage crisis, and the global ‘credit crunch’ the international community has grown more aware of problems of procyclicality and the potential role of international financial regulation in countering these cycles. The recently released annual report of the Bank for International Settlements, for instance, gives place of prominence to the notion of pro-cyclicality.³⁹ “Financial innovations have heightened what seems to be an inherent tendency to ‘procyclicality’ in liberalized financial systems”, the report argues:

[A]s credit expansion fuels cyclical economic growth, asset prices and optimism rise while perceptions of risk recede. This further supports credit expansion, not least through the provision of more collateral to allow more borrowing, leading to spending patterns that could eventually prove unsustainable. Initial rational exuberance might in this way become irrational, setting the stage for a possible subsequent collapse (BIS 2008: 137).

While attention to pro-cyclical features of current modes of regulation as well as awareness of the need to launch counter-cyclical ones is increasing, these debates are often lacking in terms of concrete proposals, however. It is beyond the scope of this paper to outline a new, more effective approach to the regulation of international finance, but a brief indication of a few essential elements may be given.⁴⁰

The current debate carries little challenging of the belief in universal standards of ‘best practice’ as the way forward in international financial regulation. This is all the more unfortunate in that many of the standards of best practice contribute to a homogenization of investor behaviour in

³⁹ As another key example one could cite that *The Economist* devoted a 24-page ‘special report’ to international banking and issues of procyclicality (‘Paradise lost’, *Economist*, 2008, May 17th).

⁴⁰ The credit crunch have caused a revival of interest in work on the history of financial crises, including classical work such as that of Hyman Minsky (1986) and Charles Kindleberger (1978). It is indeed important that discussions of future modes of international financial regulation are informed by such historical analyses. For a more elaborate discussion of a more effective, future mode of international financial regulation, see Vestergaard (2008a, 2008b).

financial markets. This is the opposite of what is needed. Since the mid-1990s, a number of developments in the financial sector – including rapid collapsing of information costs and pronounced market consolidation – have exerted a homogenizing effect on financial market behaviour (Persaud 2004a 92-99). The appropriate role of regulation is to *counter* this tendency. Universal standards of best practice are not the solution, but a key part of the problem, in other words. There is, in brief, little doubt that a more effective regulation of international finance will have to emphasise diversity and segmentation of risk, as opposed to the current homogenizing and uniform approach. The current tendency to advocate the same ‘market-sensitive’ risk management systems for all financial institutions – whether banks, insurance companies or pension funds – is dangerous. Financial regulation itself should be diversified, so as to “encourage a greater diversity of behaviour by giving their considered stamp of approval to a few and varied risk-management approaches” (Persaud 2004a: 101). In such diversified financial regulation lies, Persaud argues, a “potential for a virtuous cycle” (Persaud 2004a: 102). “The more short-run and long-term investors behave differently”, he argues, “the shorter market disruptions will be and the more this different behaviour would be profitable for long-run investors” (ibid.):

[G]iving a stamp of approval to a variety of risk-management systems designed for different types of investors would solve a coordination problem; it would become easier for fund managers to go to their trustees and say that they are not following a short-term, market-sensitive risk-management system, but another, along the lines proposed by the regulators specifically for long-term investors (Persaud 2004a: 102).

Thus, with regard to banks, the main task will be to place much less reliance on market-based approaches, and with regard to long-term investors – such as pension funds, insurance companies and mortgage companies – the regulatory ambition should be to encourage adoption of “contra-cyclical risk management systems”, rather than the current short-term risk-management systems (Persaud 2004a: 85-86; Goodhart and Persaud 2008). It is too early, of course, to judge whether a new approach to international financial regulation focusing on counter-cyclical measures will result from increased awareness of the procyclical features of current modes of regulation. For one thing, as the Bank of International Settlements notes, “not everyone accepts the hypothesis” that procyclicality and excessive credit growth is “the root of the problem” (BIS 2008: 149). Moreover, there is the substantial practical problem of mobilising political support “to take away the punch bowl at the party”, as counter-cyclical modes of regulation imply (ibid.).

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Appendix A

The core set of Financial Soundness Indicators (FSIs)

<i>Indicator</i>	<i>Description</i>
Regulatory capital to risk-weighted assets	Broad measure of capital, incl. items giving less protection against losses (subordinated debt, tax credits and unrealized capital gains)
Regulatory Tier 1 capital to risk-weighted assets	Highest quality capital such as shareholder equity and retained earnings, relative to risk-weighted assets
Nonperforming loans net of provisions to capital	Indicates the potential size of additional provisions that may be needed relative to capital
Nonperforming loans to total gross loans	Indicates the credit quality of banks' loans
Sectoral distribution of loans to total loans	Identifies exposure concentrations to particular sectors
Return on assets and return on equity	Assesses the scope for earnings to offset losses relative to capital or loan and asset portfolio
Interest margin to gross income	Indicates the importance of net interest income and scope to absorb losses
Noninterest expenses to gross income	Indicates the extent to which high noninterest expenses weakens earnings
Liquid assets to total assets and to short-term liabilities	Assesses the vulnerability of the sector to loss of access to market sources of funding or a run on deposits
Net open position in foreign exchange to capital	Measures foreign currency mismatch

Source: IMF 2005a: 23.

Appendix B

Report on Observance of Standards and Codes

Standard	Africa	Asia and Pacific	European	Middle East & Central Asia	The Americas	Total
Data Dissemination	17	11	29	13	16	86
Fiscal Transparency	12	13	31	13	14	83
Transparency in Monetary & Financial Policies	7	7	32	9	6	61
Banking Supervision	10	9	43	13	12	87
Securities Market Regulation	1	7	30	6	4	48
Insurance Regulation	1	5	33	4	2	45
Payment and Settlements Systems	3	6	32	6	6	53
Anti-Money Laundering	6	5	19	3	6	39
Accounting & auditing	9	7	18	6	8	48
Corporate governance	4	11	16	8	5	44
Insolvency and creditor rights	1	0	3	0	2	6
Total	71	81	286	81	81	600

Source: IMF 2007d.