HKIEBS WORKING PAPER NO 1090/ 2004

ASIA'S BOND MARKETS: REFORMS TO PROMOTE ACTIVITY AND LESSEN FINANCIAL CONTAGION

(Parts of this report are published as a working paper by the Hong Kong Institute for Monetary Research)

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Liquid markets for debt securities exist comprehensively in no East Asian economy other than Japan, even though short or medium-term bonds are issued in most and Asian borrowers are established (though generally not prolific) international issuers. Today's markets provide a borrowing medium (not always effectively) for Asian governments, financial institutions and some companies, but investor activity is closely correlated with bank credit creation. Above all, the region's markets provide no real guard against crisis or contagion, nor act as a balance to banking systems susceptible to distortion and event risk. Asia's economies may not suffer general capital shortages but poor resource allocation is pervasive and would be greatly improved by efficient national and regional financial markets.

This paper is concerned with markets for tradable debt securities, with the impediments to their proper functioning and with the value of structured finance techniques to expand general usage in Asia's debt markets. Seven years after its most profound financial crisis, Asia risks new contagion from any similar, unforeseen loss of confidence. Active debt capital markets would help limit such risks. The world's foremost bond markets developed as a result of intense national needs, and while economic growth will inevitably lead to greater bond issuance and trading this will be insufficient for the region's wider requirements without official sponsorship of active cooperative market reform.

The paper concludes with three linked policy proposals: a matrix of steps to remove legal, fiscal, regulatory or systemic obstacles or omissions that severely hinder market usage; measures to encourage the development of a unified regional offshore market for local and major currency risk; and the concept of a regional body to promote the creation of asset-backed securities on a scale not previously contemplated.

The authors gratefully acknowledge the financial support of the Hong Kong Institute for Monetary Research, the University of Hong Kong's Research Initiation Grant programme and the Hong Kong Research Grants Council Competitive Earmarked Research Grant programme.

The University of Hong Kong's Asian Institute of International Financial Law is managing a project to monitor Asia's financial markets, working in conjunction with the Hong Kong Institute of Economics and Business Strategy, the Centre of Asian Studies and the Center for China Financial Research. The project forms part of the University's East Asian International Economic Law and Policy Programme.

Members of the project team are assisting national policy makers, international financial organisations and private sector participants in preparing recommendations for financial market reforms, both national and regional, and in assessing the value to the economies of the region of financial integration and continuing capital market development, including workable new financial structures.

Contents

A. Introduction

Markets for debt securities exist in a comprehensive way in few Asian economies, even though short or medium-term bonds have been issued in almost all, and Asian borrowers are established (though not prolific) international issuers. This paper is primarily concerned with markets for debt issues by governments, government proxies (for example, specialist national agencies), and tradable non-government debt securities; and secondly, with the value and appropriateness of structured finance techniques to expand general usage of Asia's debt markets. The paper examines the condition of the domestic and offshore[1] debt capital markets for Asia-Pacific risk. It traces common patterns of development among the established and nascent public debt securities markets in the region,[2] and looks at the dynamics that will affect these markets in the medium term. It seeks to identify whether Asia's financial systems and institutions (that have for some time admitted 'single' transactions executed by negotiation) can be made to accommodate continuous issuing and trading activity typical of advanced markets, and to consider the associated advantages and considerations. Last, the paper makes three reform proposals intended to provide practical guidance for policymaking.

The core of the paper seeks to present a fresh view of a much discussed subject, in particular by identifying:

- Whether well-established market-based initiatives can combine symbiotically with recent proposals and reforms in public policy to result in the permanent expansion of existing markets and the successful opening of new developing markets in the region.
- Major obstacles to significant, steady growth in Asian debt securities market activity, notably in issuance volumes and liquidity. In particular, the paper analyses those factors that are common to the main sectors under review, notably:
  a. Issues of financial structure and system architecture.
  b. The use and enforcement of regulatory guidelines for banks, financial intermediaries and investors.
  c. Omissions and impediments created by national law or the operation of law, and by significant differences between national laws relating to trading in securities that deleteriously influence investor behaviour.

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[1] 'Offshore' markets and instruments are taken to include all cross-border debt securities or issuance programmes in any currency, including the currency of the domicile of the issuer of risk.

Unless stated a 'major' currency is a 'core' or 'G-3' currency (euro, yen or US dollar) or one used as a continual cross-border currency of issue, currently Australian or Canadian dollars, Swiss francs or sterling.

[2] Unless stated, this paper refers to publicly issued, listed, tradable securities. Private placement transactions are excluded from discussion, although it is recognised that sophisticated private institutional markets (as in Japan and the United States) are accustomed to investing in Asia-Pacific risk.

d. Issues of corporate culture, including investment appraisal and the composition of external finance for investment.

e. Political and special interest factors, including national fiscal objectives.

- How the private sector may accommodate wider aims of public policy without compromising its proper objectives.
- Whether Asia is 'different' from advanced economies frequently identified as financial market models, either intrinsically or in terms of its stage of financial development, needs or other features.

The paper is based upon reviews of:

- All existing domestic currency markets for debt securities in East Asia (excluding Japan); and the most important cross-border public debt markets for Asian credit risk.[3]
- The role of governments as borrowers and participants in the financial sector; and the main roles of the commercial banking sector in each economy, including intermediation and its contribution to domestic credit expansion.

The dominant view of those advocating substantial bond market expansion is that Asia may become less prone to contagion from economic shocks and shifts in sentiment if the region lessens its financial system's reliance on the banking sector, and improves the efficiency with which it mobilises savings.[4] A further supportive argument often made since 2000 is that Asia suffers a loss of economic welfare by failing fully to muster savings for investment within the region. This paper concludes that the latter case relies on ephemeral circumstances and is unproven in principle[5] but that it represents powerful support for engaging policy interest. Asia's modern economies have not in aggregate been subject to non-cyclical shortages of capital but their capacity efficiently to allocate financial and related resources has been pervasively suspect. This paper argues that active debt capital markets will improve national and regional resource allocation through providing an unbiased, comprehensive and transparent price mechanism and widen the choice of risks available to investors. In so doing, such markets will also diminish potential instability and contagion.

Paradoxically, proposals arising from earlier analysis have typically lacked sufficient scale to command official attention and achieve policy traction. Before and since the 1997-98 Asian regional

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[3] The paper considers the People's Republic of China ('China'), Hong Kong SAR, China ('Hong Kong'), India, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan, China ('Taiwan') and Thailand. Its proposals have implications elsewhere in East and South Asia.

[4] Crockett (2002), Dalla & Chintakananda (2003), Eichengreen (1999), Ghon Rhee (2000), Harwood (2002), Herring & Chatusripitak (2000), McCauley (June 2003), Yoshitomi & Shirai (2001) and many others.

[5] The accumulation of international reserves by East Asian central banks, upon which the argument depends, is not necessarily permanent on its present scale.

crisis,[6] many commentators have sought overriding reasons for the relative lack of depth or activity in the region's debt securities markets. It has become clear that there is no plausible shared or singular explanation save the coincidence of history. What most constrains Malaysia's market differs from the dominant factor affecting China's or Thailand's, for example.

The paper takes especial account of current discussions and initiatives of several policy working groups now reviewing and formulating proposals for changes in financial architecture in the region. These groups are assisted by international financial organisations and private sector representatives, and the paper is informed by certain of this work, especially in its depiction of contemporary concerns. Historically, private sector lobbying has often driven financial sector reform. For example, the Singapore domestic debt market's expansion in 1998-2000 sprang from prolonged pressure for liberalisation by foreign banks and investors, whereas in Korea and Thailand the need for legislation to improve upon the perfection of title was a prerequisite for post-crisis securitised transactions using impaired financial assets. Yet throughout East Asia, reforms have produced disappointing new issue volumes and trading activity has characteristically failed to expand such as to give full confidence to permitted new investors, whether domestic or offshore. This paper suggests how governments can create a culture conducive to debt market growth with measured structural initiatives and detailed reforms introduced domestically in a cooperative regional way. Such a coordinated approach would boost the confidence of private sector participants to invest further in market-driven activity.

The paper's recommendations include a new institutional mechanism for credit risk transfer that will facilitate the securitisation of a wide range of assets and cash flows, together with a proposal for a collaborative regional domestic currency bond market in an established financial hub. The foundation of these new proposals will be early reform to remove obstacles to market growth and usage by:

- Cooperating in best practices for legislative and regulatory change. This will be supportive to market users, particularly institutional investors, both domestic and offshore.
- Wherever possible, avoiding duplication and international competition in the creation of supporting market systems and financial architecture. This will increase confidence and reduce the direct costs of market participants.
- Demanding and encouraging improvements in risk appraisal, financial disclosure and corporate governance; and in banking sector asset-liability management and the reporting of classified assets.

The paper refers chiefly to debt capital markets or to debt securities, which are taken to include all such cash instruments (and in some cases their associated derivatives), regardless of commercial terms (such as maturity or coupon, if any), and whether commonly viewed as bills, notes or bonds.

[6] This paper refers to the 'Asian crisis' but sees it as financial only in the first phase. The crisis became pervasive in its social, economic and political consequences.

Except where indicated, it does not deal with bonds or other securities sold in small denominations solely to retail investors, nor with wholesale money market instruments. Liquid, effective term bond markets are usually observed in parallel with money markets that are effective and transparent, chiefly to assist in regulating financial sector liquidity and from the need to avoid discontinuities in price signalling. Further, there is anecdotal evidence that (in the absence of capital restrictions) fund managers regard weak or illiquid money markets as a deterrent to investing in long-term securities markets, both for totemic reasons of confidence and because the lack of suitable short-term local currency instruments increases the costs of day-to-day portfolio management.

The conclusions of this appraisal take the form of a series of linked questions:

- Do East Asia's established patterns of finance make mature bond markets infeasible in a conventional sense?
- Are weak Asian markets chiefly indicative of the region's relative development?
- Can debt capital markets be developed effectively without an active risk-free benchmark yield curve?
- Will new financial structures (regional or shared among several markets with common objectives) facilitate effective bond issuance, investment and trading?
- Can such new structures assist the funding of medium-scale businesses ('SMEs'), and widen the use of securitisation for continuing funding and asset recovery?
- Do potential net gains in economic welfare justify active policy investment to strengthen Asia's bond markets?

Section B of the paper describes Asia's contemporary domestic and international bond markets and the respective interests of the policy groups that are examining their future while Section C describes the flows of funds and economic patterns that underpin those markets. Section D traces the origins of sophisticated debt markets, details the value and costs that they bring to developing or non-high income economies, and suggests lessons for Asia's policymakers. Section E analyses prospects for Asian debt markets based upon the preceding two sections. Section F concludes with three proposals to improve market operations:

- Reforms of detail in law, taxation, regulation and financial structure.
- The means (i) to speed the progress of the specific measures explained in the first proposal; and later (ii) to create an integrated debt capital market in Asia.
- A new market-orientated monoline vehicle to provide regional credit enhancement, supporting structured transactions and fostering new volumes of well-rated debt securities.

Section G describes the main features of domestic and offshore markets in the review economies.

B. Contemporary debt markets for Asia-Pacific risk

The Asian bond has been an 'emerging market' creation since well before 1985, when the term may first have been used.[7] At various times fêted, scorned, reformed, reinvented, discarded and prized, the Asian bond is a victim of inconsistency and indecision, whose tragedy has been never to know its true role. Yet there is evidence that this irregular life may change markedly within 3-5 years, chiefly through constructive effort shared by the private and public sectors, with benefits for the region's spectrum of financial markets and economies. This section considers the results of the main market-driven initiatives seen since 1990, and describes the current state of Asia's domestic debt markets and the international markets for Asian risk.

Asian governments and central banks have for many years issued modest amounts of domestic debt securities for fundraising or regulatory purposes, respectively to capture individual savings or as money market tools to influence banking liquidity.[8] Tangible interest has existed for many years in building 'true' markets for the issuance and trading of debt securities in East Asia's developing and newly-industrialised economies. One cause has been East Asia's generally high savings ratios, which private sector bank originators regard as highly exploitable. From the mid-1980s, Asian financial market participants – issuers and banks – sought to replicate certain transactions and trading behaviour observed in most advanced economies. Prior to the full wave of the 1997-98 Asian crisis, risk-preferring overseas investors helped underpin this effort with sporadic buying support, especially in periods of falling nominal interest rates, although Asian-domiciled investors (other than banks) failed then to contribute funds on any material or consistent scale.[9] National policymakers and regulatory agencies responded in the mid-1990s to these initiatives with a variety of legal and administrative reforms. None has been fully successful.

The result today is a family of disparate domestic markets commonly identified as either under-utilised or deficient, and therefore weak in stabilisation qualities as a policy tool,[10] and a cross-border market for Asian risk that is largely transactional, illiquid, and limited as to true investor participation.[11] Until the 1997-98 crisis public policy failed whole-heartedly to respond to private

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[7] By the International Finance Corporation ('IFC').

[8] The Philippines and Thailand compete for the first recorded issues in the mid-1930s (Emery, 1997). Of the countries under review, Hong Kong and Singapore were the last to sanction domestic debt issuance in the mid-1970s. The chequered history of foreign issues by Asian governments extends to the nineteenth century.

[9] It has been argued that capital inflows from non-bank institutions remained positive until after July 1997 and the collapse of the Thai baht, helping to fund the withdrawal of foreign bank lending and portfolio equity. All private capital inflows turned negative throughout the region after the third quarter of 1997 (King, 2001).

[10] Bond market literature concentrates on new financial architecture more than considering a lack of willing usage by potential participants. Harwood (introduction, 2000) is a rare exception.

[11] Except for private banking sources, market convention sees commercial bank end-investment in medium-term bonds, other than for regulatory or treasury purposes, as an ephemeral lending substitute and generally indicative of sector weaknesses.

sector initiatives; indeed, commercial banks often lobbied successfully against changes promoting debt capital market activity.[12] By 1997, funding transactions were feasible in almost all East Asian currencies but no market offered the reliability of continual dealing that characterises modern major markets and gives confidence to new borrowers or investors.

Before the Asian crisis, the most important drivers of regional debt market innovation were non-Asian banks, all hoping to apply home product management skills to fresh markets. Their returns were mixed: hampered by weak domestic distribution and with few natural local investors, the greater share of bank income from Asian currency new issues in 1990-97 came from accruals on unsold bond inventory. Such market-driven innovation brought some success in Hong Kong, Korea and Malaysia, latterly with official sympathy. The amounts raised were modest and secondary trading was inevitably constrained. Some markets (including Indonesia and Thailand) were trivial in scale and impact, while others (Singapore and Taiwan) were effectively closed to new issues, with official opinion fearful that free capital movements might conflict with monetary or currency management policy. Table B1 shows the evolution of domestic bond issuance since 1990, including government, corporate and financial sector new issues. If Korea is excluded the total net amount of new long-term debt of all kinds made available in 2002 was US$39.0bn, less than two-thirds the comparable net amount issued by Fannie Mae in the same period.[13]

Table B1: Net annual issuance of domestic bonds

All long-term securities (>1year remaining life)													
US$ bn	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
China	1.4	8.2	14.2	14.8	20.2	25.8	26.0	41.8	66.8	64.4	61.9	63.7	61.8
Hong Kong	0.2	1.7	1.7	3.0	9.1	7.1	9.8	7.6	(1.3)	2.8	0.2	0.8	1.7
India	14.3	(2.7)	6.8	13.0	8.0	15.3	12.4	0.9	16.6	18.5	19.2	20.3	24.9
Indonesia	0.0	0.0	0.2	0.2	0.1	0.2	0.3	0.6	(0.1)	0.2	0.7	(0.2)	0.1
Korea	17.6	25.1	24.8	24.3	24.9	39.0	32.3	19.2	49.7	11.1	34.1	34.3	53.5
Malaysia	4.0	3.0	2.5	4.7	8.7	8.6	10.5	12.7	3.6	4.2	8.5	8.1	0.4
Philippines	0.8	3.3	7.1	5.5	(1.4)	2.1	1.6	(0.1)	2.3	2.0	2.5	2.0	0.9
Singapore	0.8	1.6	1.8	1.3	1.4	2.2	1.4	3.5	5.3	6.9	8.3	11.2	0.6
Taiwan	3.6	6.9	16.2	8.6	7.9	9.9	25.2	18.2	20.2	(1.6)	3.9	8.1	15.7
Thailand	0.9	0.9	1.1	1.9	1.0	1.7	2.1	0.1	10.7	8.4	4.1	5.7	10.5
East Asia	29.3	50.7	69.6	64.3	71.9	96.6	109.2	103.6	157.2	98.4	124.2	133.7	145.2
Total	43.6	48.0	76.4	77.3	79.9	111.9	121.6	104.5	173.8	116.9	143.4	154.0	170.1

Source: Bank for International Settlements ('BIS'), Bank Indonesia.[14]

The total amounts of long-term debt issues reported as outstanding to the Bank for International Settlements gives more a picture of the volume of debt issued and held for regulatory purposes by financial institutions, or (in the case of China) low denomination bonds placed with individual

[12] As recently as 1992-93 many large Hong Kong investors refrained from buying local currency bonds due to lobbying by major commercial banks, all reluctant to lose access to cheap deposits.

[13] Federal National Mortgage Corporation annual report 2002. Korea itself raised less than Fannie Mae.

[14] In some cases BIS data effectively measure credit creation, not tradable issuance. China is a notable example.

investors, rather than traded aggregates. This is shown in table B2, the central feature of which is the generally slow rates of growth in year-end amounts of debt outstanding in the same markets.

Table B2: Outstanding volumes of domestic bonds

All long-term securities (>1year remaining life)													
US$ bn	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
China	33.9	40.5	51.9	66.2	66.1	93.1	119.4	161.6	228.4	292.9	354.8	418.7	480.4
Hong Kong	1.2	2.9	4.6	7.6	16.7	23.8	33.6	41.1	39.9	42.6	42.7	43.6	45.3
India	67.9	45.2	51.3	55.4	63.5	70.6	81.2	75.2	85.7	102.1	113.6	130.2	155.8
Indonesia	0.0	0.0	0.2	0.4	0.5	0.8	1.1	1.7	1.6	1.8	2.5	2.3	2.4
Korea	96.1	114.6	135.2	156.1	185.2	227.2	239.0	130.3	240.1	265.5	269.0	292.7	380.9
Malaysia	32.7	35.4	39.3	42.5	53.6	62.4	73.1	57.0	61.9	66.1	74.7	82.8	83.2
Philippines	9.0	12.9	20.8	24.3	25.9	26.2	27.9	18.4	21.0	22.4	20.3	21.6	21.9
Singapore	11.1	13.6	15.2	16.9	20.0	22.9	24.6	23.8	29.4	36.2	43.2	51.3	55.2
Taiwan	28.4	37.1	53.6	59.7	68.4	75.7	100.2	101.2	124.3	125.9	122.8	124.3	141.2
Thailand	8.8	9.8	10.8	12.7	13.9	15.5	17.4	9.5	23.6	31.5	31.1	36.2	47.3
East Asia	221.2	266.8	331.6	386.4	450.3	547.6	636.3	544.6	770.2	884.9	961.1	1,073.5	1,257.8
Total	289.1	312.0	382.9	441.8	513.8	618.2	717.5	619.8	855.9	987.0	1,074.7	1,203.7	1,413.6

Source: BIS, Bank Indonesia

In the nine review East Asian economies[15] at the end of 2002, government issues accounted for 46.5 per cent of the total volume outstanding, weighted by the total amounts in issuance in each category, compared to 24.5 per cent and 37.0 per cent for financial institutions and corporate borrowers, respectively. In the 13 year period shown, government issues accounted for a relatively stable share of debt outstanding, falling from 52.1 per cent in 1990. In contrast, amounts due from financial institutions and corporates were volatile, clearly affected by the crisis and its aftermath. Issues by banks and other financial sector borrowers ranged over the period between weighted averages of 24.5 per cent and 65.5 per cent of the total. The highest share was seen in December 1997, reflecting a pre-crisis peak of domestic debt issuance by Asian banks (much of which would have been sold to offshore speculative investors). Conversely, outstanding corporate issues peaked in 1998 at a weighted average of 44.2 per cent, more reflective of a collapse in sales of bank debt than any confidence in the corporate sector. Outstanding corporate issues otherwise remained generally steady over the period at between 29.0 per cent and 39.8 per cent. Corporate issues were most prolific in Korea and Malaysia and latterly in Taiwan; finance sector issues were more important elsewhere, with the exception of the Philippines where extant non-government issues are trivial.[16]

The 1997-98 crisis exposed faults in Asia's use of available debt markets that remain largely unsealed. Most commentators believe that structural flaws helped provoke and intensify the crisis, partly by making the region over-dependent on its domestic banking sectors, partly by encouraging undisciplined foreign currency borrowings. Later, the same fragilities slowed a post-crisis recovery:

[15] The remarks in this paragraph exclude India.

[16] The division between financial and corporate issuers is unreliable: several local currency debt markets require corporate issues to carry bank guarantees. See final paragraph p23 (*infra*).

the debt capital markets have contributed patchily in helping repair the balance sheets of Asia's commercial banks. Asia now sustains domestic currency bond markets of varying depths and value. Yet these markets are still under-utilised and fail to occupy the core status of most advanced economy bond markets in promoting an efficient flow of savings and investment and providing governments with effective tools of policy.

Since the crisis, the supply of new debt into Asian domestic and cross-border markets has gradually risen but remains generally low.[17] In each case it is unclear to what extent this reflects structural factors or a cyclical lack of demand for funds. From a practical perspective, weak supply stems partly from credit risk concerns: the international markets were closed in 1998-99 to most East Asian borrowers following a precipitate down-grading of sovereign and issuer credit ratings. By contrast, in normal conditions the refinancing of maturing obligations represents a highly significant share of new issues in all major capital markets: the post-crisis period has shown substantial and continuing capital outflows from all review economies. This has been described as a form of post-crisis balance sheet repair: Asia has devoted rising current account surpluses to acquire highly-rated non-Asian assets, representing a significant portfolio adjustment from pre-crisis to recovery.[18] Although non-Asian investors have partly balanced this outflow of Asian 'capital to quality' with inflows of risk-preferring direct investment, there is now a consensus that the trend has become extreme and represents a loss of welfare to Asia's economies.[19]

The attention given to the debate by policymakers since 2001-02[20] suggests that structural reforms, where necessary to remove or circumvent transaction or trading impediments or to promote usage, can shortly be made feasible. That attitudes to market development and risk appraisal are changing is evident from caricature: prior to the crisis, supportive bankers would claim that the Asian bond market would be a 'good idea', while officials might voice support but worry as to the consequences of losing control to the market. All views today seem more pliable and constructive, not least because the US dollar's 2002-03 decline suggested to the Asian investor that capital preservation may not be compatible with a passive accumulation of US government bonds.

Section G assesses the features and dynamics of the debt securities markets in the ten review economies and is encapsulated in Table B3, a market's sketch of the relative maturity of each

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[17] Korea is the sole exception. Although post-1997 issuance has been inconsistent and subject to shocks, all markets have provided substantial amounts for Korean corporate funding and refinancing.

[18] Crockett (*op cit*); Oh, Park, Park & Yang (2003); and many others.

[19] Reflecting both a diversion of available funds from possible investment in Asia, and a restrictive monetary stance in conditions of low price inflation (other than if the exchange rate is undervalued).

[20] Including the announcement in May 2003 by the EMEAP central banks group of a first Asian bond fund. EMEAP, the Executives' Meeting of East Asia-Pacific Central Banks, comprises Australia, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, the Philippines, Singapore and Thailand. See pp12-13 (*infra*).

domestic currency sector, accounting for transparency, liquidity, depth, the role of government, and the number of active participants.

Table B3: Relative maturity of Asian domestic debt markets

Effective but underused	Hong Kong Singapore
Effective but not efficient	Korea Malaysia
Semi-effective	India Taiwan Thailand
Underdeveloped	China Indonesia Philippines

A similar table prepared in 1996 would have shown a more tolerant view in one or two cases due to private sector transaction promotion. In the period approaching the crisis, Southeast Asian markets[21] attracted buying or arbitrage interest from overseas banks and foreign high-yield investors, encouraging participants to anticipate a permanent rise in liquidity. Domestic financial, corporate and public agency borrowers were persuaded to respond with a significant number of modest new issues. Such versions of low coupon 'carry trades'[22] disappeared in the spring and summer of 1997 with the currency crisis, making an orphan of this market-based initiative for five years. It has recently resumed with Korean and Thai risk. Thus domestic debt markets subsist in principle in all established Asian economies, with varying degrees of sophistication indicated by architecture and participants, issue volume and trading activity. National differences in financial development may be explained by a range of factors, including the origins of governing law, exemplified in the treatment of investor or property rights, or how legal systems adapt to commercial circumstances.[23] True markets are less apparent: in some cases they exist in a latent sense, as suggested in table B1, more as forums for specific transactions than continuously functioning financial sectors.[24]

[21] Other than Singapore.

[22] Unhedged purchases of high-yielding assets using low interest rate foreign currency resources.

[23] Beck, Demirgüç-Kunt & Levine (2002). The specification of explanatory variables in similar analyses reflects a common law perspective that some consider tendentious. See section F pp53-4 (*infra*).

[24] Furthermore, low-risk local currency money market instruments are available only transiently to non-bank institutional investors (and never to money market funds). This typically increases portfolio management costs, deters foreign and domestic investors and may encourage a post-shock contagion (p52 et seq *infra*).

One direct consequence is that the quality of information offered to investing or borrowing participants is fractured or substandard, for example, as to prevailing yields or the credit risks associated with certain issuers, except in some cases in very short maturities.[25] A purist could argue that the operation of financial markets reflects the characteristics of underlying flows of capital and thus Asia's bond markets have evolved to their limited state to serve a limited purpose. Before the crisis only modest domestic capital markets could be supported or were strictly necessary; post-crisis, and with time assisting a recovery in the region's balance sheet, the structural reforms resulting from contemporary policy forums are likely to change this simple state. In the long-term, the most intriguing issue is the extent to which the ensuing pattern of funds flows responds to those reforms.

The dynamics of the review economies and a sample of advanced economy comparisons are shown quantitatively in table B4, which re-works data shown in a number of studies[26] using the illustrative pre- and post-crisis data points of end-1996 and 2002.

Table B4: Simplified internal sources of finance

	Year ending					
	1996			2002		
Outstanding share of GDP (%)	Debt securities	Bank loans	Equity cap-italisation	Debt securities	Bank loans	Equity cap-italisation
China	14.6%	95.2%	3.9%	33.3%	139.9%	13.3%
Hong Kong	21.5%	158.4%	241.1%	27.4%	148.7%	246.8%
India	21.5%	29.8%	18.0%	33.4%	16.8%	17.1%
Indonesia	n.a.	14.6%	8.0%	18.1%	23.2%	13.9%
Korea	45.9%	41.2%	10.7%	82.5%	115.5%	43.0%
Malaysia	72.4%	63.3%	122.3%	86.9%	105.9%	98.3%
Philippines	33.7%	24.2%	35.5%	28.4%	31.8%	20.6%
Singapore	26.9%	80.4%	113.8%	63.9%	108.1%	102.4%
Taiwan	35.8%	120.9%	50.2%	50.2%	149.7%	67.3%
Thailand	9.6%	59.6%	20.1%	37.4%	80.5%	25.9%
Australia	48.9%	54.1%	43.8%	52.0%	n.a.	90.6%
Germany	79.2%	87.7%	10.7%	87.6%	n.a.	16.3%
Japan	100.1%	103.2%	60.9%	169.0%	107.9%	52.1%
UK	56.1%	74.1%	131.2%	65.3%	90.3%	110.1%
US	144.3%	64.3%	75.9%	155.8%	78.1%	87.8%

Sources: BIS, IMF International Financial Statistics, World Bank Economic Outlook, DataStream, national data. Equity capitalisation data exclude non-traded shares of quoted public sector companies.

While the contributions of the main sources of funds within each economy are non-uniform, the role of debt securities in East Asia is consistently less prominent than elsewhere, both before and after the 1997-98 crisis.[27] The overall conclusion from these sample data is that the debt capital markets in

[25] Distinct from information available asymmetrically, or given preferentially to banks.

[26] For example, Jiang, Tang & Law (2001); Ghon Rhee (*op cit*); Rajan (2002).

[27] It is unsafe to draw too detailed conclusions from these comparisons. For example, the modern German economy has been financed by far higher levels of privately-held non-traded equity investment and on private, tradable debt securities, relative to other advanced industrial economies. Parochial customs infect data: the statistical treatment of refinanced residential mortgage loans differs between Germany and the US to a greater extent than their respective financial systems (the *pfandbrief* and federal agency debt markets).

non-Japan East Asia, with the sporadic exception of Korea, fail to provide the resource potential for national economies in the way commonly expected among established market economies. Bank lending generally supports external financing activity within the economy to a greater and more consistent extent than outside the region. This observation held true through the 1997-98 crisis and in the immediate recovery. One similar study illustrated the difference in scale using data from the early-1990s to show that in advanced economies, the level of outstanding debt issues averaged 110 per cent of aggregate output measured by GDP, with the corresponding proportions for aggregate outstanding equity and bank debt being 80 per cent and 150 per cent, respectively. For East Asia, domestic debt totalled 10.0 per cent and external debt 3.0 per cent, respectively of GDP.[28]

Has a lack of flourishing domestic debt capital markets led to the corresponding strengthening of offshore foreign currency markets for Asian risk, either in terms of liquidity or the certainty of supply of funds? This would show Asia using the international capital markets as a proxy for domestic market development and be consistent in risk terms with many pre-1997 overt foreign exchange regimes in Asia. It might also account for the clear and consistent difference between the generally prevailing terms of Asian medium-term bonds compared to other emerging market sources: by comparison with East European or Latin American foreign currency debt, Asian risk has always traded at narrower credit spreads to the respective benchmark yield curve than would be implied by differences in sovereign credit ratings.[29] The answer is partly affirmative, though measured by insubstantial amounts. Some Asian borrowers and professional intermediaries are well-established in the international credit markets, either as issuers or (relatively passive) investors. A small number of Asian borrowers are prolific and very few[30] have maintained a continuous market in issued debt securities. Irregular supply and the generally conservative stance of those investors able to hold Asian risk has meant that tight secondary conditions have been prevalent for much of the last decade. Asian issues of G3 currency public medium-term debt instruments totalled around US$34.0bn in 2003, an amount first (nominally) exceeded by the euromarkets in 1982.[31]

If offshore markets have provided a partial substitute for illiquid domestic debt capital markets, are there identifiable results (other than in funds raised) for public policy? For example, fractured national markets may suggest that contagion remains a worry, in that any deleterious external shock could be

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[28] Pettis (2000). This stark comparison remains applicable, and survives cyclical changes in mark-to-market valuations of bonds or equity.

[29] Anecdotal reasons cite supply failing to meet investor demand and Asia's general lack of a modern default-to-rescheduling history prior to 1997. The Philippines is the sole exception: its borrowers have at all times won less favourable terms for international issues, closer to prevailing East European or Latin American levels than for others in East Asia.

[30] No more than 4-5 Asian organisations have been regarded as frequent issuers in market parlance.

[31] This inexact comparison is intended only to suggest scale. The 'euromarket' is in no sense synonymous with European risk. Sources: *Basis Point* 551, 3 October 2003; *Euromoney* Supplement, June 1989; *Euroweek Asian Review of the Year*, January 2004.

prolonged or more widespread, as if the markets collectively lacked built-in stabilisers to unforeseen or unwarranted volatility.[32] Some writers suggest that integration among East Asia's national financial sectors is relatively advanced and has risen in the post-crisis recovery, shown in two aspects of major currency cross-border markets: the level of participation by Asia-domiciled banks as lenders or syndicate members in international bond (and loan) transactions.[33] Furthermore, the validity of this observation implies that Asian commercial bank behaviour has become a potential dampening force against severe conditions turning contagious. Yet the extent of Asian bank involvement in public bond issues as underwriters and investors and in syndicated credits may indicate passivity on the part of those banks or a lack of harvestable self-originated opportunities of sufficient return, and in any event is confined to transactions for large highly-rated borrowers. Similar evidence could suggest that potential contagion has not been lessened, for 'integration' in this form is a sign that Asian banks are less resourceful in arranging and distributing risk transactions than their foreign competitors.[34]

A further (hostile) market-orientated view is that, given the generally favourable prevailing conditions enjoyed by Asian issuers relative to those from other emerging regions, access to the international debt markets has historically tended to lessen any incentive for local capital market development. If a well-rated borrower has free access to the major markets where its needs are fed by investment banks competing for limited debt supply, would it willingly lend resources to encourage growth in its home currency bond market, when such support might limit its access to domestic funding?[35] Except in Korea and Singapore, there is little evidence of top-tier companies encouraging domestic debt market expansion other than by conference lectern exhortation. Similarly, Asian banks have made surprisingly scant use of domestic currency markets to raise hybrid or regulatory capital, which would represent the application of established techniques to stimulate local market growth.[36]

The 1997-98 Asian crisis has been subjected to repeated analysis, though seldom conceiving practical reforms. However, a surge of public policy interest since late 2001 has focused constructively on structural changes and in developing ways to encourage market usage by Asian governments, companies and investors. These efforts aspire to promote efficient markets (better to intermediate savings and investment in Asia), lessen the region's long-standing reliance on the banking sector as a

[32] It has been argued that the 1997-98 crisis was 'triggered' by the withdrawal of foreign currency credit from Southeast Asia by Japanese commercial banks, partly in response to deteriorating risk but mostly their impending 1998 submission to Basel I rules requiring adequate risk capital to support impaired domestic assets (King, *op cit*). In a true crisis, the investor will sell the asset for which it obtains a price.

[33] McCauley, Fung & Gadanecz (2002). The pro-integration case may overstate the role of underwriting syndicates in international bond issues for distribution purposes, rather than publicity. Furthermore, the size of syndicates has fallen steadily since 1994.

[34] A related point is discussed in section F, p69 (*infra*).

[35] Because local banks dominate nascent bond market investment.

[36] Korea and Singapore are again exceptions: several banks have issued local currency subordinated debt to raise Tier II capital, although the aggregate amounts are modest.

source of domestic credit and build alternative, robust financial channels that can contribute to the avoidance of further crises. Several ministerial or official groupings are working with interrelated agendas, and the results may be more substantial than those of past undertakings.[37] In 2003 central banks belonging to EMEAP sponsored the creation of a fund of an initial US$1.0bn to invest in highly-rated core currency bonds issued by its Asian member governments.[38] This is an apportionment of international reserves as a prefatory alternative to holding advanced economy risk. The project has technical assistance from the Bank for International Settlements and is favoured by those Southeast Asian countries whose economies were most severely affected by the onset of crisis in mid-1997. The fund's ceiling is modest; currently representing less than 0.08 per cent of the subscriber central banks' collected reserves but it may be both a political innovation and building block for regional cooperation on financial structure. While the fund makes no contribution to liquidity it does depart from traditional central bank reserve management practice by including sub-investment grade EMEAP sovereign risks.[39] Hitherto, proposals to create regional bodies have been over-ambitious and not easily implemented,[40] so if the fund is successful and expands to embrace non-core currency assets it may be a forerunner of jointly sponsored financing and investment vehicles.[41]

Second, three APEC[42] teams began in 2002 examining capital market development. Two have exploratory and promotional briefs; the work of the third is more specific, seeking recommendations for securitisation and credit enhancement mechanisms to improve the credit risk quality of Asian bonds.[43] APEC hopes to decide if securitisation can provide a continuous fundraising mechanism in the region and further assist the recycling of non-performing financial assets ('NPLs'). The work is led by officials in Hong Kong, Korea and Thailand, the first two having recent experience of promoting new financial architecture and legislation to facilitate large-scale securitisation, either to

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[37] These initiatives are of interest to the Asian Development Bank, IFC, IMF and World Bank, in some cases for issues relevant to non-Asian emerging markets, and other organisations are often actively involved, notably the BIS and the International Organisation of Securities Commissions ('IOSCO'). By contrast, debt capital market reform initiatives appear not to have attracted interest among regional trade negotiators in Asia, perhaps because talks on financial services liberalisation are not well advanced, even arguably among WTO members.

[38] The fund is fully invested. EMEAP plans a larger family of funds to invest in Asian currency risk, and later in a third step to include south Asian local currency assets. The preliminary structure of the second fund announced in April 2004 comprises new single currency and regional index funds that will each invest in sovereign and quasi-sovereign debt issues (see section F (p50 *infra*).

[39] Many central banks engage in active trading of liquid notes and bonds, but the assets currently held by the first EMEAP fund are generally illiquid and probably represent the fund's current feasible investment universe.

[40] For example, the currency cooperation pacts discussed by APEC and ASEAN members.

[41] Including the third proposal described in section F, p70 *et seq*.

[42] The Asia-Pacific Economic Cooperation forum's West Pacific members are EMEAP plus Brunei, Papua New Guinea, Taiwan and Vietnam.

[43] A generic description of securitisation is given in footnote 212 p70 (*infra*).

assist the recycling of non-performing assets or businesses, or in the refinancing of residential mortgage loans.

Third, the ASEAN+3 cluster[44] is undertaking similar research to APEC in the practicalities of further promoting securitisation and external credit enhancement as two related ways to encourage market usage. Each of these working groups is mirrored by ministerial forums, some of which may contribute to the momentum of planning and implementation. There is reason to expect progress by end-2004 in the groups dealing with specific initiatives; those looking at broader ways to encourage market growth may have laudable aims but less tangible success.

Last, Thailand has since 2002 led participants in the Asian Cooperation Dialogue,[45] exploring regional cooperation to encourage capital market activity. This group has assumed an ancillary role to the projects sponsored by EMEAP, APEC and ASEAN+3, intending to promote awareness of their respective work and to raise political encouragement.

Converting expectation into practise is to confound the region's complex patterns of internal and external financing, and tends to assume that the adoption of bond market models from elsewhere is feasible and desirable. This view is hazardous, and risks neglecting the costs associated with bond market development.[46] More realistic (but no less demanding on a regional basis) may be the design of specialist structures that allow the pooling of risk or enhancement of credit quality and which are tailored for East Asia in its present stage of financial evolution. A second route would require challenging levels of collaboration and legal harmonisation but little in new systems or structure: this is the promotion of a regional hub for offshore Asian currency debt issues.

Under-utilised markets are inefficient in two particular respects: from the resources absorbed by both public and private sectors in administration and the high marginal costs of transaction execution for participants. Asia's semi-liquid domestic markets bring all the costs yet only some of the true benefits associated with debt capital markets. For the markets to flourish and deliver their full value (if this becomes an agreed goal of policy), governments in the region must inculcate usage, not only with specific reforms, fiscal, regulatory or legal, but with suasion and innovation. Mechanical changes to improve the functioning of domestic markets may alone be inadequate, creating a vehicle that is sleek but stationary. The nature of funds flows in East Asia suggests that by itself, time will fail to be the cause of a signal rise in trading volume, issuance, or draw new participants to any domestic market.

[44] Association of Southeast Asian Nations (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam. ASEAN+3 is an ad hoc group that includes China, Japan and Korea. Six ASEAN+3 teams are currently engaged in work on specific topics for the group's Asian bond market initiative (see table H7 p102 *infra*).

[45] Comprising the ASEAN+3 members, together with Bahrain, Bangladesh, India, Kazakhstan, Kuwait, Oman, Pakistan, Qatar and Sri Lanka.

[46] Jiang, Tang & Law (*op cit*). See also section E, p37 *et seq*.

The contemporary cross-border bond market, competitive for a handful of borrowers, unreliable for long-term investors, will indirectly sustain the quasi-monopoly of the region's banking system by discouraging financial innovation, especially in identifying new ways to finance second tier enterprises. Hong Kong and Singapore now have similar debt capital market infrastructures that are effective in most respects but scale of use.[47]

The justification for this public policy effort arises from basic elements, against which can be assessed practical costs and strategic disadvantages.[48] These gains are shown in table B5, together with some primary challenges. Structural change is essential for some of these benefits to be captured successfully. For example, if policy intends to broaden financing sources for medium-scale enterprises then some form of innovation in financial architecture is necessary, either to create a new channel of funds and for risk appraisal, or to encourage changes in bank lending, funding or liability management practices. Some market reforms may be limited; others may demand ambitious cooperation for which the region may not be fully prepared or which would provoke a drain of sympathy from other competing national interests. The European Union's experience during the 1980s of creating a single market for trade and services may be useful in this respect for Asian policymakers since the framework preceded Europe's moves towards more extensive confederal integration, including the formation of the euro.[49]

This section has summarised the patchy evolution of Asia's domestic debt markets and how official opinion may now be resolved to create workable reforms, especially with regional initiatives for cooperation in the sharing of new constructions and the removal of market impediments. It has described East Asia's participation in the international bond markets, and how this has served as a semi-substitute for capable domestic or regional markets for a limited subset of Asian borrowers and investors. If the development cost issues associated with pro-market policies are considered to be satisfactory then how best can the region encourage the building of domestic markets? The question most often asked has been whether there exists a model for Asia to follow or adapt. The response is unclear, as Section C will show: East Asia's domestic and international financing patterns are unique in the contemporary world.

[47] Limitations in each case relate to permitted issuers, free use of proceeds (Singapore), differential tax treatments *vis-à-vis* corporate and other issuers, and restrictions on purchases by certain investor classes.

[48] Bond markets require health warnings. Some commentators argue that sophisticated markets may intensify or distribute volatility, rather than act as the dampener that capital market proponents generally expect. Such critics suggest that debt market new issue activity is positively correlated with bank credit expansion, lessening the markets' effectiveness as alternative financing channels to mitigate the contagion effects of banking crises. Jiang, Tang & Law (*op cit*) and Yoshitomi & Shirai (*op cit*) are examples.

[49] Discussed in the wider sense of all securities markets by Arner (2002b).

Table B5: Grounds for public policy intervention, and associated considerations

Welfare: The economic and social value of using Asian savings in Asia.	Accepted. Yet proponents of market development may not always quantify associated direct and hidden costs.[50]
Risks I: Active financial markets may help avoid systemic risks of crises of confidence; their impact on the banking sector and the 'real' economy.	Whether bond markets help circumvent collapses in bank liquidity depends upon their being an uncorrelated alternative. Conversely, debt markets may provide efficient media for contagion to worsen a crisis.[51]
Risks II: Operating risk management, for example, having efficient markets promote efficient portfolio management by investors and of official reserves.	This point is generally accepted though neglected in official circles because of the political value historically associated with high levels of international reserves.
Risks III: Competition, the promotion of optimal allocations for long-term investment, and lower capital costs available through dispersed risk-sharing.	Effective, well-regulated banking systems may better promote resource allocation than financial markets, due to asymmetry in information gathering and skilled risk management. Yet this is belied by recurring herd behaviour by banks. Market distortions[52] may also discourage banks from fully appraising higher risks.
Secondary benefits: New funding channels assist complementary financial sectors (for example, banking, equity markets, direct investment, project finance or recycling impaired assets).	It is impossible to legislate for such vague factors. The effects on the competitiveness and risk profile of the banking system in Asia cannot be fully judged, especially if changes to capital adequacy rules based upon value at risk assessments or credit ratings are introduced under proposed Basel II guidelines.

[50] For example, in terms of Asian savers' preferences for stable risks, which may need to adjust to accommodate new Asian debt issuers in the absence of external credit enhancement.

[51] Jiang, Tang & Law (*op cit*). Highly developed markets demonstrate a direct positive correlation between bond issuance and private sector bank credit expansion. The US domestic debt market is no exception, yet is lauded for its effectiveness in backing up the banking system in times of crisis, and *vice-versa* (Greenspan, 2000).

[52] For example, national accounting differences, fiscal incentives or concessionary funding.

C. Financing patterns in East Asia

The region's economies display considerable differences in per capita national income: a range nearly matched by variations in financial market sophistication.[53] This is a group at varying stages of a regional shift from command or centrally-directed economies to forms of managed capitalism, facilitated by a generation of exceptionally high rates of economic growth.[54] The secret of the region's rapid growth may have been in productivity gains,[55] the mobilisation of increasingly voluminous factors of production,[56] or some multifarious combination, but aspects of the contemporary performance of the review economies are unparalleled, and since the mid-1980s regarded as common to all. Thus although the markets and offshore borrowers of East Asia have been classed 'emerging' since the term was first spoken, there are historically more macroeconomic dissimilarities than shared features between East Asia and emerging Eastern Europe, Latin America or the former Soviet republics.[57] Asia's 'difference' can be distilled to a single truth that its core currency bonds (and occasionally its domestic issues) have habitually been the costliest of all emerging sectors for the investor to acquire. This section examines the recurring features of the principal East Asian economies in order to give a contextual setting to capital market development, past and future. Asia's reliance on bank credit creation and its modest debt market activity have roots not only in the region's relative stage of development,[58] but also in the cultural pattern of flows of funds within and between its constituent economies. Similar characteristics were observed of Japan in its post-1940s phase of export-led growth.[59] These patterns will inform all future market development, both in terms of its character and success.[60]

Alone of emerging markets groupings, the Asia-Pacific region has frequently been characterised by consistently high personal and government sector savings, recurring central government fiscal surpluses or low deficits, strong and steady growth in exports, investment and fixed capital formation, generally low external borrowing, and intermittently favourable external balances. The result has been habitually high rates of growth. Since 1997 East Asia has realised sizeable current account surpluses

[53] Unless stated, this section refers to East Asia. Until the mid-1990s India shared few of the growth or external characteristics of the other nine review economies.

[54] Except for Japan, Asia's period of extraordinary growth is uniform from 1978, interrupted only by the post 1997 crisis, though beginning earlier in Korea, Singapore and Taiwan. See tables H1 & H2 (*infra*).

[55] For example, Bhagwati (1996).

[56] For example, Krugman (1994); Young (1995).

[57] With the partial exception of the Philippines, which shares the 1980s commercial debt rescheduling history of other regions.

[58] Yoshitomi & Shirai (*op cit*).

[59] Goldsmith (1983) pp160-187.

[60] '[E]conomic explanations are more convincing if they acknowledge culture; [and] cultural explanations are more convincing if they acknowledge the market forces of economics.' Redding (1990, p14).

and remarkable levels of international reserves relative to output. There have been periodic exceptions, typically after exogenous shocks or policy corrections, and certain countries have frequently followed distinct macroeconomic policies with consequences for government and external financing,[61] but the region's modern financial characteristics are long-standing. More recently, East Asia's growth recovered unexpectedly soon after the 1997-98 crisis, though not before considerable permanent losses in national income, especially in Southeast Asia and Korea.[62] In examining the region's flows of capital as a basis for financial market policy proposals, it is important to distinguish between observations made before and since the crisis. However agreed is the need for reform it may be wise not to build on temporary foundations.

The region's 'base' funds flow pattern varies with cycles in confidence but it can be taken that for contemporary East Asia, it is the offshore investor that has emerged rather than the borrower as elsewhere. The immediate reasons for Asia's 'difference appeal' to investors have been the variables cited in the preceding paragraphs, regardless of whether the investor's interest becomes manifest as loan, bond, share or direct interest, and often without close regard for sovereign credit rating ceilings. Such conditions arise from underlying internal and external flows of funds at enterprise and national levels. They affect the financing choices of governments and of all companies. To the extent that the region's flows reflect cultural factors[63] rather than one stage in a universal path of development, the financial reformer may ask whether it is inevitable for Asia to anticipate flourishing debt capital markets that operate independently from the banking sector. Would such securities markets otherwise form naturally? Asia's half-built, half-used bond markets suggest that these roots are not so entrenched that effective markets would be infeasible or of little use. However, it is equally probable that the customary way that Asia's companies and governments have been financed requires care in using a generic model to promote reform. Section D of this paper reinforces this view by showing the non-continuous ways in which the world's major debt markets have 'evolved'. Asia's enterprises may be too small or financially well-provided to support a corporate debt market taken from an Australian or US template, for example, yet both system and participants are in need of a different or adapted guide. Applied to regulatory and risk issues, for which Asia's prevailing corporate organisation, ownership and disclosure are often troublesome, this implies adopting standards, rigorous in all respects but appropriate to the region's raw material, in order to stimulate interest and usage.

Table C1 summarises the salient characteristics of Asia's contemporary economies, highlighting common aspects of the region's performance since the early 1980s and in the post-crisis recovery.

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[61] Malaysia's central government has traditionally been active in direct spending on infrastructural investment; while the Philippines has a comparatively weak national tax base. Both have maintained fiscal deficits over extended periods.

[62] Cerra & Saxena (2003).

[63] This is not to endorse the contention that Asia's economic success reflects an adherence to 'Confucian' capitalism, a popular 'Orientalist' view.

Table C1: Common features of East Asian national economies

External trade, current account, international reserves	Historically very strong export growth. Rapid expansion of current account surpluses since 1999, partly leading to substantial increases in international reserves.
Output growth	Consistently high rates of growth, except in isolated cases and immediately after 1997-98.
Government fiscal balance	Frequently conservatively managed. No consistent pattern; neither is there a systematic tendency to contracyclical deficit financing. Limited post-crisis reflation measures.
External financing	Consistent public and private direct investment from overseas and within the region; portfolio investment cyclical and strongly correlated to domestic US trends. Debt finance more reliant on loans than public issues of securities. Relatively narrow direct tax bases.
External debt	Comparatively low, relative to other regions, to national output and since 1999 relative to international reserves.
Savings	Private and public sector savings have been consistently and appreciably higher than all other regions. Recent establishment of provident funds and growth of institutionalised consumer savings.
Investment	Consistently far higher than other regions; relatively large proportion of private sector contribution compared to other emerging markets.
Financial intermediation	Relatively concentrated or cartelised banking sectors; non-bank credit institutions important in domestic lending prior to 1998. Modest non-bank financial intermediation of private savings. Low liquidity in money market instruments other than in the banking sector and for monetary policy use. High levels of impaired assets (except in Hong Kong and Singapore), often poorly reported.
Company finance	Internal finance is more important than for companies elsewhere. Bond issues used far less than bank loans and equity new issues.

East Asia's flows of funds are shaped by historic and cultural dynamics, some of which are highly relevant to its contemporary financial markets. For twenty-five years, the region has maintained an orientation for export promotion similar to that first adopted in the 1950s by Japan, which fuelled previously unrecorded growth in capital asset formation. The greater part of that investment has been privately sourced and privately deployed, with a reliance on internal funding and bank borrowing.[64] Governments have generally avoided heavy military spending as a share of national output, and comprehensive state welfare or pension schemes are largely absent. The effect of that want in encouraging precautionary private savings cannot be gauged reliably, but Asian savings rates appear

[64] Again, as in Japan one generation previously (Goldsmith, 1983 *op cit*).

to remain above global averages in the few cases where directed provident schemes are broadly established, such as in Singapore. Home ownership is generally prized but is significantly lower than in advanced economies and the markets supporting private home purchase are sophisticated only in Hong Kong, Malaysia and Taiwan.[65] High national savings ratios are often thought to reflect more than the risk aversion of consumers, and generally have shown no inverse correlation with per capita income. They may also be a function of a lack of entrenched welfare systems and underdeveloped institutional savings industries, and although there is some evidence that savings ratios decline marginally when these institutional factors are established, Japan suggests this is not a sufficient explanation.[66]

The World Bank's 2003 *Global Development Finance* report expresses concern at Asia's susceptibility to external shocks, its high corporate leverage, fiscal imprudence and the region's risk preferences in investment. Such unease rehearses arguments voiced widely in 1998, that 'structural and policy distortions' were chiefly to blame for the onset of the crisis.[67]

- First as to Asia's proneness to volatility, the 'extreme openness of the region leaves it vulnerable to global shocks.'[68] Historically, the World Bank is an unlikely proponent of capital controls[69] but the remark shelters a critical paradox. The great expansion in investment in Asia has largely been privately funded, whether from domestic or foreign sources. Yet since the crisis, private markets are known to contribute heavily to the risk of destabilising shocks.[70] What was once beneficial for Asia's development[71] became a cause of suffering. Market innovation must be responsive to this problem, especially in relation to risk appraisal in capital investment and bank risk management.[72] Product innovation needs to make low risk instruments freely available outside the banking sector.
- Second, on corporate leverage and fiscal policy, '[t]here has been a remarkable recovery in the health of much of the region's corporate sector since the dark days of 1998. But

[65] Although there is intense competition in residential mortgage lending throughout the region.

[66] Post-2000 data are confused by deflationary conditions that might encourage saving, *ceteris paribus*.

[67] Corsetti, Pesenti & Roubini (1998 Part I p1). The authors were far from alone, writing in September 1998, 'There are many reasons to believe that the East Asian cycle will not take the V-shaped form of Mexico [in 1994], and that the contraction in economic activity in the region will last for much longer.' (*ibid* Part II p26). Growth became positive throughout East Asia in 1999, although in some cases 1997-98 output losses were not made good until more recently.

[68] World Bank (2003, ch2 p29).

[69] World Bank opinion on capital controls has grown catholic since 1998, influenced by its then chief economist's hostility to the possible effects of 'short-term' flows (Stiglitz et al, 1999).

[70] For example, Eichengreen, Hausmann & Panizza (2002), whose remedy is basket currency financing.

[71] Taking the Japan of the 1950s and 1960s as a model, see Bhagwati (*op cit*).

[72] The primacy of the region's export orientation is changing, with domestic consumption more important than previously, which itself will demand reliable local currency financing. China and Thailand are examples.

levels of corporate leverage remain high.'[73] Yet leverage was apparent in Asia well before the crisis and is identified as a threat regardless of duration and currency composition. The Bank's data may mask differences between leverage in individual economies,[74] revealing no systematic disparity between corporate Asia and corporate G-7. Instead, the importance of changes in leverage was identified soon after the crisis: the 1992-96 rate of increase in corporate leverage was highest in countries most affected by the crisis (Indonesia, Korea, Malaysia and Thailand).[75] Inter-regional comparisons of leverage may also neglect a proliferation in advanced economies of contingent financing and funding designed to be lightly weighted for balance sheet purposes (although major Asian companies are equally attracted to these tactics).

The World Bank continues, 'Fiscal deficits have risen sharply since 1997 and averaged 3.4 per cent of GDP in 2002.'[76] Asia's fiscal balances are a recurring issue only in India, Malaysia and the Philippines. The Bank's comment implies that some or all current fiscal deficits are part cyclical, part structural: to the extent that the cause arises from difficulties in raising revenue (narrow direct tax bases that force a reliance on sales and property taxes or duties) the suggestion is that 'true' Asian debt capital markets will facilitate effective central government funding and debt management. A pre-1997 funding analogy is that contemporary high current account deficits would have caused less concern as part of coherent exchange rate policy.[77] Today's fiscal deficits need appropriate debt management policies for which cash bond markets of some sophistication are valuable.

- Third, on the region's post-crisis portfolio management and risk preferences, the Bank suggests that 'the breadth and amount of central bank reserve accumulation over the past couple of years is striking'.[78] Certainly, precautionary motives have been at play since 1999 with governments hoping to avoid the pain of crisis by building reserves for currency support, a traditional risk averse strategy. A preference for low-risk assets is widely observed throughout high-savings Asia, although such ratios partly reflect a lack of forced or contractual savings schemes compared to most advanced economies.[79] It may

[73] *ibid.*

[74] Practitioners may doubt the reliability and consistency of the source data on leverage in Asia.

[75] Pomerleano (1998). See table H6 (*infra*).

[76] *ibid.*

[77] Especially for Malaysia, Philippines and Thailand (Corsetti, Pesenti & Roubini, *op cit*).

[78] *ibid* p37.

[79] Non-bank investor data on portfolio composition are meagre. Even prominent international organisations rely on weak material: an OECD (Akhtar 2001) study of investor behaviour uses as source the results of a limited survey published twelve months earlier in *Institutional Investor*, a respectable but unauthoritative magazine.

also echo an alarming scarcity of appropriate investment opportunities. Even in basic form, enhanced debt markets will provide an alternative to extra-regional investment.

East Asia's raw conditions translate into constraints and options for local and cross-border funding by corporate and government borrowers. Such limiting conditions (self-imposed or otherwise) result in inefficient domestic markets. Except in times of crisis, governments fund their current spending needs with local currency bond issues bought (by choice or otherwise) largely by commercial banks.[80] Often irregular, such supply cannot simultaneously sustain monetary policy needs, bank liquidity requirements and meet demand from institutional investors. Companies rely on internal funding sources or bank credit; most are unwilling or unable to meet new issue requirements for business scale or transparency; some are crowded out by the public sector or by discriminatory regulation. Asian companies are no less rational than their western counterparts; internal finance is relatively inexpensive when the costs associated with asymmetric information are high.[81] The results of these conditions are outlined in the following eight points:

- Corporate ownership is generally more concentrated than in advanced countries. This promotes a primary reliance on internal funding. Secondary debt financing is sourced mainly from banks, from which arises an emphasis on relationship financing, which in turn militates against disclosure and transparency. Investment decision making and capital allocation are heavily influenced by the innate preferences of the relationship bank: immediately before the crisis Asian lenders were more content to finance speculative property development by advancing against collateral (which was familiar) than credible projects for which whole business cash flow analysis was essential and they are historically ill-prepared.
- Bank funding depends upon retail and inter-bank deposits, a narrower base than for banks operating in major markets. Tradable certificates of deposit and regulatory capital debt issues are either trivial or unavailable, in spite of the wishes of all institutional investors. Asia's money markets are dominated by short-term government debt issues, even though they lack much of the liquidity that established markets offer to non-bank participants. The absence of markets in short-term corporate debt[82] cramps corporate investing and borrowing culture and limits the options available to all company treasurers.

[80] Foreign holdings of Asian government bonds are insignificant, except for Japanese government and state agency issues. Major currency sovereign debt issues account for a small share of government borrowing.

[81] These 'agency costs' arise from the varying interests of management and ownership and will make external finance prohibitive for less transparent companies; Takagi (2000).

[82] Similar to the US or euro commercial paper markets or the Dutch inter-corporate note market. These markets often depend upon intense rating agency coverage, which is still limited in Asia, and a willingness by banks to provide standby credit facilities, which is untested. In several cases, promising markets for short-term corporate notes have been extinguished by the weight of government money market issuance and regulatory incentives.

- Reform must address regulations or cartels that in some countries require corporate issues to be guaranteed by a financial institution, usually a commercial bank, regardless of the credit standing of the issuer. The practice may spring from investor protection motives that a robust rating culture would diminish but is usually induced by monopolistic banks.[83] It is clearly not conducive to capital market development.[84] Such anomalies question whether the region's young domestic debt capital markets have provided corporate borrowers with any real alternative to bank credit. Some views are optimistic, holding that this was the case in Hong Kong after the crisis when new bond issues 'partially filled the gap' in financing that opened in 1998-99 when total bank lending fell.[85] Yet the amount raised was modest (representing in 1999 only 13.7 per cent of that year's fall in domestic lending) and the buyers of new bonds were mainly banks. A large share of the corporate debt issued in this period comprised securitised floating rate notes issued by asset-rich companies, structured solely to overcome prevailing bank credit policies.

- In its process of reform since the late 1970s China has developed a positive association between growth and financial development, but the non-state corporate sector has not used domestic institutions for finance in a material way.[86] Most spending by non-state enterprises relies on internal funding, while external financing sources divide crudely between bank lending for state-owned enterprises and foreign direct investment for the non-state sector. However, an unknown but significant share of foreign direct investment for non-state enterprises may be more loan than capital in character, disguised to avoid capital controls on cross-border lending. This is observed with mainland China enterprises controlled and funded from Hong Kong.[87]

- Certain aspects of corporate funding behaviour impact both domestic and cross-border debt markets. In the three years before the Asian crisis sources of credit broadened in

[83] Nowhere does the practice encourage lending to SMEs. Such credit substitution is seen frequently in Southeast Asia and Taiwan. Guaranteed bonds were a standard tool of Korean companies prior to 1998. The adoption of Basel II capital adequacy guidelines may make the practice prohibitively costly for all except poorly-rated companies.

[84] These remarks do not apply to measures adopted in Korea during the post-1998 recovery by which external credit enhancement has been extended to borrowing companies by public agencies such as the Korea Credit Guarantee Fund.

[85] Jiang, Tang & Law (*op cit* p14). The fall in lending was partly credit driven; partly involuntary, due to capital shortages among Japanese banks, hitherto substantial lenders in Hong Kong.

[86] Aziz & Christoph (2002). More broadly, Allen, Qian & Qian (2002 pp4-5) postulate 'very effective, non-standard financing channels […] to support the growth of the [non-state, non-listed] sector', but acknowledge that they may have their equivalent elsewhere. Such channels may 'resemble those observed in standard firms' outside China and include 'privately placed bonds and loans' (*ibid* p32).

[87] Fernald & Babson (1999).

several economies, with secondary banks and finance companies lending heavily to companies and consumers.[88] These lenders were typically more lightly regulated than banks and operated to poor risk management standards. Directly and indirectly, this quasi-bank sector was funded substantially with foreign currency loans: the phenomenon is central to the evolution of the crisis. The critical long-term lesson is that the growth of corporate lending by finance and leasing companies suggests that the banking sector provides poorly for the needs of medium-scale businesses. Section F points to a solution using capital markets techniques to improve bank funding and asset refinancing.

Such structural weaknesses have become clear in the period since the Asian crisis. Some very large companies with established foreign currency revenues were immune to the regional withdrawal of credit in 1998-99 but all others suffered in funding or refinancing due to a scarcity of bank capital and improvements in regulatory accounting that forced banks better to recognise substandard assets. Alternative sources of corporate funding would not only lessen this problem but encourage bankers to raise their corporate client product skills beyond the secured lending and trade finance to which they are trained and accustomed. The net amount raised from offshore major currency debt markets has been consistently dominated by the volume of direct investment, shown in table C2.[89] A comparison of recent aggregate bank lending and bond issues shows the severe extent of funds withdrawn or repaid after 1997.

[88] Particularly in Korea and Thailand, but also in Indonesia, Malaysia and the Philippines.

[89] With the proviso stated in paragraph 2, p23 (*supra*).

Table C2: Summary of external financing (East & South Asia)[90]

US$ bn	1995	1996	1997	1998	1999	2000	2001	2002
Net FDI inflow	54.2	62.1	67.1	61.1	52.0	47.1	53.0	62.0
Net equity inflow	10.7	14.2	2.9	(3.3)	7.0	21.0	4.5	6.2
Total equity inflow	64.9	76.3	70.0	57.8	59.0	68.1	57.5	68.2
Official creditors	7.9	4.6	17.6	17.0	15.0	7.5	6.0	(0.4)
ST private debt inflow	29.4	20.7	2.3	(45.2)	(13.3)	(11.2)	(1.3)	1.2
Bonds	na	na	15.6	4.9	(0.3)	3.8	(0.4)	6.1
Bank loans	na	na	5.2	(4.2)	(12.0)	(13.8)	(14.6)	(13.1)
Others	na	na	4.4	(0.3)	(0.6)	(0.8)	(1.9)	(1.2)
LT private debt inflow	19.3	29.3	25.2	0.4	(12.9)	(10.8)	(16.9)	(8.2)
Net private debt flow	48.7	50.0	27.5	-44.8	-26.2	-22.0	-18.2	-7.0
Total external financing	121.5	130.9	115.1	30.0	47.8	53.6	45.3	60.8
Gross LT bank lending	52.3	53.3	54.2	23.8	16.6	25.4	12.8	23.6
Gross international bond issuance	10.7	22.2	22.9	4.6	8.7	5.1	7.2	12.5
Gross international equity issuance	4.4	6.5	11.8	4.1	7.1	23.0	4.0	7.5
Gross market-based capital flows	67.4	82.0	88.9	32.5	32.4	53.5	24.0	43.6

Source: World Bank Global Development Finance 2003; IMF International Financial Statistics

Table C3 shows that except in 1996-97, Asian organisations issued only modest volumes of international debt. Only a handful of Asian borrowers have ever enjoyed a core currency liquidity premium: investor expectations of low supply make this impossible even if a scarcity of acceptable Asian credit risk can make new issues comparatively expensive for the investor.[91] Encouragingly, local market liquidity premiums have prevailed for sustained periods in Hong Kong, Korea and Malaysia, but in each case for no more than one or two issuers, without exception public sector organisations. Premiums are likely to arise for creditworthy borrowers in the event that a true separation opens between the banking and debt capital markets. Domestic liquidity premiums explain why occasional borrowing companies have not supported the capital markets but sought 'cheaper' funding from banks.

[90] For consistency Table C2 uses data for all East and South Asia. The amounts relating to non-review economies are insignificant.

[91] Investors may allow frequent issuers new issue terms that are marginally more favourable than occasional borrowers of the same credit quality. Such liquidity premiums are never constant. At intervals, major currency liquidity premiums have been associated with Korea Development Bank, Hutchison Whampoa Ltd and Petroliam Nasional Bhd. Others existed in myth before the crisis, or have since collapsed under the irredeemable weight of their frequent issues.

Table C3: Volume trends in new international debt issues, net of repayments

Net international debt issues *(US$ bn)*	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
China	3.8	0.3	1.8	4.2	(0.5)	(0.1)	0.3	0.8	(1.1)	2.4
Hong Kong	6.0	0.7	2.4	7.8	(1.1)	4.0	5.1	7.5	3.1	9.0
India	0.2	0.3	1.0	1.8	(0.3)	(1.0)	(0.4)	(0.5)	(0.7)	0.0
Indonesia	1.8	0.1	6.7	7.1	(0.4)	(4.3)	(1.9)	(1.9)	0.5	0.0
Korea	3.9	8.2	17.6	9.2	0.6	(3.7)	1.1	(0.1)	5.4	7.8
Malaysia	0.1	1.7	2.6	3.6	(0.7)	2.4	1.5	1.7	5.5	(0.6)
Philippines	1.1	0.8	3.7	3.1	0.6	3.8	1.3	0.5	4.0	4.0
Singapore	0.3	(0.2)	2.1	1.3	0.9	1.6	4.4	6.9	(1.7)	5.0
Taiwan	1.7	0.3	1.2	2.7	1.4	(0.1)	(0.2)	0.6	4.3	7.0
Thailand	2.5	1.4	5.3	2.3	(0.3)	0.3	(0.7)	(2.5)	(0.3)	(1.3)
East Asia	21.2	13.3	43.4	41.3	0.5	3.9	10.9	13.5	19.7	33.3
Total	21.4	13.6	44.4	43.1	0.2	2.9	10.5	13.0	19.0	33.3

Source: BIS securities statistics

The share of developing country borrowers in net new international debt issues has fallen over the period 1994-2002 (a complete US dollar interest rate cycle). Table C4 shows how Asia's post-crisis contribution became almost insignificant, albeit at a time when frequent issues from developed countries grew prolifically. Bank lending shows a similar picture: table C5 provides a contribution analysis for international syndicated loans, which represent an alternative feasible source of funding for borrowers able to access the bond markets. The difference in Asia's share of new loans probably results from the lending market being marginally more tolerant of lesser credits compared to the debt securities market.

Table C4: Sectoral contributions to net new issues (by volume)

Share of annual net new debt issues *(%)*	1994	1995	1996	1997	1998	2000	2001	2002	2003
All advanced economies	80.1	85.9	77.8	77.4	84.7	93.5	93.5	93.5	93.0
Hong Kong	2.4	0.3	0.5	1.4	-0.2	0.4	0.6	0.3	0.6
Singapore	0.1	-0.1	0.4	0.2	0.1	0.4	0.5	-0.2	0.3
Other Asia-Pacific	6.2	5.1	7.7	6.1	0.1	0.0	-0.1	1.9	1.4
Other developing economies	8.0	4.6	9.2	11.1	7.2	3.9	4.3	2.4	3.2
International institutions	3.2	4.1	4.4	3.9	8.1	1.9	1.2	2.1	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BIS securities statistics

Table C5: Contributions to new international syndicated loans (by volume)

Share of new international syndicated loans *(%)*	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All advanced economies	88.2	86.8	87.2	83.6	90.5	93.6	90.7	91.9	92.4	91.2
Hong Kong	2.0	1.6	1.9	2.4	0.6	0.6	2.2	2.0	1.4	1.2
Singapore	0.4	0.3	0.3	0.5	0.1	0.2	0.3	0.4	0.3	0.3
Other Asia-Pacific	7.0	6.7	6.1	5.9	2.5	1.6	2.2	1.5	2.2	2.6
Other developing economies	2.4	4.7	4.4	7.5	6.3	4.0	4.5	4.1	3.7	4.6
International institutions	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: BIS international banking statistics

- Commercial and public sector banks from all review economies except Taiwan have been accustomed to issuing foreign currency debt; most commonly unsubordinated floating rate notes, almost always denominated in US dollars and little traded.[92] The significant new features of the post-crisis transaction market have been a handful of large issues to raise regulatory capital, especially by Hong Kong, Korean and Singapore banks, and sizeable, infrequent issues of asset-backed securities as part of the recycling of impaired financial assets, chiefly from newly-formed state-sponsored asset management organisations in Korea, Malaysia and Thailand.[93]

- Since 1999-2000 Asia's private sector banks have contributed a high level of participation in new international bond issues and loans. This has been identified favourably as a sign of financial integration that could militate against contagion in the event of new crises.[94] While an alternative explanation was suggested in section B,[95] both suggest that the banking market's risk of contagion has not diminished since the crisis.

- International credit ratings for Asian bonds begun to be widespread only after 1997-98 and are still far from numerous. For example, as at 31 July 2003 Standard and Poor's maintained 502 ratings relating to entities in the ten review countries, compared to 398 in Japan, 421 in Australia and New Zealand and 480 in Latin America.[96] Asia's rated issues include a proportion from financial institutions that at 72.7 per cent is comparable to economies with sophisticated markets (Australia and New Zealand, Europe, the US), and higher than in areas where the banking sector is concentrated (Japan, 48.2%; Latin

[92] Capital controls have traditionally restrained Taiwanese foreign debt issues except equity-linked transactions.

[93] Similar bodies now exist in China, Indonesia and Taiwan, all using the US Resolution Trust model.

[94] McCauley, Fung & Gadanecz (*op cit*).

[95] Paragraph 3, p11 (*supra*).

[96] As at 31 July 2003, including a large number of financial stability ratings for insurers.

America, 40.4%; Canada, 38.3%), suggesting that the international rating agencies have defined the rateable universe of Asian companies of sufficient scale for the foreseeable future. Local rating agencies were created from the early or mid-1990s in India, Indonesia, Korea, Malaysia and Thailand.[97] Their reputations are unalike, despite most having alliances with one of three international rating organisations. Domestic rating agencies have often suffered from weak revenues but India's leading agency undertakes related non-rating work that may be a model for other firms. Inadequate rating cultures constrain active markets only indirectly; given the wide gap between the highest and least well-rated issuers, the investor's need for adequate credit ratings will be met when new issue supply materially increases.

Asia's banks' most marked post-crisis action was a herd withdrawal of credit. The squeeze affected all but a limited number of corporate borrowers and took hold everywhere, including those economies least affected by capital flight or losses in confidence.[98] It encouraged loan delinquency by healthy medium and large scale enterprises that might otherwise have anticipated the customary renewal of credit. The fall in credit creation had no single cause but it is clear that many banks quickly became unable to support 'good' lending due to real loan losses, increasingly rigorous risk management and regulatory enforcement of capital standards, in some cases as part of national bargains for IMF funds. Corporate demand for loans duly slackened. With few low risk assets available from traditional sources, Asia's commercial banks began to acquire non-Asian risks, adopting the portfolio choice of their sponsor central banks, and after 1999-2000 a growing number of G3 currency new issues, the object of the 'Asian bid' that so efficiently saps market liquidity.[99]

Asia's post-crisis lenders have shown waves of interest in synthetic structured finance transactions[100] and free-standing credit derivatives such as core currency total return swaps,[101] the latter encouraging commercial banks to seek enhanced returns through techniques based upon traditional portfolio theory. The parochial regional argument remains, that the bulk of these transactions are arranged by non-Asian banks and sold to passive buyers. Almost a decade's exposure to synthetic transactions and credit derivatives has not materially increased sophistication among Asian banks, nor has it provided a means for non-standard risks to raise funds, notably small-scale businesses or infrastructural borrowers. Credit limitations continue despite five years of bank balance sheet repair.

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[97] Taiwan's new securitisation legislation in 2001-02 required that new issues be rated by domestic agencies. Three global rating agencies have accordingly opened Taiwan offices with local partners.

[98] Behaviour identical to that associated with Japanese lenders in 1997, footnote 32 p12 (*supra*).

[99] This is also a central criticism of the notional effects of the first EMEAP Asian bond fund.

[100] Particularly collateralised bond and loan obligations ('CBOs' and 'CLOs').

[101] Total return swaps are arguably not credit derivatives but financing transactions involving a basis swap.

Post-crisis changes in the region's external flows of funds are most simply characterised as a pause and recovery in the movement of inward risk capital (foreign direct investment), a gradually diminishing flight of debt, and a substantial flow of resources to highly-rated foreign markets (risk averse portfolio investment in non-Asian debt markets).[102] Policy reforms could remove the less satisfactory aspects of this pattern. Asia has imperfect, under-used domestic debt markets and faces a mercurial international market in which its participation is passive. Section D looks at how deeper markets were built elsewhere and addresses the cost questions posed in section B.

[102] Crockett (*op cit*).

D. What are bonds for? Characteristics of debt capital markets

Classically, bonds are widely-held, tradable medium or long-term securities. The vast majority represent unsecured unsubordinated claims on a borrower, even when issued as part of asset-backed or securitised arrangements.[103] In the real world they can be none of these: a significant share by volume of Asia cross-border issues since 2001 have been small transactions arranged as substitutes for loans, intended for purchase by limited groups of commercial banks and, like most financial assets, merely transferable rather than tradable.[104] This section looks at the origins and features of developed markets and what they might offer a developing or newly industrialised economy in which the banking sector is dominant.

Accepted theory and market practice may converge but never meet. The modern US bond market pre-dates its seminal writings by at least 20 years,[105] yet all practitioners know that government bond yield curves provide risk-free rates for every corporate investment decision and a pricing formula for comparable debt securities.[106] Almost all the common features of highly liquid markets can be contradicted, as the following examples suggest.

- The most well developed government bond markets conceal substantial sectoral illiquidity and price discontinuities; the majority of corporate bonds are typically traded for only a fraction of their full lives.
- Active markets help improve financial sector efficiency and competitiveness. Nonetheless, new issue cartels operated for many years among domestic US investment banks to control transaction fees.
- Debt securities enhance the stability of the system by creating funding alternatives to banks, reducing the sector's power and lessening moral hazard. Can this be reliable when banks manage all new issues, make markets in securities and are perennial long-term bond investors?
- Bond markets serve as a communication medium between policymakers and markets, and with the economy at large. This may be only partly true of the Japanese government bond market; the world's second largest by volume.

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[103] Secured bonds (except covered bonds) tend to be transaction-specific, narrowly-held and in some jurisdictions may be transferable only at the risk of impairment.

[104] Up to US$50m or its equivalent.

[105] For example, on specific issues such as term structure and duration, Fisher (1930), Hicks (1939), Lutz (1940), Macaulay (1938) or Samuelson (1945). The first acknowledged work describing formal aspects of bond trading appeared only in 1972 (Homer & Leibowitz).

[106] Government yield curves are tools of description, not pricing. Market practice prices new issues relative to outstanding comparable bonds, and any reference to benchmarks is purely for brevity in describing terms or to suggest trading conditions.

- Domestic government debt denominated in the issuer's fiat currency is deemed risk-free. Yet there are contemporary examples of overt defaults on such issues (for example, by Russia in 1998) that suggest the concept is suspect, even if taken solely as implying a yield offering no premium for risk.

Reality blends market theory and practice. Mainstream corporate finance theory suggests that long-term investment is best financed by long-term capital. It also asserts that banks are not providers of such capital. Yet loans may have long-term contractual features, which when combined with interest rate or other derivatives will offer full certainty as to long-run cost (applicable also to bank liabilities); while corporate bonds can be inadvertently short-term or cost uncertain.[107] Project loans made by banks before the Asian crisis often financed wasteful schemes – the many skylines of idle cranes – but at fault were risk appraisal and choice, not the instrument of funding. For some years in the US and now globally, loans and bonds have become increasingly alike: loans are traded or acquired by non-bank investors, especially as the use of standard credit and loan transfer documentation becomes increasingly widespread. In developed banking markets, including parts of East Asia, there is a growing separation between bank-customer relationship management and the retention to maturity of financial assets by banks. Loans and bonds are evolving into instruments with common features but different origins, making it hazardous to identify a financing tool with a market segment.

The availability of total return swaps and credit derivatives – especially credit default swaps - make this process irreversible. Price transparency will increasingly apply equally to both loans and bonds, so it becomes necessary to ask whether such developments in derivatives and loan trading make contagion less likely. Regretfully, the probability is low unless Asian risk appraisal improves. Fungibility among instruments is similar to the severing of the early 20th century connection between financial centres and the currency they offer to the borrower: markets increasingly distinguish solely between risks, not the means by which those risks are intermediated.[108] In the same way, credit and currency risks are increasingly regarded as distinct: this also has consequences for the relationship between domestic and core currency bond issuance and investment, and what may be needed to promote active markets.

Thus only certain generic features of debt securities markets are accepted, given limiting conditions. At the very least, active bond markets will improve competitive practices within the banking sector by offering an alternative means of intermediation, strengthening investor choice and assisting risk transfer and risk management. Any contribution to financial policy formation must distinguish between in principle needs (which are not wholly proven) and an acceptable balance of probability. Developing or newly-industrialised economies deprived of effective bond markets will lack market-

[107] Embedded options or event covenants may trigger prepayment or changes in commercial terms.

[108] Highlighted in a debate as to blockages to the offshore sale of domestic currency bonds. See p40 (*infra*).

determined interest rates, leading firms to fail properly to measure their capital costs. The bondless economy offers no simple hedging instruments to assist appropriate risk management, restricts portfolio choice for its savers and constrains institutionalised savings.[109] This in turn encourages short-termism in capital investment and the acceptance of undue foreign exchange risk. Worse, the bondless economy will undergo periodic banking sector strains. These circumstances can be said to describe China and Indonesia, which sustain the region's least developed securities markets.

For a major rating agency effective debt capital markets require several cardinal conditions:[110]

- Strong, independent regulator of securities issuance and trading, with sound rules.
- An extended period of macroeconomic stability.
- Strong legal system and bankruptcy procedures.
- Coordinated, advanced payment, settlement, and custodial systems.
- Developed base of natural buyers of long-dated securities, specifically pension funds and insurance companies.

Only the last condition truly existed in Britain or the US at the start of the 20th century when their respective modern markets began periods of extraordinary growth.[111] Other commentators look for specific measures of sophistication while accepting that the optimal market exists only in the leaves of a book.[112] The root value of true debt capital markets is in their multifarious nature. Whereas the commercial banking sector performs one function (credit creation) in a multiplicity of ways,[113] well developed bond markets have the distinct roles cited in the preceding paragraph. Asia would welcome the means for stresses to be lifted from its banking systems; a reform that may become imperative while risk taking and money transmission commingle in banks, especially given the openness of many of the review economies. Only China, India, Malaysia and Taiwan maintain significant capital controls: these were also the countries least directly affected by the Asian crisis.

If effective, well-utilised bond markets promote efficiency and general welfare,[114] has output growth been impeded by the absence of fully developed markets? The Asian crisis resulted in part from an overdependence on external debt acquisition under fixed rate exchange regimes. Yet outside China

[109] It is less clear that its bondless borrowers face higher effective costs of funds.

[110] Standard & Poor's Corporation (2003). One further condition is contentious: to require standard resolution mechanisms in new issue documentation, including collective action clauses.

[111] Even so, continuous, active, transparent, competitive debt markets are a contemporary phenomenon in North America, Europe and Australasia that date back only to the 1970s when cheapening and accessible computer processing capacity allowed a great acceleration in product innovation and system reliability.

[112] Notably Herring & Chatusripitak (*op cit*).

[113] Ignoring money transmission and non-capital attracting activities.

[114] Herring & Chatusripitak (*op cit*).

there were few restrictions prior to 1997 on the availability of domestic credit from banks and finance companies. While this may not have been ideal it was not always inefficient. Would East Asia's recent problems have been less severe had its economies not relied so heavily on banks as their principal means of financial intermediation? In a crude sense the use of mismatched and unhedged US dollar liabilities to fund domestic baht loans would always have reached a limit and halted lending by Thailand's banks; but did the Thai economy also need to collapse? With a functioning capital market, the outcome might well have been far more benign, providing that the market was uncorrelated in operations with the domestic banking sector. The existence of multiple avenues of financial intermediation is common to high income economies; for example, working effectively in the US both during a late 1980s credit contraction and after Russia's unpredicted debt default in 1998.

While the absence of an effective market may make an economy more prone to crisis, it is unclear that such reasoning provides sufficient foundation for all countries to sustain active bond markets.[115] These are grounds for market-based innovation, though not without cost, most immediately in improving corporate governance and regulatory enforcement. Asia's leading companies are generally able to issue public debt at home and abroad, so this is not a pure funding question for well-rated credits but more a matter of the interests of investors. For medium-scale enterprises that constitute the majority of Asia's commercial population, narrow ownership and poor disclosure and reporting will deny access to an 'imposed' debt market but they would be unlikely issuers even if such standards were high.[116] Indeed, this is a cause of illiquidity equally important as issues of system architecture, law, taxation and investor behaviour. Natural or enhanced creditworthiness is critical to the market's functioning and to this is tied the effective risk management benefits of bonds. The main system impediments to properly functioning markets in Asia are highlighted in sections F and G.

Section B sketched the most obvious potential gains and costs of market development. Whether the bond market becomes a panic-spreading mechanism depends on the quality of its flows of information and how sensitive are the regulatory requirements it faces. Also, if there is leakage between the bond and loan markets then creating a corporate bond market serves only to absorb bank capital, with banks substituting bond purchases for lending. This has represented a cheap source of revenue for many Asian banks in the post-crisis recovery. Without a non-bank investor base such leakage can eliminate secondary liquidity even in a bond market with noticeable new issue volume. It characterises most Asia-Pacific domestic debt markets prior to 1997. From a policy viewpoint, 'co-movement' between bank lending and bond purchasing may erode the value of capital markets as market-dampening mechanisms, for example, to provide corporate liquidity in times of stressed banking markets. The same features in the cross-border debt markets may lead to contagion: a withdrawal of bank credit

[115] Section E assesses what other grounds may exist.

[116] Corporate issues are taken as more costly for the borrower than internal funds due to the high agency costs associated with asymmetry of information, typically more acute for SMEs.

taking place simultaneously with a cessation of new debt issues and collapse of secondary prices, although there is no agreement on the result.[117] In the long-run, sound regulation and risk management are more effective in preventing contagion of any kind than financial innovation is in its cause.[118] The IFC has assessed these types of costs and its judgement is highly practical, not least as the most experienced offshore user of emerging debt markets.[119]

Germany shows that economies maintaining a strong relationship banking model can be consistent with effective debt capital markets. More generally, the early lives of sophisticated markets may show whether they share common roots. The formation of today's prominent, actively traded debt markets has received little attention in the extensive analysis of the influence of financial innovation on economic development.[120] The history of government borrowing is a story of transaction techniques no less sophisticated than deployed by contemporary investment banks. Soon after emperors or monarchs found it possible to tax their subjects[121] they learned to raise loans collateralised by streams of expected revenues, and both French and Spanish rulers grew used to financing state spending with forward sales of projected income. These pass-through structures were unreliable: European monarchical credit risk was uniformly volatile in the Middle Ages and the creditor's life consequently unstable. Only in the 17th century when costly standing armies became obligatory did European tax raising become continual and not wholly arbitrary. The modern bond – and the standardisation it implies - dates from the same era. The first transferable long-term bonds were introduced in London in the late 17th century soon after the founding of the Bank of England, the creation of which emphasised 'that its securities were not considered to represent merely the monarch's personal

[117] McCauley, Fung & Gadanecz (*op cit*).

[118] Discussed by Arner & Lin (2003).

[119] Harwood (2002 *op cit*) is an example. Only the benefits are stated, not the costs, nor whether the presumed benefits might be achieved in other ways.

[120] Observations on pre-1950s debt market turnover and liquidity are largely anecdotal and resist empirical analysis. However, accepting the finding (since Hicks, 1969) of the contemporary finance-growth school that financial development has typically preceded and helped stimulate economic growth (for example, Rousseau & Sylla, 2001, who use 17 country data for the period 1850-1997) it is reasonable to identify prominent exogenous commonalities associated with notable phases in debt market development. In the very long-run growth may influence what North calls an economy's 'institutional framework' (1995 p2), including the functioning and nature of its financial system.

The finance-growth literature is substantial, perhaps beginning with Goldsmith (1969), and extends to specific questioning of debt market development in Asia (for example, Eichengreen & Luengnaruemitchai, 2004). Robinson (1953) is a supposed contrarian in asserting that 'by and large [ ] enterprise leads finance' (*ibid* p86), which is taken (for example, by Levine 1997, and Rousseau & Sylla *ibid*) as claiming that causation runs from growth to finance but may have been an unrelated point on constraints in the supply of savings for capital accumulation. Robinson was unconcerned with financial markets. Marxian analysis has held that the finance-growth relationship is insignificant, for example, Gurley (1967) in the context of bank intermediaries, or that 'the development of financial institutions including non-bank intermediaries, is both a determined and a determining variable in the growth process.' Gurley & Shaw (1955), but the strong view is now seldom heard.

[121] Taxation by tribute probably appeared in the 9th century 'for the declared purpose of defending the realm from outside attack' (Ormrod & Barta, 1995 p57).

debt.'[122] As new instruments allowed those in power to spend increasingly freely, the growth of issuance by the leading European nations and later the US would accelerate.[123] Throughout the 18th and 19th centuries, military spending was the critical determinant of state issuance: most governments sought to reduce indebtedness in times of peace but issued debt without restraint in the order of several multiples of contemporary national output when preparing for war.[124] Voracious war spending created demand for innovative financing instruments; the amounts raised were of a new order to those available from any bank, state contractor or moneylender, each of which was constrained by capital or personal prudence. The need to finance military spending instigated the first public securities markets by the 1750s[125] and subsequently allowed other borrowers (initially, British canal builders and American railroads) to follow in using these new funding techniques.[126]

The unprecedented expense of the Great War of 1914-18 was ruinous for all combatants but the US. Shortly afterwards, Britain's treasury calculated that the marginal cost of the 'financial effort' of the war was £8.9bn, of which £7.2bn (81 per cent) was financed by borrowing of all kinds at home and overseas.[127] At the outbreak of war Britain's total outstanding public debt was approximately £645m; at the close of fiscal 1918-19 the amount had risen twelve-fold to £7.9bn.[128] War's absolute, inviolable demand is the root of modern debt capital markets.[129] The official historian of Britain's

[122] Baskin (1988) p206.

[123] For Brewer (1989), efficient fundraising created the 'fiscal-military states' of the Dutch United Provinces, France and Spain by the early-17th century and England after the 'Glorious Revolution' in 1688. Dickson (1967) shows that a 'financial revolution' led to enormous gains in England's ability to borrow in 1688-1756, when a public bond market was made possible by simplifying transfer between bondholders (hitherto unreliable or possible only by assignment), the absence of which 'would have effectively stopped [the state] from borrowing on the scale it needed.' p457. The core of that revolution, the 1689 Bill of Rights, is to North (*op cit*) an example of essential change: 'A capital market entails security over property rights over time and will simply not evolve where political rulers can arbitrarily seize assets or radically alter their value.' p101. Some such problems persist.

[124] Ferguson (2001).

[125] 'The urgent need to raise enormous sums created by the American Civil War [from 1861] was instrumental in the development of mass markets in securities, much as the Napoleonic wars [from 1799] had been earlier in Britain.' (Baskin *op cit* p207).

[126] Davis & Gallman (2001) ch2.

[127] Including the UK's first foreign currency debt issue, jointly and severally with France, a US$500m 5 year fixed rate bond launched in October 1915 in the domestic US market via JP Morgan & Co. The issue was poorly received: much of the transaction was left with the underwriters (Wormell, 1999), a fate known to all modern issuers.

[128] Ramsey (1918 in Wormell, *op cit* pp181-6). Without the benefit of macroeconomic national income accounting, the calculated marginal cost of the war was an under-estimate; the volume of debt issued was accurate.

[129] Ferguson (*op cit*) gives a similar picture for other western issuers.

This point ignores the strategic considerations of an enemy's awareness of its protagonist's shortage of financial resources. Recalling the exhaustion of Britain's foreign reserves in 1916, Keynes (1930 pp339-340) considered it 'rather strange' that 'the acuteness of this problem of foreign finance should not have been more vivid to the imagination of our enemies.'

national debt conceded in the 1930s that while the financing of the war produced financial problems of 'an entirely new order' it would be mistaken 'to suppose that the nation is now confronted with a situation to which there is no parallel in its own history'.[130]

Historically, scale and momentum appear to be crucial to the making of a successful, usable market. Asia's foreseeable funding needs (compatible with creditworthiness) are far smaller in real terms than the amounts borrowed by the Great Powers in 1914-18 but its overall demands must be sufficient to be convincing to market participants. It is arguable that until 1997-98, Asia had no need for developed bond markets. Only the wish to guard against future instability or contagion will provide that essential momentum, rather than gradual increases in public borrowing. The advanced economies that have elected to build fully developed debt capital markets are those with a history of financing organised conflict, and generally later chose in the Great Depression or after 1945 frequently to maintain fiscal deficits, whether because of military or welfare spending.[131] If Asia is to be an exception it must establish a contemporary need as compelling as war. The crisis and its aftermath provides motivation: ignoring the loss in output in Korea and Southeast Asia, the direct costs to central governments of supporting stricken banking sectors were enormous[132] and an overhang of impaired assets has not been fully realised, especially in China and parts of Southeast Asia. In the longer-term, further substantial needs may originate from infrastructural and social requirements.

Thus a history of conflict or profound funding needs ultimately explains the existence of corporate debt markets, not only a benchmark risk-free yield curve. If public borrowing is inadequate to sustain a government bond market that is liquid throughout the term structure, are fully synthetic yield curves feasible in Asian currencies, given that state funding is generally constrained? This is usually regarded as unlikely with a foundation of illiquid derivative and money markets, where trading spreads will be volatile and futures contracts non-existent or little used. However, contemporary techniques may soon allow the building of a synthetic yield curve based upon several references and informed by sovereign credit differentials. Government's role in supporting benchmarking is always valuable, shown by the markets of Hong Kong and Singapore, yet synthetic instruments can increasingly replace traditional aspects of financial market architecture. It will soon no longer be necessary to have a standard risk-free yield curve in sophisticated markets and the trend may spread to their newer counterparts in Asia and elsewhere.

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[130] Hargreaves (1930 in Wormell, *op cit* p230). London's financing of the Napoleonic wars was a test of financial engineering.

[131] 'Welfare' in this context means non-contributory public spending on education, employment, health, social security or social infrastructure.

[132] Estimated as shares of GDP in the 12 months to July 1998 to be 17 per cent for Indonesia; 2 per cent for Korea; 13 per cent for Malaysia; and in the 12 months to July 1999 22 per cent for Thailand (Lindgren, Tomás, Baliño, Enoch, Gulde, Quintyn & Teo, 1999).

Supply conditions in certain mature government bond markets have recently caused term interest rates to fall below the 'true' nominal risk-free yield curve.[133] How may companies then estimate the risk-free rate for investment decisions, and how will non-government issues be priced by the market? In each case, the market already provides an effective answer, by using interest rate swap rates as a substitute for government bond yields. Arrangers of new issues in all major markets use the trading level of comparable outstanding bonds and the yield curve of interest rate swaps (actual, imputed or implied) for guidance, with launch pricing quoted as a spread above a government benchmark solely for convenience, if at all. While the trend of the vanishing benchmark has been confined to certain major currency markets, the principle applies to the issue and trading of domestic Hong Kong non-government bonds, which are priced in relation to HK and US dollar swap rates and expected credit spread differentials. Less sophisticated East Asian markets could follow a similar approach, especially if cross-border investment activity grows within the region. A liquid government bond market is not an absolute prerequisite for a deep and effective corporate debt securities market, providing that an adequate interest rate derivative market exists in the national currency and is not prohibited by government. Early private sector initiatives to open a long-term debt market in parts of East Asia were hampered, not only by non-existent government yield benchmarks, but also by the relative youth of all interest rate swap markets. This is not to dispense with active and efficient government markets but rather to find a solution to illiquidity that is appropriate to the region by which sovereign issuance can be adequate if insufficient, and yet encourage a corporate and securitised market to grow.

Soon after the inception of the crisis, the BIS reported that:

'Government debt markets are especially important […] where the fiscal costs of resolving systemic problems in the banking sector will be significant, and capital markets are needed to facilitate the restructuring and recapitalisation of banks and non-bank corporations. In such countries, the upgrading of both debt and equity market infrastructure is a high priority.'[134]

History suggests that momentum is equally important in fostering market innovation and growth. New issue scale and regularity will promote liquidity and encourage institutional investors, even the most risk preferring of which craves predictability.[135] As the institutionalisation of savings increases through mandatory provident schemes and commercial insurers, then debt products will doubtless be generated to meet their needs.

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[133] For example, in Australia, the UK and the US. Cooper & Scholtes (2001) discuss *inter alia* the effects on advanced corporate bond markets of a diminishing supply of 'risk-free' government bonds.

[134] Bank for International Settlements (1998 p17).

[135] Flandreau & Sussman (2002).

E. Appraisal of East Asia's debt capital markets

It may be that all sophisticated bond markets are alike but that undeveloped markets differ in their own fashion. All that is universally accepted is that Asia's debt markets are sub-optimal: there is no exception in respect of market usage or investor confidence. Earlier sections have shown how the region's markets are often well-developed but poorly used. Hong Kong and Singapore may be praised for establishing well-integrated systems but like the tyre that is never checked for air, these markets' use is latent; how they perform in stress is unknown.[136] Liquidity is not present by any accepted measure, with only ephemeral exceptions. The markets are ineffectual as an alternative channel to the banking sector and thus fail to lessen the risk of contagion. They are poor in primary financial resource allocation and to date they have been of limited use in recycling impaired financial assets except in Korea and Malaysia. In some cases new issue growth has been robust since the Asian crisis but the markets remain illiquid, opaque and subject to variations in regulation, taxation or legal status that deter many investor classes, may prevent others from becoming established, and constrain natural savings and investment flows within the region. Concomitantly, bond markets are important but inessential. This encapsulates why public policy has failed to achieve adequate energy and why past private sector initiatives have never wholly succeeded. As with Japan in its post 1940s industrialising era, East Asia lacks not funding, but efficient financial systems. Some national irregularities are shared: a theme of this paper is to identify common policy remedies to correct such problems. This section is an outline of where reform should be applied.

Policy formation will need to address a series of characteristics and impediments:

- Common barriers to steady growth in bond market activity in the review countries, notably issuance volumes and secondary trading liquidity.[137] These especially include obstacles in relation to withholding taxes, differentials in the application of taxes, restrictions on settlement or custody, arbitrary differences in creditor status that constrain institutional investment, legal risks for investors, creditor claims, and property rights generally and specifically in receivership or bankruptcy.
- Institutional blockages, including the framework and application of regulatory guidelines for banks, pension and mutual funds, insurance companies and borrowers, and how they hinder activity.
- Policy reforms to facilitate structured finance involving asset transfer. If securitisation is effective in promoting balance sheet restructuring and to provide ongoing supply for

[136] Greenspan (*op cit*) famously saw the US bond market as the economy's spare tyre, available in times of crisis to supplant a stricken banking sector.

[137] Accepted indicators of liquidity are beyond measure if the market tends always to trade 'bid-only'. See footnote 238 p86 (*infra*).

Asia's bond markets, does it require specific corrective legal measures or in civil code jurisdictions the enactment of 'umbrella' legislation as was completed by post-crisis Korea and Thailand? Are there other ways to enhance the creditworthiness of Asian borrowers and open funding alternatives for medium-scale businesses, including structured solutions such as credit enhancement with over-collateralisation or external support?[138]

- Cultural factors that cause obstructions relating to corporate governance and ownership. Is Asia's concentration of family-controlled or closely-held companies and conglomerate structures a product of the absence of a deep debt capital market? Has the lack of such markets resulted from these aspects of ownership and governance?[139] Asia's exporting economies are aggregates of mainly medium-scale enterprises in which ownership is comparatively closely-held, and for which related party transactions are thought relatively important, resulting in poor disclosure and a regulatory environment lacking credibility and confidence. For similar reasons, the work of local rating agencies (none established before 1990) has been erratic and in some cases their coverage has been conflicted. All these factors can make structured transactions impossible.[140] Where corporate credit risk might be enhanced by securitisation the law has often been inadequate, especially if asset transfers to a special purpose vehicle ('SPV') may be challenged or subjected to *ad valorem* taxation. Data records will often be inadequate to sustain an economic transaction. In this context, how has Asia nurtured an equity culture but not admitted traded debt? A majority owner's desire for control provides the most plausible explanation, with minority shareholders accepting risk with a (theoretically) limitless return and some semblance of a shared interest with the owner.[141] For such recalcitrant companies, issuing public debt instruments would compel both disclosure and a contractual coupon. In the long run true corporate debt markets will assist the equity markets by stimulating fuller disclosure.

- Poor accounting standards and inadequate disclosure, especially non-consolidation in reporting, including corporate leverage hidden by related-party transactions, off-balance

[138] Arner (2002a) gives a contemporary view of this issue.

[139] One survey shows that whether a company uses external finance may not be a function of the financing alternatives available in its host economy, although the form it takes typically is. Further, the size of companies is an important determinant of the extent of that choice being realistically available (Beck, Demirgüç-Kunt, & Maksimovic 2002).

[140] The 1990s saw pioneering securitised or asset-backed transactions close in Indonesia, Korea, the Philippines, Thailand and Asian countries outside the review group. In most cases, these transactions were not repeated, despite all intentions and heavy development expenditure.

[141] Herring & Chatusripitak (*op cit*).

sheet financing and cross-guarantees.[142] Uncertain disclosure of derivatives or contingent liabilities. Unrecorded exposure to currency risks from short-term foreign borrowing and unstated use of hedging instruments.

- For banks and finance companies, qualitative classification and poor disclosure of sectoral risk concentrations, delinquent loans, provisioning, non-accruing assets and 'voluntary' rescheduling with new advances.
- Last, how Asia's financial sectors differ from those of advanced economies, whether intrinsically or purely in terms of relative stage of development. This question affects policy implementation in that governments risk promoting capital markets because of their assumed value while neglecting fair competing interests and a variety of other costs.[143] Today's bond markets may be underdeveloped mainly because their host economies are themselves youthful: greater sophistication will flow naturally from further economic growth bringing institutional development. It has been suggested that Asia is now in the second, semi-sophisticated stage of three distinct phases of financial development, and that its systems for funding and intermediation are in their 'natural' state on an evolutionary path.[144] Even if correct, it remains likely that external effort is needed to induce Asia's markets to the third stage of sophistication: this inevitably demands policy reform.

These seven factors are the basis for the paper's proposals for reform contained in section F.

Reviews of the Asian crisis often neglect China's success in avoiding output losses in 1997-98[145] while noting that a substantial 1994 devaluation and a pre-crisis external current surplus left China free of the stresses placed on Korea and Southeast Asia in mid-1997.[146] That China's border halted the contagion may owe much to its economy's limited natural credit culture. Market techniques have grown steadily more important since the 1980s but financial institutions do not yet operate in the fullness of market forces. This has two consequences for China's banks. First, they continue to suffer external direction and may be unable to extend or withdraw credit from state sector borrowers as freely as most banks would prefer. Second, banks are protected from external shifts in sentiment. The sector cannot be attacked rapidly even though the scale of its impaired assets and weak capital bases is

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[142] 'Asymmetric information – the situation in which some people have greater access to knowledge relevant to a decision – appears always to have limited the scope and use of financial markets', Baskin (*op cit*), reviewing 300 years of market evolution.

[143] Section F takes account of this issue by proposing the collaborative use of a regional financial centre.

[144] Yoshitomi & Shirai (*op cit*). The analytical framework is especially due to Goldsmith (1969 *op cit*).

[145] Real GDP grew by 7.8 per cent in 1998.

[146] Although China's devaluation may have increased the probability of subsequent falls in other Asian currencies.

accepted. China's continuing market liberalisation and prudential re-regulation will eventually make those pressures less susceptible to semi-official resistance; it is essential for China to create a true debt capital market to guard against destabilisation. This is also a question of funding efficiency for China's private enterprise sector, which hitherto has relied on internal funding and received minimal external financing support.[147]

A recent debate asks why an economy cannot use its own currency to borrow abroad, or to borrow domestically for long maturities.[148] With this 'incompleteness', financial fragility is unavoidable because all investments will suffer either a currency or maturity mismatch. Critically, these mismatches exist not because of imprudent hedging but because a country whose external liabilities are denominated solely in foreign exchange is unable to hedge.[149] Deeper capital markets lessen the problem, as the early 20th century proved for the US and several other leading industrial economies. The key in the progression of 'older' economies to become free to issue external debt in their own currencies (or having local currency debt bought by non-residents) was their response to shocks on the scale of war or the 1930s depression. In this respect the US debt market evolved more rapidly than those in Europe because of the size of its host economy. This produced a vast investor need for domestic debt and made it less risky for investors to hold bonds (despite a phasing out of convertibility).[150] Until the 1960s investment in foreign debt securities was most often undertaken through a limited number of financial centres that were home to prominent investor communities, but there is no longer any correspondence between a bond's currency of issue and its place of issue or listing. In Asia it is clear that future bond market development is more truly a domestic question, for the critical need is to admit or establish prominent local currency investors at home, as well as abroad.[151] Research[152] and anecdotal evidence show that large countries are better able to attract foreign investment to their domestic currency issues; market depth is an important corollary to an economy's size.

Does Asia's debt capital market development require regional impetus? There may be fears that collective action by national authorities may lead to non-commercial solutions or duplicate wastefully what may safely be left to the private sector. The same view advocates an evolutionary approach to

[147] Gregory & Tenev (2001) surveyed over 600 private Chinese enterprises.

[148] Initiated by Eichengreen & Hausmann (1999). This condition has been termed 'original sin' (ironically unknown in Asian traditions).

[149] Since no investor is willing to acquire this local currency, it is assumed that hedging instruments are likewise unavailable (Eichengreen & Hausmann, *op cit*).

[150] Prior to 1933 bonds typically provided for repayment in gold at the investor's option (Bordo, Meissner & Redish, 2003).

[151] This accords with the second precept of the analysis, whether an economy is supported by long-term domestic local currency investors (Eichengreen and Hausmann *op cit*).

[152] Bordo, Meissner & Redish (*op cit*).

financial market development, leaving each local market to grow alone to maturity.[153] The findings of section D suggest that it is doubtful whether even greatly expanded Asian economies would support liquid domestic bond markets adequate for both non-bank investor activity and intermediation that militates against financial market contagion. Indeed, certain substantial economies have never produced sophisticated debt markets. Between the end of the Bretton Woods agreement in 1971 and the 1999 creation of the single currency, Western Europe included comparatively prosperous states that maintained prolonged budget deficits, some with well-developed government debt markets. In France, Germany and the Netherlands, for example, those markets were self-sustaining but among current EU states robust markets for corporate debt existed only at intervals prior to the adoption of the euro (although generally in the UK). In many cases government funding was reliant on overseas core currency issues: for long periods this was true for Belgium, Denmark, Ireland, Italy, Spain and Sweden. A regional initiative in Asia appears to be essential, both to harmonise reform and give appropriate momentum to market development while respecting the primacy of commercial conditions. The proposals of section F are accordingly designed to stir market activity rather than supplant private interests.

Asia's government bond markets are likely to evolve further but they will be deficient with neither budget deficits to fund nor principle to support in the form of welfare and efficiency.[154] This is a current concern of several regional working groups.[155] Whether governments issue bonds to raise funds or for the operation of monetary policy the practice must have clarity and predictability. Too often this is not the case and investors and intermediaries suffer impromptu withdrawals of auctions of notes or bonds. The same argument can be made of international financial organisations issuing in Asian currencies, often failing to contribute to liquidity with regular issues (there are many examples of supranational borrowers making single visits to emerging bond markets).[156] The absence of a well-developed market may have costs for any economy (in terms of efficiency and capital allocation[157]) but in Asia this has been seen most acutely for investors. Competition among banks for major relationships has often been so extreme that creditworthy borrowers have generally not lacked external funding, and few budget deficits have become endemic. With a more developed financial

[153] Exemplified by Yoshitomi & Shirai (*op cit*). North (*op cit*) plainly states the anti-evolutionary case, 'throughout history, there is no necessary reason for this development to occur.' p102.

[154] If China elects to promote true domestic debt markets then its profound funding needs may prove a catalyst for growth and participation throughout the region.

[155] See section B, pp12-14 (*supra*).

[156] To the extent that these issues are held by commercial banks, it is arguable that they also represent a negative market distortion due to favourable risk-asset weightings, and as such form part of Asia's risk averse post-crisis portfolio adjustment (p8 *supra*; Crockett *op cit*).

[157] 'The financial superstructure, in the form of both primary and secondary securities, accelerates economic growth and improves economic performance to the extent that it facilitates the migration of funds to the best user.' Goldsmith (1969 *op cit*) p400.

infrastructure, the near-term gains will be most apparent from the investor's perspective, whose resulting behaviour could provide a practical counter to future contagion.[158]

Regulatory or system arbitrage are drivers of product innovation, particularly in rule-based economies, but the growth of markets will not succeed without reform, however much it may be desired by participants. Governments need to legislate wherever necessary to remove or correct obstacles and inconsistencies, as well as agreeing new wholly practical elements (as radically new as the US mortgage or German *pfandbrief* markets once were). If debt market reform is a goal of public policy, then the aim is to promote the role of bonds in Asia as a broadening of financial intermediation. Public policy's task must therefore be to promote usage and may involve significant expansions in government issuance. It may also involve the creation of national or regional agencies to facilitate change. For many of these issues the IFC has a reliable view given its experience in fundraising in developing markets. It has argued that not every country will be able to develop active markets for reasons of volition or scale.[159] This further supports a solution involving a hub approach by which system resources are pooled. Behavioural factors are critical in achieving market usage and since this takes time to become manifest[160] it must be recognised that creating financial infrastructure alone does not bring usage, nor achieve the broad benefits of bond markets. No policymaker can countenance encouraging market development as a mark of a sophisticated economy.

Liquid debt markets engender a culture of enquiry, for they demand accepted standards of exchange and information. Reliable domestic markets will ease the World Bank's three current concerns.[161] Asia's performance record is remarkable but far from immaculate, for reasons that are widely discussed.[162] A post-1998 output resurgence has resolved certain issues, some structural as conceived by critics of the region's growth record, and others relating to the quality of regulatory insight and observance. The most pertinent policy task is to solve permanently a crisis overhang of non-performing or impaired financial assets, and instigate practices that lessen the true occurrence of such assets and provide a means to deal with new cycles of loan losses and recovery. Section F addresses this topic with proposals for a new regional securitisation vehicle and for regulatory oversight

[158] A lack of defensive investments increases instability in volatile conditions. When rational, risk averse investors (domestic or foreign) wish to reduce their holdings of local currency assets of any type, they may ordinarily seek to acquire defensive short-term instruments in the same currency. Core currency markets make this choice possible by allowing non-bank investors to hold liquid money market instruments (or wholesale money market funds), usually without fiscal penalty. Such alternatives are available in no Asian currency except yen, and prudence limits the use of local currency bank deposits by institutional investors.

[159] Harwood (2000 *op cit*), introduction.

[160] Similar to the market evolution concept (Yoshitomi & Shirai, *op cit*).

[161] Section C, pp20-21 (*supra*).

[162] Including corruption, crony capitalism, self-induced moral hazard, over-investment, unhedged foreign currency borrowing, poor exchange rate management, inadequate risk analysis by bankers and project sponsors, and government 'interference' in the economy. Arner, Yokoi-Arai & Zhou (2001) show that such problems are not uncommon elsewhere and have been regularly identified in crisis analysis.

sensitive to market practice. Fully-functional debt markets are part of Asia's prescription, not least in their giving banks a means to raise local currency regulatory capital and broaden their funding and asset refinancing. Governments may become better able to fund themselves securely, with fewer risks of flight capital leading to contagion and chronic illiquidity; active markets will offer greater real choices for both borrowers and investors.

The issue of feasibility cited at the beginning of this paper is addressed by two tables on the immediately following pages. Fully functioning and active markets are desirable and feasible but will not be achieved without dedicated effort and agreement to remove structural, legal and regulatory blockages. Furthermore, it is unlikely that the needs of each review economy are sufficient to maintain a debt capital market effective in all respects. This paper's proposals for collaboration in policymaking and in detailed aspects of implementation are based upon these conclusions, in particular for the creation of formalised regional financing arrangements through a new offshore capital market. Table E1 assesses the present strengths of domestic and offshore markets for debt securities in terms of how participants are served by each market. Most commonly, the domestic markets provide adequate means for governments to borrow and conduct monetary policy, albeit that each may be limited in ambition. No market offers value in risk management or for all corporate borrowers or investors. The six core questions posed in section A[163] are considered in table E2, which provides a basis for the policy tasks and proposals examined in section F.

[163] p4 (*supra*).

Table E1: How current markets affect participants

	Market beneficiaries	Market omissions
China	Central government as borrower; and in monetary policy operations Infrastructure project promoters	Fund managers and insurers Banks needing to recycle impaired assets Non-state corporate borrowers and medium-scale enterprises Central government as risk manager
Hong Kong	Central government as borrower; and in monetary policy operations Supranational borrowers	Fund managers and insurers All corporate borrowers Central government as risk manager
India	Central government as borrower, and monetary policy operations Banks and public sector investors	Fund managers and insurers Major corporate borrowers and medium-scale enterprises Central government as risk manager
Indonesia	Central government in monetary policy operations	Central government as borrower; and as risk manager Fund managers and insurers All corporate borrowers
Korea	Central government as borrower, and in monetary policy operations Major borrowing companies Banks needing to recycle impaired assets	Fund managers and insurers Medium-scale enterprises Central government as risk manager
Malaysia	Central government as borrower, and in monetary policy operations Public sector investors and pension funds	Major corporate borrowers Fund managers and insurers Medium-scale enterprises Central government as risk manager
Philippines	Central government as borrower Short-term corporate borrowers Banks as investors	Central government as risk manager All non-bank investors Medium-term borrowers Infrastructure project promoters
Singapore	Central government as borrower, and in monetary policy operations Major local companies Public sector investors	Supranational and foreign borrowers Fund managers and insurers Medium-scale enterprises
Taiwan	Central government as borrower, and in monetary policy operations	Companies of all kinds Fund managers and insurers
Thailand	Central government as borrower, and in monetary policy operations Prominent, well-rated companies	Banks needing to recycle impaired assets Medium-scale enterprises Infrastructure project promoters
Offshore	Well-rated sovereign, public sector and major corporate borrowers Banks as borrowers Inactive investors	Non-investment grade borrowers Governments as risk managers Banks as regulatory capital issuers Active investors and hedge funds

Table E2: Feasibility of true debt capital markets in Asia

Do Asia-Pacific's established patterns of finance make mature bond markets infeasible in a conventional sense?	Not infeasible but new markets will not develop naturally.
Are weak Asian markets chiefly indicative of the region's relative development?	The markets' current disposition reflects funding and spending choices and historic priorities.
Can debt capital markets be developed effectively without an active risk-free benchmark yield curve?	With difficulty, but providing regulatory discretion allows interest rate derivatives to generate a continuous swap yield curve.
Will new financial structures (regional or shared among several markets with common objectives) facilitate effective bond issuance, investment and trading?	Giving system reliability, issuer predictability, and prospects for improving credit ratings, investors and other new users will proliferate.
Can such new structures assist the funding of medium-scale businesses, and widen the use of securitisation for continuing funding and asset recovery?	This is demonstrable in the case of NPLs. Funding SMEs is feasible if complex (compared to applying securitisation to homogenous assets such as home loans); banks must be encouraged to accelerate SME lending in return for arms' length refinancing through securitisation.
Do potential net gains in economic welfare justify active investment to strengthen Asia's bond markets?	The potential gains in terms of a shield against instability are real, universal, but unquantifiable. The pooling of resources or cooperation in regional solutions will require new political effort.

F. Policy needs and recommendations

This paper has described the efforts rehearsed by private and official interests in building viable international and local capital markets for Asian debt before and since the 1997-98 crisis; how the results are sparse except in offering a means for conspicuous issuers to borrow, central banks to influence money market activity (often in limiting ways that lessen price transparency) and how these hopeful markets are thus subject to regular questioning. Asia's fixed income markets are of scant use to many potential participants, including most classes of non-bank investors and a majority of aspiring borrowers, and fail to induce sufficient non-core currency issuance of adequate risk quality to satisfy regional and domestic investors. Above all, they provide no guard against crisis or ensuing contagion, nor act as a balance to banking systems that are susceptible to complex monopoly, distortions in resource allocation and to event risk.[164] Too little collaborative public effort has been made to stir activity: specific action beyond exhortation or planning is needed from Asia's governments and the official groups now deliberating on their behalves.

Left to grow alone, Asia's domestic markets will fail to generate adequate liquidity or activity. The world's most sophisticated debt markets sprang from the most essential needs, enabled by reform and product innovation, and would otherwise have evolved neither as far nor fast. Only economies with a history of financing organised conflict or extensive state welfare programmes have nurtured fully developed debt capital markets.[165] Nowhere else has the need been as large or the motivation as great. Asia must recognise a contemporary need with as great an imperative as war: the shocks of 1997-98 and their aftermath may have created such motivation, especially when taken together with a regional need for improved resource allocation and investment in infrastructure. One year after the Asian crisis began, Hong Kong's senior financial official asked impassionedly, 'how is it that we in Asia have never been able to replicate the eurobond market success [...]?'[166] He might privately have welcomed the crisis as providing suitable reason: if market activity is stirred so as to assist in solving the banking sector's post-1997 burden of impaired assets the ongoing result will be depth and liquidity of the order envisaged by the most optimistic participants, and systemic reform that will constrain future post-shock contagion and support future economic development.

[164] Consumer finance has become highly competitive in Asia in the last decade but complex monopolies widely exist in SME financing and retail deposit taking, whereby two organisations maintain a sizeable joint market share or a larger number act as an effective cartel.

[165] While the conception of those markets dates from the late-18th century their modern (liquid) form is highly contemporary (from no earlier than the mid-1970s) so that on a developmental timeline Asia is not far 'behind'. The eurobond market experienced prolonged spells of chronic illiquidity at recently as the late 1980s.

[166] Financial Secretary Donald Tsang, speech to Asian Bond Market conference, 4 July 1998.

This section advances policy suggestions and recommendations for reform, all appropriate to the region and intended to promote supply and usage and to widen participation. The ten most important elements (drawn from the seven conditions outlined in section E[167]) are:

- For each currency sector and regionally, standardise and broaden the range of available feasible debt instruments, especially as to issuers and maturities.
- Establish and consolidate benchmarks (normally single obligor government or quasi-government securities) across a declared range of maturities; introduce and adhere to visible debt issuance programmes, nationally or regionally.
- Remove restrictions on trading techniques, including bond or note repurchases on all investment grade issues, short selling, and the freest use of OTC (over-the-counter) or exchange traded interest rate and currency derivatives compatible with declared exchange rate policy.
- Standardise clearing (real-time book entry settlement and delivery) systems and custody requirements to provide reliability, eliminate principal risks in the settlement process and promote market integrity so as to encourage investor confidence. Remove obstacles to the use of securities financing by conventional bond and note repurchase and lending, so to support efficient trading techniques and safeguard settlement liquidity.
- Where necessary, require market-makers to provide trading liquidity in benchmark notes and bonds. Ensure that bank liquidity requirements and day-to-day central bank operations do not generally hinder liquidity in benchmark securities (through an over-reliance on bond repurchases). Ensure that trading systems allow an open, efficient price discovery mechanism that is fully visible to end users, rather than a closed circle of central and commercial banks.
- Promote securitisation and other credit transfer mechanisms through regulation or legislation (and consultation with all established credit rating agencies) to allow the dependable structured pooling of risks (generating both short and medium-term instruments) to enhance weak credits and assist risk and liability management by banks.
- Remove regulatory restrictions that prevent non-bank institutional investors from acquiring or trading in term debt securities of any kind, subject only to agreed credit rating floors that are purposefully harmonised, and in money market instruments whether or not rated.

[167] pp38-40 (*supra*).

- Where necessary, remove common barriers that prevent investors to establish a legal basis for trading, ownership and settlement.
- Remove (or as a minimum standardise and simplify) withholding taxes on securities, collateral assets and their sale; eliminate differential treatments among interest-bearing and other debt instruments; and remove differential source taxation of identical investments by banks and non-bank institutional investors.
- Support common portfolio accounting standards among investor groups, in particular to apply similar requirements among banks and non-bank financial institutions.

These needs are optimal, non-parochial but not infeasible.[168] It is unreasonable to expect even incomplete reforms to be introduced speedily throughout the region. Were agreement to emerge from today's platoon of working groups then attendant legislation is still unlikely to pass quickly and untroubled.[169] This paper's proposals balance the most desirable reforms with recognition of an inevitable resistance to change by government and other entrenched interests. For example, the institutional structures proposed later in this section could be used to bring into effect all the detailed prescriptive measures listed in the following table F1 though without demanding that hesitant governments of less-developed markets relinquish full authority to those forces of which they may be suspicious, in many cases correctly.

There are three strands to these recommendations; they address all main aspects of the market's needs.

Proposal I	Proposal II	Proposal III
Agreement among ASEAN+3 members to introduce essential legal, fiscal, systemic and regulatory measures to remove identified impediments to market participation and growth, and introduce reforms to encourage harmonisation and regional usage.	A collaborative regional public debt market for domestic and major currency issues, monitored by confederal regional regulation in an established Asian financial centre.	A new regional body as part of an institutional mechanism for credit enhancement to support credit risk transfer and facilitate and encourage the securitisation of a wide range of assets and risks, and the creation of a new source of well-rated risk.

[168] Proxies may eventually develop for the factors listed here; for example, using cash swap curves as a substitute for conventional risk-free benchmark yield curves (pp36-7 *supra*).

[169] Whether by design, Taiwan's 2002 Financial Assets Securitisation Law was enacted in haste and is widely regarded as deficient save for limited use.

Each proposal is intended to be long lasting in impact and its implementation influenced by continuing objectives, rather than the cyclical factors of financial conditions or confidence. Nonetheless, this is an opportune time to begin reform. The practicalities of creating a second regional EMEAP fund to invest in Asian currency instruments are considerable, for example, except in relation to two EMEAP constituent currencies.[170] They may not be adequately resolved without the adoption of many of the changes specified in Proposal I and for which Proposal II would give momentum and strategy. In the absence of such developments, the second fund is likely to be unduly constrained by both currency composition and its freedom to invest and divest holdings, regardless of investment objectives.

The proposals are not mutually exclusive. First, the simplest means to remove identified detailed obstacles to growth and development (Proposal I) is to permit a collaborative offshore market for which from inception no impediment or obstacle can exist (II).[171] Second, permitting the operation of an offshore domestic market (II) will facilitate the speedy introduction of more complex mechanisms to allow securitisation on the broadest scale (III), even without changes to existing law. The remainder of this section describes the operation of each proposal and how their respective advantages represent favourable practical solutions to the region's needs.

[170] The exceptions among EMEAP's target currencies are Hong Kong and Singapore dollars (see p13 *supra*) for there will be no investments in Australian or New Zealand dollars or yen instruments. The announced single currency and regional index funds are effectively a means to lessen problems associated with direct investment in local currency instruments by offshore investors and certain domestic investors, such problems relating to custody, enforcement of rights, reliability of transfer, taxation and other matters shown in Table F1, which exist in all cases to varying degrees except in Hong Kong and Singapore.

[171] 'The rapid emergence in the 1960s of a worldwide Eurocurrency market […] resulted from the peculiarly stringent and detailed official regulations governing residents operating with their own national currencies.' McKinnon (1977 p2).

Proposal I: specific measures agreed among participating governments to remove obstacles to market growth, so as to promote efficiency and activity.

The success of all pro-market reform will be limited if governments fail to address a compendium of impediments that deter activity and penalise participants throughout East Asia, even in markets regarded as advanced. The measures listed in this proposal are examples of essential changes, without which activity will not develop to its potential, institutional investors will be constrained and forego opportunities, and the region will continue to lack the dependable risk averse macroeconomic characteristics of active, non-contiguous debt capital markets. This section identifies commonalities in problems associated with legal, regulatory and enforcement issues and systems questions, the main effects of which were characterised in the preceding section.[172] It contains a common approach to revealing and encouraging reform to assist with investor and issuer appraisal of the results.

Successful markets are sustained by accommodative legal systems and bankruptcy procedures, and are regulated independently with clarity and fairness. No aspect of market issuance or trading distinguishes unreasonably between classes of issuer or investor. Systems providing for data gathering or dissemination, settlement, payments and custody are simple in use, coordinated and risk-minimising, and the market is supported by a core of institutional buyers of term securities. No such markets properly exist within the EMEAP circle except in Australia and Japan.[173] Reform has seldom been proposed in a fashion sufficiently specific to provide reliable guidance for legislation or rule changes. One reason is the opacity of existing rules: for example, most ASEAN withholding tax regimes are unclear, whether by application, tariff, amelioration or the reliability of collection. Banks are favoured in this respect over other financial institutions that have fewer chances to exploit fiscal loopholes or claim treaty exemptions made freely available to the banking sector.[174] Withholding taxes can create long-term distortions in resource allocation; they generate substantial revenue in no review economy and would not do so in any purely domestic capital market even with substantially increased turnover.

Policy formation must address all significant institutional blockages and how they hinder activity, including the framework and application of regulatory guidelines for banks, pension and mutual funds, insurance companies and borrowers. It must lessen obstacles in relation to withholding taxes, differentials in the application of taxes and tax treaties, restrictions on settlement or custody, arbitrary

[172] pp38-40 (*supra*).

[173] Hong Kong and Singapore approach international standards but suffer anomalies, restrictions and a lack of turnover in many instruments (see Table F1 p56 et seq *infra*).

[174] The interplay between withholding taxes and associated tax treaties may cause a net transfer to the offshore banking sector that distorts the pricing of credit risk and can stimulate short-term capital flows from offshore. For example, it was influential in the accumulation by many European banks never represented in Asia of relatively high levels of Korean and ASEAN risk assets prior to the Asian crisis.

differences in creditor status that constrain institutional investment, legal risks for investors, creditor claims and property rights generally and specifically in receivership or bankruptcy. It must also examine cultural factors that may cause obstructions relating to corporate governance, disclosure and ownership. Last, for structured finance techniques to become a significant aspect of capital market activity, each legal, regulatory, taxation and accounting system must provide simply for the true sale of financial claims and associated collateral assets, and minimise title uncertainties arising from set-off, the incidence and collection of duties, the giving of notices, permissible foreign ownership, and concerns as to partial enforcement or contract integrity. Restrictions and legal uncertainties that impede securities financing (mainly bond and note repurchase and bond lending) will lessen dealing and settlement liquidity for all investors and professional traders.[175] Regulators have often sought to dampen trading regarded as destabilising but limitations on market techniques that are generally considered legitimate may heighten volatility by inducing unwarranted selling. Domestic and foreign investors are hindered in both long-term investment and day-to-day trading by the poor availability of local currency short and long-term hedging products and supportive credit risk procedures for risk netting and collateralisation. Similarly, low risk instruments to house investors' short-term liquidity are available only in core currencies. Asian money market instruments may not exist, are taxed at source, or are artificially scarce, effectively held within a closed circle of central banks and their domestic banking acolytes. This lessens choice, efficiency and reduces price (interest rate) transparency.

Meeting these objectives requires three problems to be solved: intentional or implied restrictions, omissions of law or practice, and unnecessary inconsistencies within and among national bond markets. The elements in this matrix of market obstacles and omissions divide into four categories: legal, fiscal, regulatory and systemic, the aggregate effect of which is to prohibit or deter issuance and investment. The four parts of Table F1 list issues within this framework for which attention is most needed and especially where that need is common to several of the review countries. They apply to both government and corporate long-term debt markets, and to a majority of the review economies' domestic money markets. Some of these problems and disparities are widely known, especially in the sense that those risk-preferring organisations dealing in Asian bonds welcome credit and price discontinuities and the trading anomalies that they create: this is true in measure of the proprietary activities of banks and private funds. Until these questions are resolved general trading activity will be permanently constrained to the detriment of wider interests within the financial sector and notably in

[175] 'Securities financing' refers chiefly to repurchase arrangements, securities lending and to collateralisation. Bond or note repurchases ('repos') are a trading tool most common in use in Asia by central banks influencing day-to-day liquidity and may be used by professional traders for the same motive. Investors lend or borrow securities to increase portfolio returns or facilitate short sales; securities lending thus affects settlement liquidity. Collateralisation using debt securities is integral to managing counterparty credit risk in interest rate swaps and other medium-term OTC derivatives.

terms of regional crisis containment. The most damaging features are obstacles and omissions, since market discrepancies can often be reflected in the pricing of risk, but domestic irregularities relating to matters of law are also damaging and not fully compensated in ratings, risk or pricing.

The legal and regulatory points cited in parts 1 and 3 of Table F1 are connected to certain of the putative findings of contemporary 'law and finance' theory,[176] that legal environment and differences in the ways that investors are protected by national jurisdictions or regulations are strong determinants of the effectiveness of individual financial systems, including the scale and depth of capital markets, and may ultimately be reflected in national economic performance. Investor protection is typically shown by variables representing indexes of creditor rights, quality of creditor claims or judgement enforcement and the likelihood of expropriation against owners (shareholders, and in some cases creditors). A second thread of the theory argues that legal origins or traditions significantly influence investor protection and the sophistication of national financial systems. Some views further hold that common law traditions better support creditor rights and effective markets compared to jurisdictions based on civil law, and conversely, that such protection of creditor rights improves the functioning of capital markets because the quality of enforcement rules and practice varies with legal systems.[177] These issues affect the remedies and reforms to be considered by national governments. If the nature or origin of legal systems is a strong determinant of financial development, then some of the problems identified in Table F1 may be intrinsic and incapable of piecemeal remedy. If the root of these concerns is based upon factors so fundamental then the harmonised approach to reform sought by APEC and ASEAN+3 working groups cannot be feasible in outcome.[178]

[176] Beginning with La Porta, Lopez-de-Silanes, Shleifer & Vishny (1997 and 1998). Beck & Levine (2003) review the theory's literature. King & Levine (1993) and Levine (1997) examines broader relationships between financial and economic development, suggesting general acceptance of strong causal links between the functioning of financial systems and economic growth. These studies extend specific aspects of work begun by Goldsmith (1969 *op cit*).

[177] Testing law and finance theory is made difficult because aggregate data on debt (creditor) claims are erratic compared to equity claims, which (by convention) are consistent and simpler to measure. The determined variable 'debt' has been commonly taken as the sum of bank claims against the non-banking sector and disclosed or public non-financial bond issues (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1997 & 1998). This may exaggerate sophistication in a bank-based financial system; it may also confuse aspects of creditor rights relating to the protection or enforcement of collateral since a far higher proportion of bank claims are secured than amounts owed to bondholders. Such data weaknesses cloud the contention that the treatment of debtor claims necessarily signifies effective financial markets.

[178] Recent broader work examines the determinants of bond market capitalisation relative to national income in Asia and more generally for up to 49 local currency markets (respectively, Eichengreen & Luengnaruemitchai, *op cit*, and Burger & Warnock, 2004). Both studies concur with La Porta et al that country size, economic growth, creditor rights and certain risk factors are important determinant of bond market size, but Eichengreen & Luengnaruemitchai find that Asia's lack of large markets also reflects conservative fiscal policies and historic cultural factors. Both studies acknowledge data limitations, for example, hindering analysis of the determinants of market activity (turnover) and in suggesting reverse causality. Further analysis is warranted based upon segmented market transactional data.

Practice is unlikely to produce so rigid a result. There are accepted examples in Asia (and elsewhere) of civil law economies that sustain flourishing debt capital markets and of common law jurisdictions that fail so to do.[179] Experiences within the EU since 1986 suggest that harmonisation to minimum standards, coupled with mutual recognition, can be effective across economies with differing legal and institutional settings. Further, unsecured rights attaching to debt claims are different in character to the corporate governance issues linked to equity claims, where agency concerns are direct and permanent. In addition, empirical problems associated with assessing comparative creditor rights may suggest that the theory is advanced from a common law perspective, for example, as the choice of proxy variable cannot easily control for common law systems inherently encouraging commercial dispute at law. The role of debt is less easily examined by the law and finance school than rights and obligations associated with equity claims,[180] although they have been taken in aggregate to signify degrees of national investor protection. Last, law and finance theory studies that amalgamate in analysis the claims of banks and outstanding non-financial sector bondholders presume in so doing that debt creditors have collateral rights that are typically absent from contemporary debt issues.

From an Asian reforming perspective, the scale of bank assets in an economy[181] cannot signal financial market sophistication.[182] Lending cartels are widespread; large companies may choose to raise funds offshore; indeed, large companies are able to obtain debt in all environments.[183] As an example, the most dynamic part of the contemporary Chinese corporate sector has been found to have no reliance on traditional external finance;[184] this sector accounts for the largest share of contemporary national growth. Chinese non-state enterprises are largely self-financing or have access to informal sources of external funding not visible in the domestic banking system, and the public sector is almost wholly responsible for China's outstanding domestic and foreign debt issues.

If constraints exist on general reform in the most pressing financial systems, how can public policy effectively promote market usage? The optimal approach may be to recognise that the issues cited in Table F1 are objectives to which all concerned governments must strive, accepting that the overall legal framework within which they approach reform may not be conducive to specific changes, however necessary, or at worst may make repealing existing rules unreliable. The approach taken by

[179] Compare Japan or Korea with India and Malaysia, for example.

[180] Compared to equity, debt claims are less heterogeneous and complete associated data are less consistently available, either at national income accounting or transaction levels. Public (listed) issues are usually traded in ways that are wholly transparent only for professional counterparties; exchange listings for bonds usually entails only token reporting of buying, selling or prices.

[181] For example, measured against national income, corporate revenue and cashflow (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1997).

[182] Anticipated by Goldsmith (1969 *op cit*) prior to data becoming even partially available.

[183] Acknowledged by La Porta, Lopez-de-Silanes, Shleifer & Vishny (*op cit*) p1148.

[184] Allen, Qian & Qian (*op cit*).

Korea and Taiwan in promoting laws to allow securitisation may be models for broader initiatives.[185] Public policy must also promote risk-averse reform rather than allow liberalisation of the type seen often before 1997, which contributed to the scale of the Asian crisis and contagion. Proposals I and II require improvements in the regulation of issuers and investors, and the taxation of issuers, banks and investors. In helping to shape policy reform each will have corollary effects on the development of Asia's banking sectors, particularly in risk management and product innovation, in lessening the contagion effects of future crises of confidence, and in reducing the occurrence of moral hazard in inherently conflicted bank-dominated economies.

There is considerable value to a harmonised regional approach to reform despite inherited institutional obstacles that make common objectives achievable only in different ways.[186] First, joint efforts over an agreed period show purpose to market participants. Second, the sharing of intelligence and resources is valuable despite intrinsic national differences in systems and solutions. Third, collective action will support future intra-regional non-core currency investment and trading. The subsidiarity principle of the EU may be a guide for this purpose: the 1987 Single European Act sought to liberate capital movements among member states only by providing common minimum standards for implementation through national legislation to make the reform effective, which varied among those signing the Act.[187] Mutual recognition became the second stage of reform on the basis of those common standards.

If Asia accepts the need for change to promote market-based activity, its first step is to agree a precise intention and require national authorities to proceed with more complex mechanics. Table F1 contains a list of specific topics for the region's working groups to address. All the points shown in the table demand attention although their respective importance varies among the review economies. Many factors are manifested through a lack of investor confidence that is pervasive across markets. Significant commitments of time, resources and political determination will be needed for these measures to be addressed everywhere in the region. Active, integrated debt securities markets will not otherwise be seen in Asia.[188]

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[185] Recognising that in Korea legislation is longer-established and has been put to far greater use.

[186] This may be the greatest benefit of a successful EMEAP local currency fund.

[187] Single European Act, 1987 OJ (L169) 1 (1987). It must be acknowledged that except in the UK, a contemporary absence of securities market legislation meant that few obstacles to harmonisation needed first to be dismantled. (Arner, 2002b). Obstacles to integration continue to exist and since 2001 their removal has been the tasks of the EU's new European Securities Committee and Committee of European Securities Regulators.

[188] '[T]he evolution of the legal framework underlying efficient market economies was a long incremental process […]. If the legal framework doesn't already exist or only partially exists it must be created.' North (1995) p11.

Table F1: Frequently observed market impediments (see section G for important sources)

	Obstacles	Omissions	Disparities
1. Legal	The most serious legal obstacles concern the free transfer of property and other rights, and the rights of creditors in proceedings for bankruptcy or debtor restructuring.	Legal omissions relate especially to questions of enforcement, and in penalising certain transaction types, notably asset-backed securities.	Legal disparities are most common or apparent in the treatment of creditor classes and between domestic and foreign claims.
	• Barriers to true sales of real property or financial assets. • Unqualified acceptance of ownership and property rights, and limitations of such rights in relation to investor classes. • Bars to foreign ownership and associated asset transfers. • Restrictive court enforcement of local judgements. • Inability of or refusal by courts to enforce applicable foreign commercial judgements against local debtors. • Limitations on creditor collateral rights in bankruptcy or reorganisation. • Limits to enforcement against public organisations; arbitrary extension of generally accepted sovereign immunity. • Enforcement of court-sanctioned restructurings. • Incomplete recognition of SPVs, including those registered offshore.	• Indeterminate title, successor rights and enforceability after transfer of creditor claims or associated collateral. • Notice requirements delaying or otherwise affecting the reliability of sales of assets. • Debtor notice requirements affecting the reliability of transfer of creditor claims. (It is common to adopt a synthetic deal structure using credit derivatives if the true sale of claims is suspect, for example in structured finance involving the sale of pools of loan assets, but may be preferable to alter the standard form of primary loan document. This is becoming common with residential mortgage loan agreements). • Recognition of International Swaps and Derivatives Association (ISDA) master agreements and definitions; permissible set-off and netting in swap contracts (see Table F1 part 4 *infra*).	• Creditor status: uncertainty as to whether courts will enforce or dissolve contractual creditor priorities. • Unpredictable or political reviews of judicial decisions. • Risk of borrower set-off in asset sales (requiring additional credit enhancement in asset-backed issues) arising from incomplete notice requirements. • Precedence: domestic claims enjoying *de facto* priority compared to offshore claims. • Examples of practice inducing moral hazard issues: indigenous investors may perceive no difference in the relative status of government sector instruments. • Rules on usury, especially for penalties. • Imprecision or conflicts of law in disputes as to cross-border settlement and issues relating to securities custody.

/(*continued*)

Table F1: Frequently observed market impediments (*continued*)

	Obstacles	Omissions	Disparities
1. Legal (*continued*)		• Inadequate or unreliable creditor rights in bankruptcy or reorganisation, including failure of priority creditor rights, unpredictable rules on foreclosure and status of collateral assets, and insecure priority rights after debtor reorganisations. • Failure to recognise trusts or equivalent insubstantive entities, either onshore or offshore.	• Acceptability of standard legal agreements for financial transactions when non-compulsory and not subject to regulation.

Table F1: Frequently observed market impediments (*continued*)

<table>
<tr><td rowspan="2">2. Fiscal</td><td>Obstacles

The main fiscal obstacles are taxes and duties that prohibit or severely penalise reputable financial transaction structures.</td><td>Omissions

Fiscal omissions are chiefly matters relating to information, especially clarity in the application of taxes, duties and allowances.</td><td>Disparities

Disparities in fiscal issues can be pronounced as between classes of creditor, obligor or financial institutions, and between local and foreign parties.</td></tr>
<tr><td>• Incidence and clarity of stamp duties and other ad valorem taxes.
• Duties, taxes and penalties imposed upon the transfer of financial assets and claims, and associated collateral rights.
• Taxes and impositions that recur within single transactions, for example, in the sale of assets or claims between SPVs.
• Securities financing by repurchase or lending may be considered an outright sale for tax purposes.</td><td>• Clarity in the imposition of taxes on asset sales or the transfer of claims.
• Clarity as to permissible capital allowances.
• Homogeneous treatment of interest and interest deductions.
• Absence of commitments to tax neutrality.</td><td>• Withholding taxes applied asymmetrically to investor groups, parties of different domiciles, classes of instrument or to classes of issuer.
• Concessions for banks in comparison to other financial institutions, for example, in allowances for write-offs, interest deductions, access to double taxation treaties, and the use of offshore funding centres.
• Inconsistent application of allowances under double taxation treaties; treaties with non-universal applications.
• Subsidised or inequitable lending or investing incentives, for example, applied by treaty to foreign banks or conduits in selected domiciles.
• Taxes on repurchase arrangements and on bond borrowing.
• Specific taxes on foreign investors and professional dealers.</td></tr>
</table>

Table F1: Frequently observed market impediments (*continued*)

	Obstacles	Omissions	Disparities
3. Regulatory	The severest regulatory obstacles are found throughout the region and concern prohibitions on local currency investment, usually by non-bank financial institutions. Issuer restrictions have tended to be directed at offshore flows in both local and major currencies. In many cases these restrictions impact inequitably upon the integrity of freely-entered contracts.	Regulatory omissions result most frequently in markets for risks or instruments that are effectively closed to classes of investor, either deliberately or by default. These omissions reflect action or inaction by several sources, including central banks, market and investor group regulators, listing authorities and accounting regulators.	Differences in the treatment for regulatory purposes of conventional investor activity are a source of market distortion. The resulting lack of clarity leads to a sacrifice in investor participation.
	• Responsibility for market and new issue regulation divided among competing authorities. • Prohibitions and constraints on issuer classes, including corporate and foreign entities. • Restrictions on the borrower's initial use of proceeds. • Investor constraints relating to permissible asset holdings and risks. • Specific foreign investor limitations, including prohibitions on investment by obligor or instrument. • Custody controls and directed settlement.	• Inadequate accounting standards compared to IOSCO recommendations for best practice in accordance with IAAP or IFRS guidance. All 10 review economies are full IOSCO members. • Weak issuer reporting and disclosure. • Weak regulatory oversight of issuer reporting and disclosure. • Minimum requirements for new issue registration documents and prospectuses. • Incomplete practice framework for interest rate and currency derivatives. • Forced illiquidity of money market instruments to non-bank financial institutions. • Developed rules for retail investor protection for debt securities.	• Disparate credit rating requirements and associated capital treatment for banks and certain other regulated investors. • Variations in requirements for new issues to be rated, and on minimum rating standards. • Non-standardised practices by national credit rating organisations, especially when linked to regulations affecting investors. • Absence of coordination among national credit rating agencies.[189] • Variations in the application of external capital controls, permissible investments, mark-to-market valuations and liquidity requirements.

/(*continued*)

[189] The role and regulation of national and international credit rating agencies (not only in relation to Basel II) is not exclusively an issue for Asia and is not addressed in this section. However, Asia's regulatory authorities have as strong an interest as their OECD counterparts in discussions as to how rating agencies may properly assume self-regulatory functions, given questions of potential conflict and accountability. See remarks in Proposal III (pp79-80 *infra*).

Table F1: Frequently observed market impediments (*continued*)

	Obstacles	Omissions	Disparities
3. Regulatory (*continued*)	• Effects of external capital controls on offshore borrowing. Approvals may be required for foreign currency or offshore borrowings where the approval process is variable or arbitrary. • Effects of capital controls on permissibility of domestic and international interest rate and currency swaps. • Effects of regulation on the availability of debt instruments, especially in liquidity requirements and the classification of securities eligible for rediscounting with central authorities (see Table F1 part 4 *infra*).	• Listing rules and prospectus requirements designed appropriately for debt issues, especially to allow for corporate debt issuance programmes or 'shelf' issues. • Provisions relating to investment in commercial paper. • Centralised reporting of bond prices and trades. This omission is closely associated with consistent use of centralised arrangements for settlement (see column 3).	• An issuer's domicile may by itself affect other conditions attached to a transaction, including fiscal treatment, eligibility as collateral for repurchase agreements or permissibility in regulatory reserves. • Requirements for corporate debt issues to be guaranteed by third party financial institutions, either for investor protection purposes or historic reasons.

Table F1: Frequently observed market impediments (*continued*)

	Obstacles	Omissions	Disparities
4. Systemic	Systemic obstacles arise from both specific factors, not all of which are deliberate, and aspects of local debt market practice that deter institutional activity.	The most apparent and widespread systemic omission is a lack of valid market-determined yield curves for all new issue and investor benchmarking. This would ideally be a conventional risk-free government yield curve but could take other forms (fair value or derivative yield curves, for example), assuming both transparency and consistency for users, and the absence of distortions such as that caused by trading or intervention techniques.[190]	System disparities are manifested in encouraging an arbitrage orientation, discouraging regional institutional investment, and penalising asset classes within domestic markets. The disparities listed in this column occur between instrument classes within markets, Insofar as they exist between national markets they also lessen investor confidence.
	• *De facto* banking sector cartels. • Securities dealing cartels and unreasonable exclusions from dealing. • Prohibitions on securities lending and short-sales. • Excessive use of money market repurchase operations by central banks (causing yield curve distortions). • Inequitable qualifications or restrictions on dealing. • The closed relationship between banks and governments in national money markets can be a distortion and moral hazard: the state issues debt largely held by the banking sector, prompted by regulatory or liquidity purposes.	• Flaws in bond auction mechanisms and participation, resulting in a weakened price mechanism in primary sales, poor price visibility and a lack of consistent transparently determined interest rates. • Lack of declared government benchmark issuance programmes, and unreasonable abandonment of such programmes. • Transparent and declared objectives for monetary policy; coordination between debt management and monetary policies. • Widespread access to a full range of local currency money market instruments; admissible in unified clearing system. • Clear rules for new issue registration and listing.	• Government issue primary dealer qualifications, requirements and exclusions. • Settlement practice; settlement risks (especially a lack of book entry operations, real-time settlement and reporting). • Rules on custody and sub-custody for domestic and foreign investors. • Variations in business days practice. • Variations in interest accrual and settlement practice. • Variations in practice for trade confirmations and execution. • Variations in settlement days. • Elective use of central depositaries for settlement or custody.

/(*continued*)

[190] On encouraging liquidity in government bond markets, Mohanty (2002) gives details of issues cited here as omissions or disparities.

Table F1: Frequently observed market impediments (*continued*)

	Obstacles	Omissions	Disparities
4. Systemic (*continued*)		• Custodian recognition and market admissibility of ISMA general master repurchase agreements. • Certain securities financing techniques may assist professional trading and improve settlement liquidity but not necessarily improve overall market liquidity or price transparency for participants at large. This can include securities lending, collateralisation using bonds or notes, and conventional repurchase agreements. It is essential that markets operate openly in order for all investors to benefit from such techniques. • Custodian recognition and market admissibility of ISDA general collateral agreements.	• Elective physical delivery of bond certificates. • Settlement by delivery against payment not applied consistently across instruments or classes of issuer. • Reliance on bond repurchases in monetary operations diminishes secondary liquidity, even though repos may facilitate trading in other ways, for example, if short selling is permitted. • Weaknesses in credit rating methodology (including data deficiencies) and applications; poor credit rating practice in structured finance. • Fragmented issuance by central government organisations.[191] • Settlement and custody practice must be compatible with acceptable securities financing techniques (repurchase, securities lending, and collateralisation using bonds or notes).

[191] Including distinctions between issue types, some deliberate, others archaic or legalistic. These will usually be inconsequential in the investor's perception of risk but lessen liquidity and introduce yield curve discontinuities. McCauley (Dec 2003) suggests the amalgamation of central government and central bank debt.

Proposal II: a collaborative regional market to encourage overall activity and hasten the reforms needed in each domestic market.

This paper's first proposal identified those legal and systemic features that most deter market activity in Asian debt securities and which are prominent in the review economies. It also anticipates a cooperative process to development and in harmonising standards throughout the region. Proposal II anticipates the micro-level reforms contained in that analysis and presents a compact means of implementation. It represents as a minimum a streamlined way of addressing many of those issues of detail, by requiring governments to acknowledge and together sanction a free (but regulated) offshore market open to regional, domestic and non-Asian participants. Alternatively, the proposal could form a model for more ambitious long-term reforms leading to an integrated regional debt capital market.[192] The intention in each case is to permit from an agreed date the trading and settlement of all Asian local and regional currency new issues in an established regional hub that meets agreed standards,[193] free of withholdings, duties and capital controls, subject to common regulation and available to all investors and approved issuers.[194] Proposal II is thus a device to short-circuit existing arrangements, remove confusion, relieve delays and provide confidence to participants. The proposal has a long-standing precedent in the eurobond markets prior to the creation of the euro, with the critical novelty that participating countries would permit no restrictions prohibiting new issues in an obligor's home currency[195] since the intention is to meld domestic and offshore investor interests.

The model regional issue suggested in this proposal is shown graphically in figures 5 and 6.[196] From the implementation of national agreement, all new issues would be launched and will trade in the offshore centre. Domestic participants would deal through the offshore centre's systems, except for retail investors who would be expected to use domestic intermediaries for reasons of conventional investor protection. The official support needed to begin the initiative would comprise four basic undertakings:

- Participating governments would agree to lift all restrictions and regulations that may limit or prohibit investing and trading in the hub by all domestic financial institutions and intermediaries for which they are responsible.

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[192] Favoured within the Asian Cooperation Dialogue (p14 *supra*).

[193] Major currency bonds would not be excluded but are not the concern of this proposal and are likely to appear only as asset-backed securities. Asian issuers of major currency bonds would welcome the broader distribution that the proposal would encourage without wishing to constrain sales of their transactions to Asia.

[194] All Asian local currency markets except Hong Kong overtly restrict non-domestic issuers or their use of new issue proceeds.

[195] This was typically the case for French and Italian issuers in the 1970s and 1980s. France allowed the general use of its currency for capital raising only after 1989.

[196] p84 (*infra*).

- The host government would agree to allow the expanded offshore market to develop unhindered, and during its life not to impose restrictions or penalties on investment activity or payments other than sanctioned by the competent regulatory authority to which participating governments would subscribe. The host authorities would agree to maintain standards for financial market practice agreed by participants.
- That authority shall from the project's inauguration become subject to supervisory observation by an advisory council in which all participating governments are represented, but shall itself have day-to-day oversight of settlement and sub-custody functions.
- Participating governments agree to maintain allegiance to the concept for a defined period, for example, of an initial ten years, with retroactive coverage preventing the withdrawal of applicable consents during the life of issues created during that period.[197]

The first undertaking is fundamental, and would require only modest legal and regulatory changes in each domestic jurisdiction. The second requires consensus on the standards to be maintained for market practice and access, for which both international efforts and the issues identified in Table F1 are guides.[198] The third demands cooperation among national governments and would represent compensation for any perceived sacrifice of parochial interests among the region's competing financial centres. The final undertaking is related to market confidence and its effect on activity: this is likely also to concern regional negotiations on the trade in financial services.

The aim is for the hub to concentrate fundraising, freely assisted by the execution of currency and interest rate swaps. All local currency securities would be eligible in the hub's systems for custody, clearing and payments, in each case with transfers made free of all deductions or withholdings, and delivery against payment required on a single basis as the sole principle of settlement. The concentration of activity will also have the practical effect of acknowledging the critical role of interest rate and currency derivatives in new issues of all kinds and in so doing lead to regulation that is transparent to investors. The concept is flexible, simple to implement and operate and given political support could be made effective in a limited period of six months. Over time, it would lead to a permanent rise in market usage, indicated by the number of active investor participants as well as new issue and trading volumes.

The proposal requires national efforts, mainly in detailed aspects of law or its application, and regional agreement in sharing parochial sacrifices for the sake of Asia's overall welfare. Critically (and in comparison to the more significant architectural work needed to bring into effect Proposal III),

[197] A cessation of the initial period would affect planned refinancing of maturing bonds in spite of retroactive coverage undertakings but borrowers face such irregularities at all times in current circumstances.

[198] Discussed in Goo, Arner & Zhou (2001). The hub is likely to have met the required standards when chosen.

Proposal II requires no new systems and only minor institutional arrangements. In meeting the needs identified in Proposal I, this scheme would provide a spur to a regional debt market by building upon existing local sectors and institutions without affecting them deleteriously. It presumes that choice of physical location has become unimportant for most common financial and capital market activities, given accepted regulatory and system requirements. Most trading is conducted electronically, and normal business days among EMEAP member states are virtually contiguous. Using one hub for issuance, trading and settlement would encourage a marginal increase of investor activity, mainly resulting from regional and other international funds flows that are presently neglected or deterred for want of simple infrastructure and dealing procedures. Trade flows and streams of direct or portfolio investments lead to natural demand for money market products, long-term debt instruments, hedging tools and products to assist capital asset benchmarking. Momentum for the proposal will thus arise from identified but largely untapped regional sources rather than an increase in the core of demand now emanating from commercial banks and traders of risk, although an initial real expansion in dealing volume can be expected from domestic professional participants that trade through the hub. The plan involves no patrician losses for national governments and no sacrifice of present systems. A market said to be 'offshore' need not be taken as unregulated, demonstrated particularly in the second and third of the four founding undertakings.

Participating governments will allow contiguous trading among all domestic and offshore participants. The pre-commencement matters needing attention are:

- The nature of regulatory approvals needed for issues in the hub, embracing single transactions and formal or informal debt issuance programmes.
- The relationship between the hub's regulator with rating agencies and with exchanges that list securities.
- Settlement capacity in the clearing vehicle and for direct or indirect custody of domestic securities. Agreement as to uniform settlement conditions, including like settlement days and a common national commitment to reduce the settlement period to a minimum.[199]
- All transfers from domestic borrowers will be made free and clear of withholding taxes and other impositions.
- Common minimum standards for qualification as a selected hub.

[199] The choice of hub will determine the vehicle used for settlement and custody, although not necessarily without modification, For example, it may be advantageous to involve an established non-Asian settlement and custody organisation well accustomed to multicurrency operations, and thus lessen parochial concerns among participants. Regional settlement issues have been the subject of study by the World Bank (Akamatsu, 2004) and are of current interest to the ADB.

- Changes in supervision for the hub's regulatory authority, and an increase in the authority's capacity.

The hub's new issue listing requirements for stock exchange admission would be unchanged, at least as a direct product of this proposal.[200] Listings are required by custom and to provide linkage to regulatory oversight of issuer reporting and disclosure but are not associated with settlement, trading or price information. Most new issues can be expected to be listed in the hub; overseas listings would be permissible providing that they caused no dilution in the hub's regime for issuer reporting.

There need be no ceding of responsibility between national authorities: a harmonisation approach employing common standards underpins the hub concept, with approvals where necessary to be given as now. In each phase of a transaction, all operational aspects are managed in the offshore market to seek price transparency, maximise secondary liquidity by bringing together domestic and offshore trading, using the most sophisticated available systems for settlement and custody, and taking advantage of the economies of scale present in unified wholly electronic systems.[201] Trades between counterparties in the issuer's domicile would be reported centrally and settled through the offshore market. This also removes uncertainty arising from the choice of law or jurisdiction in cross-border trading disputes by having the location of settlement and custody determine organically the law to which securities in settlement or custody are subject. The hub authorities could also adopt an appropriate international convention further to support investor confidence.[202] In these respects the proposal most resembles the eurobond market of the late 1980s and early 1990s. If domestic and offshore investors buy a new issue at launch then both the funds collected and the bonds issued to investors will be fully fungible, although for convenience separate temporary 'notes' could be lodged electronically to represent domestic and offshore tranches; the size of each tranche will not remain fixed after initial settlement. The political component of credit risk is thus no different for investors to that which they accept today, except that domestic investors will assume negligible marginal risks against the hub clearing house, as with all other international settlement institutions. Legal aspects of risk flowing from the withdrawal of national concessions are unchanged.

Creditor claims will be treated no differently than today. The great majority of bond issues convey no direct collateral rights to bondholders. Providing that borrowers enter transaction agreements written under governing laws acceptable to listing authorities approved by the hub's regulator then

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[200] Except to the extent required for admission of issues originating in participating countries, for example, in relation to credit ratings or jurisdiction of incorporation.

[201] See remarks on outsourcing clearing services in Proposal III, p76-7 (*infra*).

[202] The leading example is the Hague Convention No. 36 on the law applicable to certain rights in respect of securities held with an intermediary, part of the Hague Conference on Private International Law. The convention was adopted in 2002 but is not yet in force. Among the review countries, China, Korea and Malaysia are members of the conference, and Hong Kong, India and Singapore have acceded to certain of its conventions.

applications for judgements or enforcement would be conducted as disparately as today. Domestic investors would thus not be prejudiced in their traditional choice of law in cases where market practice is well-established, but issuers are certain to be required to submit to non-exclusive jurisdiction in generally accepted international forums, and could expect to experience a pricing disincentive compared to 'standard' hub issues.[203]

The singular principle of the proposal is to speed the catalogue of reforms cited in Proposal I and encourage the sum of domestic and regional liquidity. The plan will make internal domestic markets work to their limitations in trading capacity, regulatory oversight and funding constraints; and make the offshore hub market work for development, eliminating duplication in system architecture and helping to convince new participants of its effectiveness. Non-Asian issues would be permitted subject to standard regulatory guidelines as to listing eligibility and acceptable credit ratings: in each case this arrangement is similar to current provisions in the Hong Kong and Singapore local currency debt markets without long-term restrictions as to the use of issue proceeds. As a general rule, all issues could be owned directly by retail investors if they met existing investor protection requirements. The issuer's domicile by itself may not affect other conditions attached to a transaction, including a bond's fiscal treatment, eligibility as collateral for repurchase agreements or permissibility in regulatory reserves.

A more conservative model appears in figures 7 and 8, designed to accommodate government bonds and other existing high-volume domestic issues.[204] Compared to the main proposal, the primacy of hub trading and settlement is held by existing domestic institutions but so as to allow unhindered foreign investor participation through a single channel for settlement and custody. Later, governments may grow willing to permit their domestic sovereign issues to trade through the offshore centre. Approval may not be necessary for any offshore market to open and mature; in this case it is essential that domestic borrowers, traders, banks, brokers and investors be permitted to buy or sell offshore bonds denominated in their 'home' currency.[205]

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[203] The adequacy of enforcement of local and foreign judgements is critical in the reforms contained in Proposal I (Table F1 *supra*).

[204] p85 *infra*.

[205] A more complex alternative would use new onshore domestic vehicles. This may be the approach adopted by EMEAP for its second Asian bond fund.

Hong Kong's post-1997 financial system became informally liquid in Chinese yuan. Its banks are now permitted to accept yuan deposits, which they must then deploy to avoid interest losses, a need that may be comparable to the first stage in the development of euromarket practice shown in figures 3 and 4 (p83 *infra*). Final yuan settlement must be made through a single bank in Hong Kong. Similarly, hub banks would accept deposits freely in all hub currencies of issue. The impact on monetary policy is minimal: deposits held offshore may lead to marginal credit creation if extended to non-banks but the availability of bonds of like currency would assist the operation of domestic monetary policy (see Einzig & Scott Quinn 1977, p104 *et seq*).

The proposal adapts formative 'liberal' euromarket experience to a regional context that is planned, agreed and facilitated. By contrast, the history of European and US international private capital flows from the late 1950s suggests that the eurocurrency debt markets emerged less through deliberate intellectual or policy planning in any market or state but rather a mass of modest factors, not all intended. National restrictions, all well-understood in a culture of fixed exchange rates and post-war capital controls, confronted mounting demand for cross-border fundraising and investment. However, one decision supported growth in international activity across all product markets: the Bank of England's permitting a wholesale market to come into being that could deploy eurocurrency (non-sterling) deposits. A market in tradable short and medium-term deposits allowed euromarket activity to develop in all its facets (money markets, fixed income and lending) and was the result of competitive product innovation. In 1966 the British authorities allowed a US bank in London to issue tradable US dollar certificates of deposit (CDs, and later medium-term floating rate FRCDs). Previously the Bank of England had only allowed brokerage with firms in London placing debt issues for foreign borrowers among non-resident funds and banks.[206]

Sanctioning market-making in CDs introduced two features to London as nowhere else. First, funding grew feasible for offshore lending transactions matched in maturity to meet overseas demand for US dollars.[207] Second, funds could now be fully used offshore.[208] By contrast, today's investors in Asia have less freedom: regardless of objectives they each face a binary choice of being invested or disinvested in their target sector. In the extreme conditions of 1997-98 investors wishing to liquidate holdings of Asian equities or direct investments were forced also to sell the corresponding host currency for lack of a conservative alternative. This proposal is not only concerned with facilitating foreign portfolio investment in a risk-averse setting that lessens contagion: participants in intra-regional capital investment would welcome more effective capital markets for information, accounting and practical motives. Early euromarket liquidity was considerably aided by the conventional money markets, one reason being that in formative days the euromarkets were as heavily reliant on bank activity as Asia today, but non-bank financial institutions were gradually drawn to using new tools for liquidity (including short and medium-term CDs and commercial paper). Although not the direct focus of this paper, the availability of short-term debt instruments would bolster and encourage market activity in long-term securities by helping broaden a trading culture, assisting in local currency hedging and by servicing the needs of non-portfolio investors.

[206] Kynaston (2002) describes much of the chronology.

[207] Conventional eurocurrency loan documentation included increased costs clauses to eliminate lenders' interest rate basis risks. Taken with the wholesale CD market, banks could be confident in making lending commitments seen conventionally as mismatched.

[208] This model is shown graphically in figures 3 and 4, p83 (*infra*). With sufficient funds existing and demanded offshore, the classic euromarket issue is arranged, paid, listed and traded outside the domicile of the issuer of risk. Domestic and foreign investors alike trade through a financial hub.

Proposal II is an approach built on acceptance of regulatory standards of an Asian hub (embodying regionally drawn minimum standards of practice) rather than the harmonisation of the region's markets implied as the objective of Proposal I. It would allow offshore domestic issuance in a financial hub where systems are appropriate, regulation is accepted as fair and transparent, and investor attention is well-established from both foreign and domestic sources. It is a market-orientated way of dealing with obstacles, impediments and non-uniform practice to address problems of modest usage. These arrangements require a minimum of legislation or regulatory change providing that liquidity is allowed in currency swaps. They compare favourably in simplicity to alternative proposals to select a hub currency to which participating nations would align their own currencies (a hub currency would be managed in relation to a trade-weighted basket, described as a 'common loose arrangement'[209] as part of a gradualist approach to eliminating regional exchange rate volatility). This paper's proposal could represent a practical first step, not only to fundraising and market development but also in creating a framework for long-term regional stability, if that became an accepted political goal. It carries none of the unknown costs or demands of a new basket or hybrid currency, nor requires the removal of market segmentation by currency that could have a ruinous impact upon the immediate transactional future of Asian banks.[210] Nonetheless, if currency cooperation becomes an explicit policy objective then the combination of Proposal II's hub and Proposal I's long-term reforms would facilitate market integration, and contribute to the introduction of a new foreign exchange regime in the region.

[209] Frankel (2003, p44).

[210] While the early life of the euro has greatly increased issuance in the non-US dollar European corporate debt markets, the removal of entry barriers maintained by distinct legacy currency sectors allowed a huge increase in the market share of global underwriters. '[E]vidence points clearly to the fact that international competition from the larger US investment houses has been a central new feature of the post-EMU environment.' (Santos & Tsatsaronis, 2003 p14). The same study finds evidence showing that distribution resources outweigh established client relationships for banks seeking new issue transaction mandates.

This paper includes no suggestion that intermediation is intrinsically better physically located in any part of the globe. It does see the improving of standards and techniques among Asian banks to be a secondary virtue of its three main proposals.

Proposal III: a regional vehicle to encourage standardisation in credit risk transfer and facilitate securitisation through the issue of well-rated asset-backed securities on a scale not previously contemplated in Asia.

The proposal's heart is a suitably capitalised new vehicle to encourage effective risk pooling, credit risk transfer, credit rating targeting and in particular to provide a new source of external transactional credit enhancement. It includes no formal limitation on permissible source credit risk,[211] while instruments of issue might include all conventional and hybrid term debt securities, and structured money market instruments such as asset-backed commercial paper.[212] This proposal is far reaching but specific in its application of resources. It requires national endorsement, regional cooperation,

[211] But see Table F2 (p74 (*infra*).

[212] Securitisation is a tool of structured finance taken to be the irrevocable transfer of defined financial assets by their originator, with consideration funded by the simultaneous sale to a third party investor of new securities issued by the asset buyer. Neither asset buyer nor investor has transactional recourse to the originator. The asset buyer is most frequently an insubstantive vehicle (a company or trust). Most securitised transactions contain elements of internal or external credit enhancement to enable the securities to achieve certain credit ratings. Internal enhancement usually takes the form of over-collateralisation or the holding of a liquidity reserve; external enhancement is most commonly cash collateral, a third party financial guarantee (US standby letter of credit) or insurance. Securities are typically issued in tiers that carry different commercial terms and risks to maximise the use of assets and associated cash flows.

Except where stated, references to structured transactions do not include wholly synthetic securitised issues, notably CBOs and CLOs, which involve applying credit derivatives to asset portfolios that then remain as funded assets on the balance sheet of the originator.

The vast US federal agency bond market is generally not concerned with pure securitised structures but with pass-through arrangements under which investors acquire indirect interests in the financial assets purchased by the issuer, for example, Fannie Mae or Freddie Mac, without claims or rights of enforcement against those assets. The investor's primary risk in each case is that of the agency issuer. Similarly, investors in the European covered bond (or pfandbriefe) markets acquire preferred interests in groups of assets (usually residential mortgages or loans for public projects) that may change in composition and which remain on the balance sheet of the originator-issuer. A market-based Asian covered bond sector would need to meet three conditions: the curbing of NPLs to internationally accepted levels; the accumulation of adequate portfolio data histories; and bank demand for regulatory capital exceeding that for true capital. None of these conditions is imminent. An Asian covered bond market could be created using the preferred creditor status of a multilateral institution, mirroring a concept now under discussion in the EU. Such support has precedents: the US federal agency and German pfandbriefe markets were each founded with state backing and historically have received the benefit of indirect sovereign credit.

The proposed Basel II capital accord would change the definitions of risk-weighted assets accepted by participating national authorities and is relevant to this proposal in two respects. First, the accord would lessen the capital required to be set against residential mortgage loans and certain SME lending, and alter capital requirements for corporate credit (increasing for sub-investment grade risks, decreasing for others). Second, the treatment of certain higher risk (or unrated) tranches of securitised transactions and supporting liquidity facilities would demand increased capital compared to Basel I. If adopted, the new accord would have implications for some of the transactions contemplated by the proposal but not such as to make a material difference to its operations or effectiveness (see Bank for International Settlements 2003b, 2001 and 2004).

engagement with established credit rating agencies, and a resource commitment, partly in the form of a funded equity infusion but largely as external corporate support by means of contingent capital.[213]

The aim is to establish a credit enhancement agency to recycle the accumulation of impaired assets in East Asia's banking systems. Except in Korea, this is Asia's greatest incomplete post-crisis task. With the endorsement of all ASEAN+3 members, this will yield a flow of new securities and bequeath a well-practiced and standardised mechanism appropriate for most aspects of credit risk transfer with structured finance techniques, and in the long-term could assist fundraising for infrastructural development and indirectly improve the provision of credit for SMEs. In its first phase, the proposal is concerned with allowing the origination of structured transactions using real financial assets, healthy or impaired, as supporting collateral. To the extent that Asian banks have comparable needs for balance sheet and regulatory capital[214] and source assets include a sizeable proportion of impaired risk, wholly synthetic security transactions are not the first subject of the proposal. Nonetheless, they would be permissible under the aegis of the agency and will increase in use over time as the banking sector grows better able to create and trade credit derivatives.[215] This transition is a function of the rapidity and completeness of post-crisis bank balance sheet repair, and of the success of this proposal in providing an indirect incentive for lending to lesser-rated risks, notably SMEs.

Common to all securitised transactions is adequate enhancement of the credit risk offered to investors by the manipulation or augmentation of underlying source assets, be they a whole business, similar but unconnected assets or streams of cash. However such enhancement is achieved the process becomes manifest in one of five ways, which are the central aims of this third proposal:

- Generally, the means to make an unacceptable risk satisfactory to an investor.
- An overt or implied credit rating that betters its respective sovereign ceiling.
- The means to price unvalued pools of assets (usually to make feasible their sale).
- A method to create capital market funding where none previously existed.
- For originators, a funding source where none was available at an acceptable cost.

Applying securitisation techniques in Asia has often entailed a search for recorded assets and predictable cash flows, the usefulness of which depending on hazards such as the dependability of

[213] 'Contingent capital' is a third party's contractual, irrevocable commitment to fund an infusion of equity for an obligor according to pre-determined commercial criteria, applied at either transactional or corporate levels.

[214] Both the availability and deployment of regulatory (risk weighted) capital by banks relative to real capital will tend to increase with the sophistication of the banking sector (especially in risk management and product usage), the quality of supervision and the credit rating of the host economy.

[215] Few Asian banks are active as originators or traders of credit derivatives (primarily total return swaps, credit default swaps, or cash and synthetic credit-linked instruments).

transferable property rights or the commercial effect of taxes.[216] Unpredictability harshly affects the economics of structured transactions.[217] The heavy marginal cost of completing an inaugural deal could be supported if it became the first of a series: too often this has proved impossible for lack of suitable material or by the obstruction of law, especially in achieving a true sale of assets to support a domestic or offshore securities issuer.

The gravity of the crisis perversely eased these limitations by making asset sales and the creation of asset-backed securities essential to bank balance sheet renovation and corporate restructuring.[218] Rating methodology in Asia grows more confident and catholic, soon making viable that certain asset pools be valued hypothetically using foreign sectoral records rather than with a wholly actuarial approach needing extensive indigenous data histories. Proposal III is a logical further step:

- To speed and expand the recycling of non-accruing or delinquent assets on a transparent basis, that when established assists the sale pricing of NPLs.[219]
- Greatly to raise the number of Asia's feasible issuers, chiefly by providing banks with explicit risk support for a refinancing mechanism that will encourage competitive credit creation for medium-scale businesses and all risks of lesser quality, free of the general constraint of sovereign rating ceilings.

By facilitating structured finance on a regional scale to deal with the continuing problem of recognised, undeclared or unpriced impaired assets, Asia's governments will allow future growth in debt capital market activity and offer reliable supply of debt instruments to institutional investors. The transaction framework is well-understood by participants and regulators:

- Financial assets are sold by their originator to an insubstantive domestic trust,[220] then resold to a similar offshore vehicle that in turn funds the purchase, simultaneously or after a short period for asset accumulation, with an array of new securities enjoying direct claims of varying seniority over all or part of the pool of assets.

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[216] See Proposal I (p51 *supra*).

[217] Reporting a new issue for a Korean bank *International Financing Review* commented timelessly, 'The Asian [mortgage-backed securities] market has been plagued by a lack of [such] issues as nearly all the deals have proved to be one-offs', edition 1508, 1 November 2003, p49.

[218] Most effectively with Korean lenders, to recycle impaired assets and through the creation of collateralised issues based upon the defaulted debt of Korean companies, notably the *chaebol* Daewoo. Malaysia is generally seen as similarly successful on a far smaller scale. China's need is widely accepted as paramount.

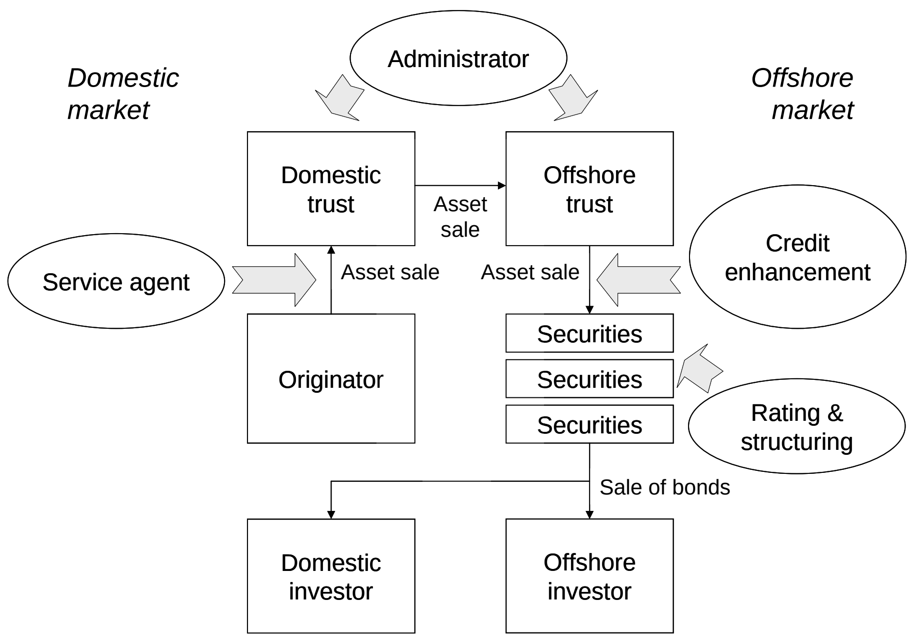
[219] Assuming increasing transaction standardisation over time, a process of reverse enquiry uses the market-clearing yields on tranches of securities to value a collateral pool and thus determine its permissible sale price.

[220] 'Trust' is used for brevity, and is synonymous with special purpose vehicle or company, denoting an insubstantive entity unconnected to the originator. Certain civil law review jurisdictions that do not ordinarily recognise trusts have legislated since the crisis to sanction SPVs in the context of structured finance, notably, Korea, Taiwan and Thailand.

- Securities (typically notes, bonds or commercial paper) are issued in tranches, designed by priorities of claim and in commercial terms to meet required target credit ratings and the risk-return preferences of various classes of investor while extracting the fullest economic use of pool cash or proceeds.
- Value is first extracted from the asset pool internally; external sources then provide additional credit support such that each series of bonds meets a target initial credit rating achieved through iterative consultation with a rating agency.
- Such external backing is facilitated by a third party by means of funded or contingent capital, financial guarantee (or its equivalent) or dedicated insurance. It may cover defaults within the collateral pool or the entire transaction, including specific support to induce a counterparty to enter one or more currency swaps.
- Servicing the assets is made independent of the originator. The originator may continue to deal commercially with the ultimate debtors except in cases involving impaired assets.

Figures 1 and 2 respectively show the principles and simplified operations of the proposed vehicle.[221]

Figure 1: Generic securitisation model



The main elements of the proposal and how they differ from those of past concepts or transactions are highlighted in Table F2 and its succeeding paragraphs. The table is a representation of the structure's commercial core rather than a guide to its legal construction or a schedule of possible participants. The parties omitted for convenience are those providing contractual financial or administrative

[221] Illustrations omit intermediaries taking money transmission or other pure agency roles.

services to one or both of the trusts (including issuing and paying agents, providers of short-term liquidity, swap counterparties, providers of support for reinvestment risks, and general or specific trustees). The agency will support deals conforming to the guidelines described in the table.

Table F2: Features of Credit Enhancement Agency (Proposal III)

Principles of operation	Standard onshore-offshore securitisation model using two sequential domestic and offshore trusts. For consistency, transparency and technical reasons relating to achieving true sale and a neutral tax stance the basic structure will ideally apply both to local and foreign currency transactions, regardless of the domicile of initial investors. To avoid disruption in the relationship between lenders and clients and to encourage usage the Agency will stress the value and need for standardisation in both the documentation of underlying financial assets and in the main elements of sponsored or supported transactions. Qualifying assets will be governed solely by credit rating and transaction feasibility. Impaired assets, commercial mortgage loans, corporate loans and major lease receivables will be the most important subject asset categories. The proposed vehicle could accommodate other non-impaired (performing) assets such as consumer instalment credit; credit card and trade receivables but existing market resources may initially resist channelling such transactions through the Agency. The Agency will adopt standard market-determined commercial terms for asset-backed securities (particularly currency, listing, custody, settlement and trading qualifications).
Main parties	Credit enhancement will be provided by a new regional organisation incorporated in an acceptable tax neutral jurisdiction and established in a regional financial centre. Initial and future capital will be provided by founding shareholder representatives of sponsor governments, international financial organisations, and (perhaps) a small minority of private institutional supporters to give technical and advisory input to the Agency at arm's length. The official shareholders will form a regional supervisory body responsible for general regulatory matters. The Agency's resource mechanism and credit enhancement process will be available for use by any financial institution recognised by the regulator. The Agency will not itself own, manage or operate any other party in transactions to which it extends credit enhancement. Asset servicing will be managed by organisations based locally in the asset domicile. Except in cases involving pools of NPLs the service agent may be an affiliate of the originator. For transactions using impaired assets the service agent may be a national asset management company or specialist organisation, where necessary given technical assistance by the Agency. No other new entities are required for operations: the Agency will work with all nationally regulated originators, financial institutions and recognised credit rating agencies.
Available credit enhancement	Direct enhancement; by a provision of funded or contingent capital to the offshore securities issuer; direct swap counterparty; or a partial guarantee of that issuer's obligations or of specific classes of security. Contingent capital becomes funded according to predetermined triggers, such as financial or operating covenants or credit ratings. Indirect enhancement; by offering similar backing privately to enable a second unconnected external source to offer support to an issue, for example, a newly incorporated or existing monoline insurer.

Why is this approach new? Asia has hosted many structured issues since 1997-98 but almost always supported by blanket guarantees (for example, Hong Kong Mortgage Corporation issues) or highly-rated foreign monoline insurers. Efforts to build a regional monoline insurer in Asia failed soon after the crisis: the company was inadequately vested and in alarm its shareholders failed to agree remedial action to protect its young, imbalanced portfolio.[222] This new proposal differs in its permanence, in the way it approaches credit enhancement, in the generic mechanism used to ensure that complete and dependable sales of assets underpin new issues of securities, and in its ability to allow the packaging or synthetic treatment of most asset classes.[223]

How does this proposal differ in detail from other models, and what are the associated risks and costs? Securitisation relies upon system assumptions (adequate legal, regulatory, accounting and taxation structures) and pools of assets of sufficient economic value to sustain acceptable transaction economics.[224] While the technique can clear financial debris in any of the review economies, this became generally feasible chiefly because the post-crisis imperative for balance sheet repair made transaction costs more tolerable. The result has been a notable recycling of assets, a growth in synthetic transactions since 1999-2000[225] and a resulting improvement in bank and corporate balance sheets in certain countries. The greatest success has been achieved in Korea, with a volume of successful securitised debt issues since 1998 greatly exceeding those elsewhere[226] but transaction growth is needed in China, India, Southeast Asia and Taiwan.[227]

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[222] Asian Securitization & Infrastructure Assurance (Pte) Limited ('ASIA Ltd') was formed in 1996 as the region's first indigenous monoline insurer. It posted losses in its third operating year, lost its investment grade credit rating and reinsurance cover and has since been dormant with its insured portfolio being wound down.

The 1997-98 crisis may have occurred too soon after formation for ASIA Ltd to have established a diversified portfolio. The company failed less from credit losses but rather its poor capitalisation and the deleterious consequent effects on insured capacity and credit ratings. For a commercial organisation hoping to enhance credit risk ASIA Ltd carried too weak a credit rating (single-A) to meet its purpose. The ratings fell below investment grade upon the company's ceasing to write new business.

[223] The new credit enhancement agency need not be profit-seeking but its providers of capital will demand commercial compensation, derived from guarantee fees and (ultimately) pool receipts. While the agency may permit the transfer of all financial asset classes, market practitioners may believe that existing resource economics give sufficient support to any particular transaction such that the agency need not be involved. For example, it is likely that impaired assets and corporate loans will be securitised far more often than single property commercial mortgage loans, future receipts or credit card receivables.

[224] Generically in structured finance, asset data must be available, reliable and relate to identifiable cash flows. Transaction structuring can achieve almost any result with the poorest of subject assets but the acceptable cost of completion through credit enhancement (over-collateralisation or external support) can be constrained.

[225] In synthetic transactions, an originator hedges risk assets using credit default swaps or guarantees in series. The swap counterparty may be a third party (insurance company or SPV) that then issues conventional securities to bond investors. Critically, assets do not leave the originator's balance sheet, making it appropriate for portfolios where loans are extended in several jurisdictions or when it may be impossible to create a reliable trust or perfect changes in title. Cross-border complications, varying legal regimes and foreign exchange issues are of little concern in the transfer of pure credit risk. Synthetic securitizations (especially CLOs) entail the transfer of only part of an underlying risk to investors through the issue of securities.

[226] When legislation first permitted asset-backed securities.

[227] As well as in Japan.

This proposal differs from conventional securitised transactions attempted in Asia in the past decade in three respects:

- The motives that encourage or compel originators to relinquish assets.
- The nature and source of external credit enhancement.
- Regional administration.

Proposal III is explicitly not concerned with providing third party guarantees for single obligor risks, especially in unique transactions. Its aims are wholly market-orientated. For the agency to commit capital to simple credit guarantee activities is to duplicate a function performed adequately in all but extreme market conditions by private sector banks and specialist financial institutions and is likely to establish an unnecessary moral hazard.[228]

For cost-effectiveness, the proposed agency's undertakings will be supported in part by contingent capital provided by shareholders, committed at inception. Subsequent funded infusions to the agency could support cash calls arising under its contingent liabilities or to maintain prudential balance sheet ratios, and ultimately reflect the risk outlook for any securitised asset pool guaranteed by the agency. This technique is well-understood by regulators and credit rating organisations. The agency's shareholders will be predominantly sovereign or supranational, so its capital structure must be distinguished from transactions inherently subject to moral hazard. The terms of unfunded commitments will be subject to pre-determined commercial conditions, influenced neither individually nor collectively by shareholders. There are many precedents in commercial reinsurance practice and in the history of credit default swaps over the past decade to support this model. Triggers are standardised, typically under ISDA guidelines, and are subject to regulatory oversight and rating agency appraisal.

The reforms of Proposals I and II may alone generate insufficient tradable risk to meet Asia's risk management goals. Proposal III uses a conventional asset-backed security structure in a regional setting, fuelled by assets located in all parts of East Asia. Thus the scheme's motive is to facilitate a growing volume of well-rated new issues and give such continuity of supply to investors that they see structured finance as predictable rather than episodic. The agency will be sufficiently capitalised, with resources applied predominantly to the provision of transactional or programme credit enhancement,

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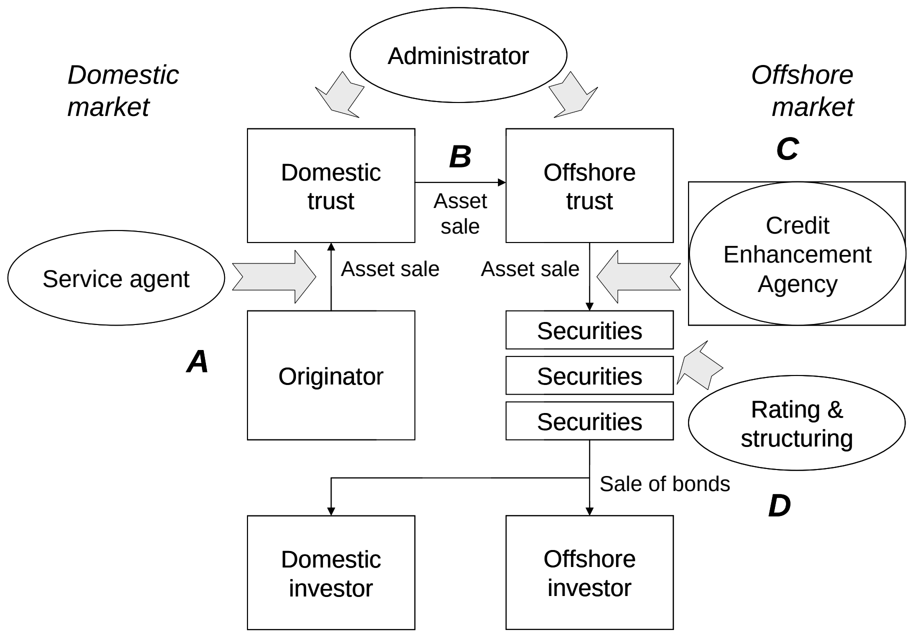
[228] Ignoring cofinancing schemes, international organisations have provided single obligor guarantees in conditions of stress when credit availability was minimal. Despite intentions, in no case has the transaction created a favourable precedent. For example, in 1998 soon after the collapse of Long-Term Capital Management, Electricity Generating Authority of Thailand issued US$300m in 10 year fixed rate bonds, with principal and one interest coupon guaranteed *inter alia* by the World Bank. In the poorest conditions, the issue was completed, selling mainly to commercial banks and has never been liquid. This deal succeeded only as a distorting novelty, offering nothing to encourage market development. International organisations may properly provide credit *in extremis* but issues such as this are costly models. (See *Euroweek* issues 570-573, September-October 1998).

ideally with administration and risk management functions outsourced in a similar fashion to Euroclear prior to 2001, both to limit the direct influence of individual shareholders and help avoid the fate of ASIA Ltd. These mechanics will allow for relatively high ratings so as to attract new investors to regional and major currencies issues, an accepted imperative for greater participation and activity. Not only will the agency assist in recycling impaired financial assets in high volumes, but in the long-term may become a means to encourage commercial lenders' credit support for SMEs. Smaller businesses may seldom have access to capital markets, directly or otherwise, but Asia's banks would be better able to meet their demands for loans and services were it possible for corporate risk assets to be funded or refinanced through securitisation.[229]

The letters 'A-D' the following figure highlight four transaction elements inherent in the proposed structure.

Figure 2: Critical elements of credit enhancement agency



Structured finance is often a complex means to achieve the simple, in this case a supply of new debt issues at superior credit ratings. The structural skeleton of the proposal is not original, either in Asia or elsewhere [230] but two features are novel. First is the way that new (non-distressed) financial assets are volunteered for securitisation by their originator banks or finance houses; second is the cost-effectiveness and productive scope of the scheme's recommendations for external credit

[229] This also makes use of the asymmetric information frequently available to banks.

[230] Asset-backed securities appeared in 1983, with US residential mortgages used as collateral. CBOs were first issued two years later. Most Asian asset-backed bonds have been negotiated singly but in the crisis aftermath a large volume of impaired assets has been used as collateral for CBOs in Korea (Oh, Park, Park & Yang, *op cit*).

enhancement.[231] This proposal would offer a continuing means to generate debt securities of a credit quality acceptable to investors using hitherto unsuitable (but not distressed) assets.

- 'A' indicates the factors causing financial institutions to offer assets for securitisation and the associated risks. These comprise agreement on the formation of the agency, clear and uniform requirements over NPL recognition, accounting and asset disposal, more flexible sources of funding for banks, and indirect support for lesser credits, particularly SMEs.

  To the extent that banking assets represent claims against entities that have (or desire) no access to a debt capital market an inducement will be needed before this type of primary resource can be pooled as collateral and transformed into usable material for debt issues attractive to domestic or offshore investors. Here, the official motive must be a combination of regulatory requirements on credit creation, particularly the full enforcement of client and sectoral prudential limits as well as general capital and liquidity demands, and a new incentive to encourage credit availability for SMEs. For example, non-discriminatory tax concessions are unlikely to breach current international trade rules.

  The proposal seeks in no way to circumvent sound aspects of Asia's banking systems: it is doubtful that a flourishing Asian debt market could appear without the active participation of the region's banks. The aim is to involve the banking sector by offering solutions to ongoing portfolio problems, and additionally make banks accustomed to continual use of structured finance techniques in the refunding of non-impaired risk. A local financing link between bank and business enterprise is economically and culturally valuable but if Asia wishes to offer greater financing choice to SMEs then it is important to avoid the alternative of subsidised or directed lending, which is usually unsuccessful, unpopular and a hazardous distortion. Increased credit creation for SMEs could be made feasible by enabling banks more easily to refinance funded balance sheet risk and freely raise regulatory capital.

- 'B' draws attention to essential matters of law and practice that must be made certain for the agency to operate effectively without national constraints, and have been discussed in Proposal I. They concern the certainty of achieving a true sale of assets, the perfection of creditor claims, and eliminating duties or taxes on transfer to the extent that the use of securitisation is tax-neutral compared to a lender retaining the entirety of a claim.

[231] According to Hong Kong Monetary Authority research (cited in Dalla, 2002) ASIA Ltd may originally have needed up to US$700 million in capital and commitments to obtain AAA credit ratings. The cost was rejected, partly in the mistaken belief that the company could operate feasibly with single-A ratings. This paper's proposal assumes that the merits of active debt markets are now better understood so that the initiatives discussed in section B (pp12-13 *supra*) may encourage appropriate national support not possible from ASIA Ltd's heterogeneous owners.

Onshore and offshore trusts in series are suggested to ensure the perfection of title, adhere to a standard transaction model, minimise fiscal uncertainties and where necessary facilitate the listing of securities.

- 'C' indicates issues relating to the process of credit enhancement. External credit enhancement for extant Asian asset-backed securities has generally been found in two sources: third party first loss guarantees or credit wraps [232] provided by monoline insurance companies. The first is costly and the second prone to exhaustion from prudential risk limits. Assuming that third parties will support the credit demands of this proposal then the contingent capital model used by leading reinsurance groups will meet requirements for both investor credibility and cost-effectiveness in using free capital and other resources. It is further assumed that the new entity will be capitalised and maintained by subscribing governments and interested international organisations.
- 'D' points to interplay between the credit enhancement agency and credit rating companies. The rating process for structured finance is complex, iterative and erratic, and requires the credit enhancement agency to show flexibility and considerable effort, not least because the three large international rating agencies use differing methodologies in modelling collateral applied to asset-backed securities.[233] Credit enhancement is intended to support that process but none of the three main rating methods is best suited to the risks with which Proposal III is concerned. An actuarial method uses loss data to estimate necessary credit enhancement; appropriate for many asset-backed securities but unreliable when data histories and NPL accounting are poor. Cashflow modelling analysis is helpful when asset performance data is unavailable but is costly and protracted. It is likely that the new agency would explore new techniques and promote a blend of methods in consultation with the rating organisations, where possible using international sectoral data to support the performance observations of Asian originators. The proposal entails founding no additional credit rating organisations, but does envisage a dialogue on ABS rating methodology between the new entity and all recognised local and international rating agencies, as well as initiating a means for mutual acceptance of local ratings by national regulatory authorities, also assisting the reforms of Proposal I.

Rating review practice also distinguishes between conventional unsecured bonds and asset-backed securities. Public sector or corporate issue that are rated at launch will be

[232] Financial guarantee support designed to correct specific credit failings.

[233] This divergence mitigates concern as to rating agency influence similar to that arising from Basel II granting the agencies a fully institutional role. Too little attention has been paid to agency regulation given their predictive performance before and since the Asian crisis, or in Russia's. Differences in agency methodology (and implied imperfections) are described succinctly by the BIS (2003) and Raynes & Rutledge (2003).

periodically reviewed during the bond's life and upon visible changes in credit conditions. Asset-backed securities are assigned initial ratings and then ignored unless they seem likely to default. Proposal III anticipates a change in practice such that seasoned asset-backed bonds become subject to periodic review to reflect the maturing of asset pools and the phased redemption of individual classes of security. A contingent capital structure is especially suited to this development. For each transaction given credit enhancement, a provision of funded capital would be assigned at launch, together with an unconditional commitment to supplement that funded contribution if certain external events occur and persist for a limited defined period.

The advantages of Proposal III are that it is able to deal with all financial assets and will cause a considerable increase in issuance and trading activity without disturbing the value of links between banks and SMEs. As a real comparison, the concept resembles that used to recycle defaulted or delinquent bonds and NPLs in post-crisis Korea.[234] Banks can be effective providers of finance for medium-scale enterprises because are accustomed to conditions of imperfect information and high initial lending costs, but often they need encouragement to lend, not only at times of generally heightened risk. An effective refinancing vehicle could provide this essential incentive while avoiding the prohibitive transaction costs of pooled debt issuance for SMEs.[235] For investors, the agency provides access to credit risk more complete and transparent than generally available in Asia. Regional settlement could take place in the same manner as Proposal II. The proposal only relates to portfolio change, not to altering the credit characteristics of single obligor risks: such transactions or derivatives based upon such risks would be left wholly to the private sector, regardless of elements of credit enhancement. The sole role for public policy in this respect is to encourage the creative participation by Asian domiciled banks.

The main considerations of the proposal are inherent costs, its need for regional cooperation, and the practical obstacles set out in Proposal I, especially in achieving price transparency in asset sales. Asset-backed securities are no less demanding than corporate bonds as to questions of accounting and law, and the proposal may not work universally with equal effect. Yet this is true of the most sophisticated markets. Last, the implementation of Basel II may lead to an increase in regulatory

[234] See especially Oh, Park, Park & Yang (*op cit*).

[235] Direct public Asian SME bond issuance will remain largely infeasible for the medium-term. However, the relaxation by US administrative and judicial interpretation after 1987 of Glass-Steagall legislation, allowing commercial banks to underwrite corporate securities led initially to those banks arranging a disproportionate number of smaller issues for lesser risks and SMEs (Gande, Puri, Saunders & Walker, 1997). This was doubtless due partly to the competitive power of investment banks but may also signify the value to SMEs of their known lenders developing capital market product skills: the reform generally improved SME funding. Findings from Europe suggest that distribution skills are critical to 'local' banks retaining new issue market share against competition from global investment or universal banks (Santos & Tsatsaronis, *op cit*). See remarks in section B p12 (*supra*).

capital costs associated with certain securitised transactions, although this would affect few issues backed by impaired assets. Basel II's adoption could also encourage a shift in assets favoured for securitisation from residential mortgages towards loans to unrated corporate borrowers and commercial mortgages.

This paper's three proposals demand extensive cooperation among participating countries. In each case, the need for agreement upon minimum standards and therein achieve a high degree of harmonisation make it essential that both structure and requirements for use be kept as simple as possible. These proposals contain no suggestions as to issuance in composite or basket currencies: it is assumed that issuance will be in local and major currencies to match investor demand and to contain transaction costs.

Asia needs effective markets rather than passive accumulations of financial assets, and will benefit from a viable alternative to the banking sector, sufficiently transparent and liquid to provide a useful price signalling mechanism. Governments must agree to cooperate in best practices for legislative or regulatory change, and adopt new proposals that are supportive to market users, particularly institutional investors, wherever possible avoiding duplication in the creation of supporting market systems and financial architecture. They must also demand and encourage improvements in risk appraisal, financial disclosure and standards of corporate governance.

Active markets will not exist in Asia without cooperative government engagement in reform, and unless government's commitment is at all times market orientated.

> *'Hypothetical history, which explains the past by what is simplest and commonest in the present, is in banking, as in most things, quite untrue. The real history is very different. New wants are mostly supplied by adaptation, not by creation or foundation. Something having been created to satisfy an extreme want, it is used to satisfy less pressing wants, or to supply additional conveniences.'.*[236]

[236] Bagehot (1873) ch3.

Appendix: Illustrations relating to Proposal II

The following diagrams illustrate three simplified deal structures, in each case for clarity omitting banks and other parties that are non-discretionary intermediaries or execute pure transmission functions, and showing flows of funds at the time of initial and periodic payments. 'Investor' is ubiquitous, standing for all types of principal. Each form of issue may be listed on an exchange.

First, 'offshore' bond issues are similar to the model euromarket transaction of the 1970s. Regardless of listing or regulatory domiciles, all trades are settled outside the domicile of the issuer of risk. A domestic investor may freely buy or sell such issues subject to any local official or regulatory constraints, seen commonly when bonds are denominated in its home currency.

Figure 3. Offshore issue, initial payments:

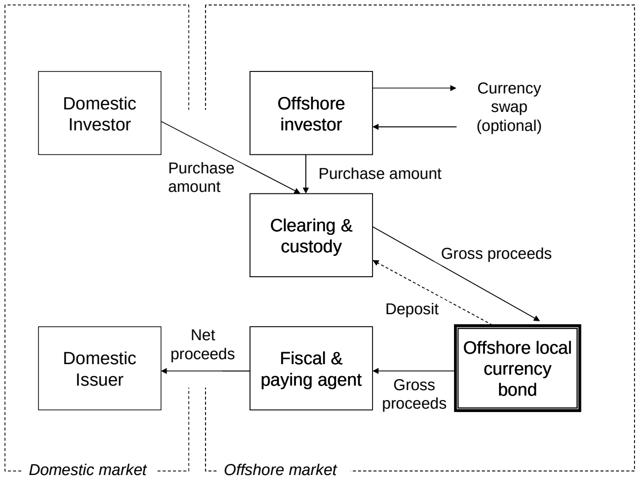
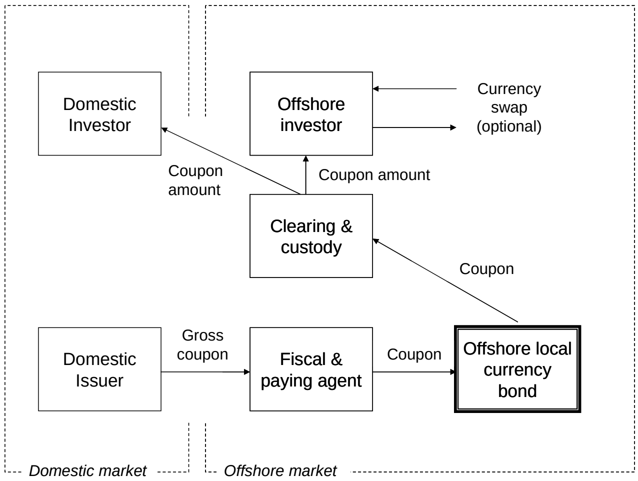


Figure 4. Offshore issue, periodic payments:



Second, 'regional' issues represent the core of Proposal II, in which a regional hub becomes the transaction's primary place of settlement, probable listing and repository of information. In this case a domestic investor may elect to effect or settle a sale or purchase offshore, subject to local official or regulatory constraints.

Figure 5. Regional issue, initial payments:

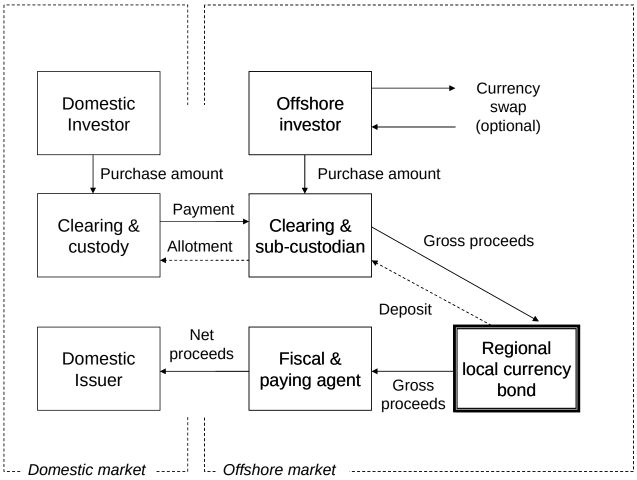
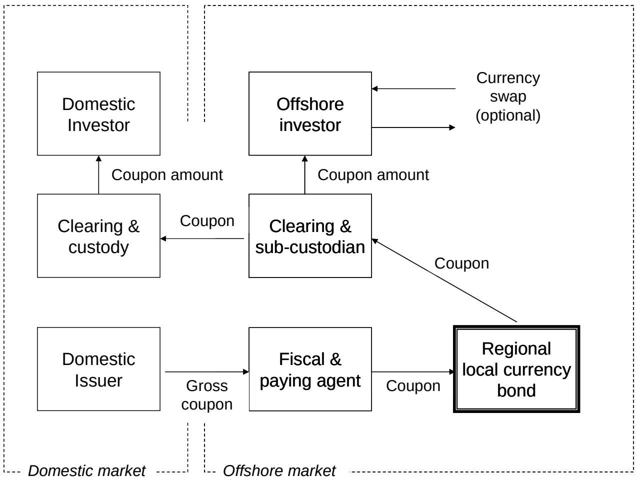


Figure 6. Regional issue, periodic payments:



Last, the 'domestic freely-traded' issue is a model for those for which the primacy of a regional hub may be impractical or impolitic. This may be appropriate for domestic issue classes that exist today in considerable volume, most notably government and central bank notes or bonds, for which domestic settlement and other aspects of system architecture exist in most of the review economies, whether or not begging reform. The bridge to the regional hub is intended to promote information flows and encourage cross-border investment activity, and may later encourage the standardisation of dealing, settlement and custody.

Figure 7. Domestic freely-traded issue, initial payments:

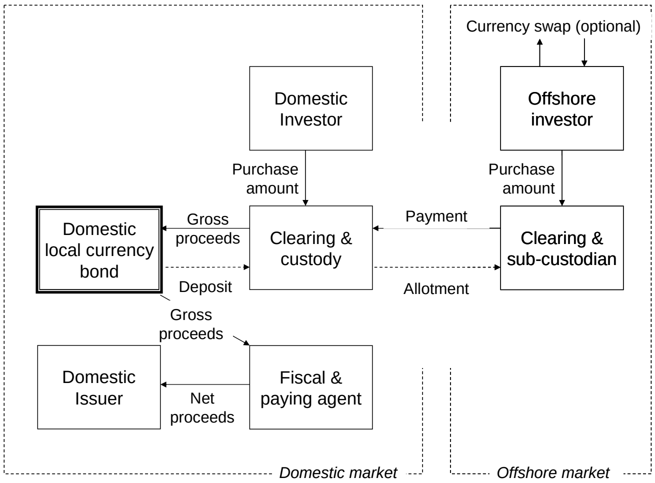
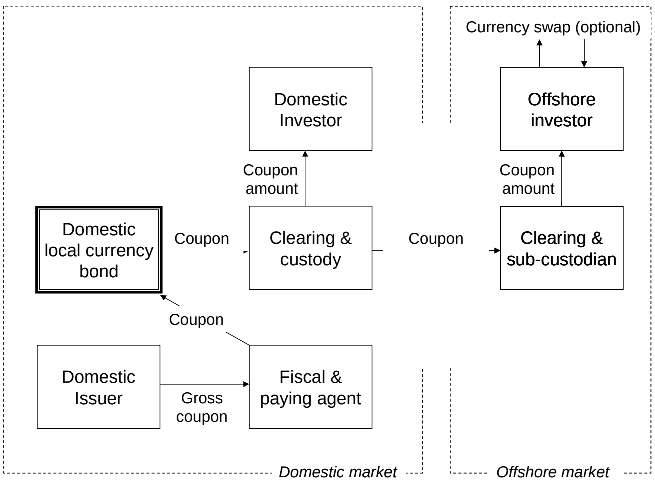


Figure 8. Domestic freely-traded issue, periodic payments:



G. Market features and impediments

This section indicates the more important attributes of Asia's bond markets, identifying their principal features and those that most require reform. It contains a table in ten parts illustrating conditions and activity in both domestic markets and for aspects of offshore issuance and trading, and isolates concerns to which attention is needed in the ways identified in the first proposal of section F.[237] No attempt is made to extend beyond the key points: descriptive comprehensiveness is ephemeral and subject to continual coverage by private sector sources. The factors cited in the table also address questions arising for non-bank institutional investors in assessing any developing market.

A recurring concern is the effect on general liquidity and price transparency of government securities (and in some cases other instruments) being held by the domestic banking sector as part of an overt or indirect regulatory regime. Other common issues include:

- The scale of domestic markets in terms of available debt instruments. How freely do these securities trade and with what degree of liquidity?[238] Measures of turnover may be unreliable in unsophisticated markets but outstanding capitalisation can never be the sole criterion by which a market is assessed.
- Regulatory restrictions on issuance and external constraints on investor activity.
- How withholding taxes apply to bonds and money market instruments. Do these and other taxes differ in their impact on types of instrument or classes of investor, domestic or foreign? Are banks (domestic or offshore) or foreign investors able to lessen or offset the incidence of withholding taxes?
- The impact of exchange controls on cross-border investors and fundraising. Are there differences between the legal and practical incidence of exchange controls?
- Do domestic dealing and settlement processes differ between debt instruments? Are domestic and foreign investors offered clear unitary settlement models using delivery against payment and for custody?
- How secure and actionable is the sale of financial assets, transfer of creditor claims or of associated collateral between unconnected parties? Do taxes or duties affect such

[237] p51 et seq. (*supra*).

[238] Measures of liquidity are uncontroversial but never absolute. For example, dealing (bid-offer) spreads can faithfully show competitive liquidity only if convention requires continual market-making. Relative turnover and the effect of single trades on prevailing prices are helpful indicators for less-developed markets but are clearly subjective. The most comprehensive survey of East Asian liquidity is by Mohanty (*op cit*) but covers only government securities.

transfers so as to threaten the integrity of conventional structured finance transactions, including those for NPLs?

- Path dependence exists in the institutional development of all markets, for example, in the way that the treatment of property rights affects asset-backed securities ('ABSs'). Rights created recently in law to facilitate privatisation programmes may not be fully appropriate for reliable ABS issues.
- Legal impediments concentrate on areas most affecting investor confidence and the structuring of ABS transactions or programmes. Circumventing these problems with complex (or synthetic) ABS transactions is not a sufficient solution.
- The quality and reliability of mandatory issuer disclosure requirements.
- The availability and price transparency of interest rate swaps and other important OTC or exchange traded derivatives and hedging products.

In the table that follows:

- References are to domestic markets for local currency debt securities unless stated. 'Outstanding market capitalisation' is as at 30 September 2003; 'net issuance' is for the 12 months to 31 December 2002 (BIS and Bank Indonesia data).
- 'Recognised domestic public issues' are those completed in 2003 and disclosed to Dealogic's Bondware database. They represent a reliable transaction-based guide to the scale of non-government sector domestic currency public issues arranged by banks and securities houses. For Hong Kong and Singapore they include a significant proportion of issues by foreign entities.
- Credit ratings are shown as at 30 April 2004.
- Legal issues include general problems and specific concerns hindering securitised transactions, notably the feasibility of true sales and creation of bankruptcy remote vehicles, risks of set-off, whether the sale of receivables is treated as secured lending to an asset originator, and matters of notice or registration that materially lessen the feasibility or simplicity of any such transaction.
- 'ADBI index' refers to HSBC's Asian dollar bond index. On 30 April 2004 this comprised 111 fixed rate US dollar denominated international issues each of US$250 million or more with at least 12 months' remaining tenor, of which 110 were from ultimate obligors domiciled in the review countries. Of those 110 bonds, 52 per cent were regarded as liquid, 39 per cent as tradable and 9 per cent as illiquid. There are currently few outstanding non-US dollar international fixed rate Asian issues (and very few liquid floating rate issues in any currency). The 100 bonds forming the non-illiquid part of the

ADBI index may be taken to be the universe of East Asia's tradable fixed rate international debt issues.

- 'Trading, settlement and custody' examines transparency for users, the degree of mandatory settlement centralisation, whether dealing or settlement is fractured by being subject to choice, variations in settlement days, the reliability of delivery against payment procedures (if extant), and systemic links between settlement and payments.
- Derivatives and bond financing is a category indicating the domestic market's product capabilities. Not considered here are offshore derivatives (mainly interest rate products) based upon non-deliverable forward contracts, intended to mimic domestic instruments that are non-existent, illiquid or unavailable to foreign counterparties. Regulators commonly prohibit some or all domestic market participants from using such OTC products in their home currency, despite their being freely traded offshore.
- Data especially relevant to this section are contained in tables B1 and B2 (pp6-7) showing domestic debt issues; tables C3, C4 and C5 (pp26-27) illustrating foreign currency external borrowing; and tables H3a and H3b (pp100-101) with public sector fiscal balances.

Table G1: China debt market characteristics

Substantial government and state sector issuance. Negligible trading activity. Directional, allocated market with centrally determined interest rates. Reform of all kinds under close official scrutiny. Modest illiquid foreign currency issuance (hampered by credit concerns and post 1997 defaults).

Instruments in issue	Central government issues fixed and floating rate treasury bonds and sanctions financial institution bonds on a similar scale (and state enterprise bonds in smaller amounts) most of which are bought by commercial banks for liquidity requirements. A growing non-bank financial institutional sector has a lesser passive investment role. Modest secondary dealing split between the Shanghai or Shenzhen exchanges and an interbank market: the untraded yuan bond market is thus substantial. Primary sales have been made by auction since 2002-03 but the process is closed and only part of the state's issuance plans is typically declared. Scheduled or pre-announced auctions have been cancelled at short notice. Bonds are placed or bought by direction, so the market lacks infrastructure for information purposes, open regulation, trading and settlement.
Absolute size	Outstanding market capitalisation US$479.8bn (of which 51 per cent represents central government issues). Net issuance 2002 US$61.8bn. US$75.9bn treasury bonds (gross) reported issued in 2003 (2002: US$71.6bn). Recognised domestic public issues 2003: Nil. No. of ADBI index tradable constituents: 8.
Main legal omissions	Historically, property and securities law are not comprehensive and subject to administrative rulings. New contract (1999) and trust laws (2001) provide for true sale and allow single transactions, but property rights, effectiveness of transfer, and the creation of bankruptcy remote vehicles for ABS issues require further reform and refinement (hence offshore ABS structures have been preferred to date). Quantitative constraints on corporate issuers now prevent the use of onshore SPVs for structured transactions. Enforcement uncertainties are common and may vary between provinces. Four asset management companies were set up after 1997 to dispose of bank impaired assets: foreign participation in such sales has been minimal despite great interest, partly due to pending legal and regulatory uncertainties. These problems are acknowledged by government and its main regulators.
Taxation questions	Withholding taxes on interest payable offshore and to domestic non-bank investors.
Rating agencies	None. Under regulatory study.
Long-term credit ratings	BBB+/Not rated (S&P domestic currency sovereign bond rating). A2 (Moody's domestic currency ceiling). BBB+/A2 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Since 2003 several domestic or foreign currency issues completed using NPLs but only with full or partial recourse to the asset seller, or enhanced with well-performing assets. China Banking Regulatory Commission ('CBRC') is said to be drafting ABS regulations. Many more transactions planned or announced.
Derivatives & bond financing	Bond repurchases allowed since 2003. Draft derivative regulations issued by CBRC in 2004 clarify counterparties for onshore foreign currency trades. Not yet known what yuan products will be permitted, nor who may use derivatives and for what purposes.
Trading, settlement & custody	No mandatory central securities depositary. Limited provision for delivery against payment settlement. Trading days vary between instruments, and if bonds are listed.
Announced reform	World Trade Organisation commitments suggest liberalisation will occur but many reforms are political. China's State Council gave a commitment to debt market reform in early 2004. Many reforms have been mooted or announced for markets and to deal with NPLs. Approval for non-bank money market funds was announced in 2003, which could assist liquidity. It is likely that government issuance will become market-orientated in stages, allowing interest rates to cease being centrally determined.
Regulatory issues	Unclear division of responsibilities among securities, banking and insurance regulators, and historically between the central bank, finance ministry and National Development and Reform Commission. There is strong recognition of the need for regulatory clarity among all central authorities. Offshore borrowing and investment is tightly controlled.

Table G2: Hong Kong debt market characteristics

Sophisticated, potentially substantial but underused market. Non-bank investors often lack confidence.

Instruments in issue	Government has issued debt sporadically. The Hong Kong Monetary Authority regularly issues Exchange Fund notes (12 months or less) and bonds (10 years or less), the main use for which is as liquidity regulation instruments through a discount window, and to provide the private debt market with a benchmark yield curve. Open auction used for these quasi-government securities with a declared issuance programme. The amounts in issue have traditionally been limited by Hong Kong's quasi-currency board structure but this restriction could be overcome if agreed. Statutory bodies issue medium-term bonds regularly but never prolifically. In each case, secondary markets can be liquid, but conducted largely by banks: non-bank institutional investors have little continual access to paper. Non-government sector bonds follow eurobond market issue and trading practice: issuers are mainly supranational organisations (for tax reasons), banks in Hong Kong. Local and foreign corporates are far less active. A liquid market for commercial paper existed in the early 1990s until crowded out by the Exchange Fund notes. Hub for medium-term note (MTN) issuance based on semi-liquid derivatives market. Retail targeted debt issues popular since 2002 due to low nominal interest rates. Since 1997, government agency Hong Kong Mortgage Corporation encourages banks to securitise residential mortgage loans and is itself an issuer in local and core currencies. Sporadic core currency public issuance by major corporates.
Absolute size	Outstanding market capitalisation US$45.5bn (of which 34 per cent represents government issues). Net issuance 2002 US$1.7bn. Recognised domestic public issues 2003: US$12.4bn (512). Excludes unlisted MTNs. No of ADBI index tradable constituents: 21.
Main legal omissions	Common law framework generally amenable to securities markets. Delayed reform of law on administration and bankruptcy. Listing rules may deter non-Chinese foreign companies.
Taxation questions	No withholding taxes but corporate debt issues costs are treated unequally for profits tax purposes compared to banks, public sector and supranational issuers: this has historically deterred both local and foreign corporate issuance. Non-bank traders and investors may be similarly disfavoured, although this anomaly was lessened in 2003.
Rating agencies	None. International agencies active.
Long-term credit ratings	AA-/Aa3 (S&P & Moody's domestic currency sovereign bond rating). Aa1 (Moody's domestic currency ceiling). A+/A1 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	No substantial omissions or anomalies.
Derivatives & bond financing	OTC hedging instruments (especially interest rate swaps and options) are well traded. The exchange based market in interest rate products is more limited.
Trading, settlement & custody	Integrated, well established systems and bridges to overseas clearing houses. Central securities depositary is linked to payments system for HK and US dollar securities.
Announced reform	Approval for real estate investment trusts (REITS) and retail orientated debt issues has yet to take full market effect.
Regulatory issues	Issuer disclosure and reporting is a concern for many investors. Unclear relationship between securities regulators.

Table G3: India debt market characteristics

Structurally flawed market with substantial government issuance. Investable assets are scarce, especially for non-bank investors. Generally highly regulated. Reform is desired but slow in implementation.

Instruments in issue	Market dominated by government sector (central and government and public corporations) as issuers; banks (and the central bank) as investors. Government sector needs reform to consolidate debt issues. No fully open auction or declared issuance programme for government primary issues (but short-term issues are announced semi-annually). Little general liquidity in government issues due to liquidity requirements and historic legal constraints on issuance. Central government auctions treasury bills (up to 12 months), and notes of up to 10 years; state government securities can be similar. Central and state governments also guarantee bonds (up to 15 years) to assist infrastructural financing. Corporate bonds and commercial paper are bought by banks and (bonds) to a limited extent by domestic retail investors. In a first rupee issue for a foreign borrower in February 2004, the ADB raised US$110m equivalent in 10 year notes, 60 per cent bought by commercial banks, the remainder by non-bank institutions. Foreign borrowing and outward investment very closely regulated.	
Absolute size	Outstanding market capitalisation US192.5$bn (of which 99 per cent represents government issues). Net issuance 2002 US$24.9bn. Recognised domestic public issues 2003: US$4.6bn (129). No of ADBI index tradable constituents: 2.	
Main legal omissions	The transfer of receivables is valid but real property rights may be constrained or subject to delay in transfer. Limits to foreign ownership of domestic companies.	
Taxation questions	Withholding tax is typically 20 per cent of interest due to non-resident investors. A tax treaty with Mauritius has been used by non-resident Indians and domestic borrowers to eliminate withholdings. Government has sought unsuccessfully to impose capital gains taxes in lieu of withholdings taxes. Stamp duty applies to CDs which limits money market trading. Ad valorem stamp duties apply to the transfer of receivables.	
Rating agencies	Listed corporate issues must be rated (at investment grade) by two local agencies.	
Long-term credit ratings	BB+Ba2 Aa3 BB/Baa3	(S&P & Moody's domestic currency sovereign bond rating). (Moody's domestic currency ceiling). (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Recently enacted securitisation law, not yet tested.	
Derivatives & bond financing	Restrictions on short sales, bond futures and bond options. Negotiated, semi-liquid OTC interest rate derivative market.	
Trading, settlement & custody	No central securities depositary for all instruments. Central government issues settle through an automated system operated by the central bank, which also acts as a depository. Limited provision for delivery against payment settlement. Settlement trading days vary by instrument. Physical delivery persists in some cases.	
Announced reform	Securitisation, related issues of taxation and stamp duty have been under discussion since 1999. Existing offshore borrowing controls were tightened in November 2003 to encourage domestic borrowing.	
Regulatory issues	There is no unambiguous regulation of debt securities issuance. Bank liquidity requirements are comparatively high, which depresses market liquidity.	

Table G4: Indonesia debt market characteristics

Modest market that grew after the Asian crisis due to government funding needs connected to banking sector recapitalisation. Limited corporate debt market.

Instruments available	Money markets are liquid and well established, with government and public sector bills and commercial paper held or traded prior to the Asian crisis, mainly due to central bank issuing short-term notes (SBIs) for funding and liquidity management, and state companies borrowing for longer periods. Commercial bank demand for SBIs is governed by regulatory requirements. Several very large medium-term government debt issues arranged after 1998-99, mainly to support the recapitalisation of the public sector and newly nationalised banking sector. Currently, an open auction exists for new government securities but there is no issuance programme or guidance: a firm institutional framework for issuance is lacking. Legislation enacted in 2002 is intended to give a formal setting for government issuance, and will be tested when the outstanding post-1999 transactions are refunded. Medium-term corporate debt issues have begun to increase in number since 2001-02, following legislation encouraging mutual fund investment in debt securities.
Absolute size	Outstanding market capitalisation US$5.4bn. Recognised domestic public issues 2003: US$2.7bn (52). No of ADBI index tradable constituents: 3.
Main legal omissions	Legal system is less accommodative to market-based securities than Asian common law systems, and may require comprehensive legislation of the kind introduced by Korea after the Asian crisis. There is uncertainty in the enforcement of foreign and domestic judgements, and in the acceptance by the courts of the choice of foreign law for contracts or collateral deeds. Current receivables may be transferred by assignment but there are doubts as to necessary notices and consents. Law permitting ABS issues was enacted in 1997 but domestic SPVs cannot issue without a trading record. Law allowing the transfer of receivables to an onshore vehicle passed in 1998. Unclear that courts respect contractual priorities among secured creditors in restructuring, but secured creditors have retained rights over collateral. Further uncertainty exists in respect of new bankruptcy law.
Taxation questions	Withholding tax applies to interest from debt securities but with differing domestic and foreign exemptions. Foreign investors may be subject to taxes on capital gains. A limited number of tax treaties only lessen minimum effective rates of deduction. Stamp duty applies to the transfer of collateral assets (this has led to unnecessarily complex structures to create reliable ABS issues).
Rating agencies	Ratings are mandatory for public corporate issues. The established rating agency has ties to a sister agency in Malaysia and technical assistance agreement with an international agency.
Long-term credit ratings	B+/B2 (S&P & Moody's domestic currency sovereign bond rating). Ba1 (Moody's domestic currency ceiling). B/B2 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Handful of single transactions since 1996-97 supported by foreign monoline cover. Legal framework for onshore transactions in need of correction (except those using credit card receivables). Acute enforcement problems have made conventional ABS expansion hazardous for domestic investors and almost impossible for offshore transactions.
Derivatives & bond financing	Securities financing and short sales permitted but little used. No onshore market in interest rate swaps; no exchange traded interest rate contracts.
Trading, settlement & custody	Use of central securities depositary is not mandatory for all instruments. Limited delivery against payment settlement. Settlement trading days vary.
Announced reform	General intention to support capital market reform with further legislation. Rules announced in 2003 for more comprehensive disclosure by issuers. General intention to create a new unified regulatory authority.

Table G5: Korea debt market characteristics

Sizeable market made resourceful and sophisticated since 1999 by considerable legal and regulatory innovation. High corporate and ABS issuance. Risks of systemic volatility may threaten usage.

Instruments available	Market size and activity overstated before 1998, since when reforms have fed growth in government, corporate and ABS volumes and usage, much of the expansion assisting post-crisis financial reconstruction. Government issues traditionally account for a relatively small share of total market capitalisation. Despite the scale of the overall market, non-bank investors often find acceptable instruments scarce, in part because Korea has a comparatively large insurance sector. Central government issues several security types (including treasury, monetary stabilisation and foreign exchange stabilisation bonds) in maturities of up to 10 years, and historically guaranteed other public sector borrowers, producing an unnecessarily fractured market and benchmark yield curve. Coupled with bank regulatory requirements, such fragmentation greatly lessening liquidity. Open auction for government securities and declared issuance programme. ABS growth sourced successively from banks, finance companies and corporates. Foreign issuers not generally permitted despite the Won market's size. Overseas core currency issuance by Korean borrowers is sizeable and generally well-traded.
Absolute size	Outstanding market capitalisation US$432.1bn (of which 26 per cent represented by government issues). Net issuance 2002 US$53.5bn. Recognised domestic public issues 2003: US$38.1bn (631). No of ADBI index tradable constituents: 26.
Main legal omissions	Korea appears a model for successful civil law financial reform but long-term impact on activity cannot yet be judged. Strong controls remain on all Korean issuers and largely prohibit non-Korean Won issues. Despite ABS growth it is unclear whether originators may service loans, but this has not been disputed. True sales are allowed under ABS legislation but SPVs are often placed offshore to safeguard true sales.
Taxation questions	General 25 per cent withholding tax on interest. Banks actively use foreign tax treaties.
Rating agencies	Three agencies, each with an international link. Ratings mandatory for public issues.
Long-term credit ratings	A+/A3 (S&P & Moody's domestic currency sovereign bond rating). Aa3 (Moody's domestic currency ceiling). A-/A3 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	New laws in 1998-99 permit ABS and mortgage-backed issues by help create a simple means of transfer and public notification. As a result the government's NPL recycling body (KAMCO) has been highly effective since 2000 in assisting the financial and corporate sectors in disposing of impaired and restructured assets, financed with ABS issues. All KAMCO assets were acquired with recourse. Overseas ABS issues have been generally successful, relying on monoline credit wrap support becoming more freely available with Korea's credit rating recovery after 1998. Primary (non-synthetic) CLOs and MBS issues successfully completed since 1999-2000.
Derivatives & bond financing	Limits on bond repurchases. Interest rate and currency derivatives generally permitted and the domestic swap market has been encouraged recently by the authorities. Domestic investor demand likely to increase the use of structured products.
Trading, settlement & custody	Centralised settlement and custody but not mandatory. Delivery against payment settlement since 1999 but not universal.
Announced reform	Separation of ownership and financing.
Regulatory issues	The regulatory environment developed since the Asian crisis has clear divisions of roles but future reform may concentrate on questions of corporate disclosure and reporting. As a primary CLO market expands (probably based upon SME loans and finance company receivables) then the regulatory treatment of interest rate and credit derivatives will need clarification and be made consistent with capital regulation. Unclear also that all public intervention has been market-driven, for example, in 2001 state bodies were encouraged to assist in engineering a recovery in the market for corporate bonds.

Table G6: Malaysia debt market characteristics

Effective but under-used market, the product of significant systemic innovations.

Instruments available	Despite improvements in systems and a long history of market initiatives, Malaysia's domestic bond markets suffer illiquidity and a lack of issuer usage. Government and public sector instruments take many forms, while the core of outstanding central government issues is compulsorily acquired and held by public sector provident funds. Government issues securities directly (with open auctions and a declared issuance programme) and through the central bank, and include guaranteed Islamic notes of up to 10 years. Liquidity requirements for financial institutions further constrain trading in Government of Malaysia treasury bills and bonds. The government has long recognised the problem, and caused federal agencies to issue securities that domestic investors would regard as government risk: Cagamas founded in 1986 as a national mortgage agency, and Khazanah Nasional, a state investment company since 1993 that issues state guaranteed notes that serve to provide a benchmark zero coupon yield curve. Market innovation is healthy and money market activity is liquid. The corporate debt market is effective but modest (there is a history of bank-guaranteed corporate issues). Foreign investors have also been deterred by capital controls (1998-2000). Bar to issuance by foreign borrowers.
Absolute size	Outstanding market capitalisation US$92.5bn (41 per cent government issues). Net issuance 2002 US$0.4n. Recognised domestic public issues 2003: US$1.7bn (14). No of ADBI index tradable constituents: 14.
Main legal omissions	The legal framework generally does not hinder market development but post-crisis enforcement has been questioned.
Taxation questions	15-20% withholding tax imposed on investments for all non-bank investors, but some instruments are tax exempt, including Government treasury bills, zero coupon bonds and identified corporate bonds rated by RAM. Investors often use a Labuan conduit to avoid or lessen domestic taxes (Labuan investors generally buy domestic instruments free of tax).
Rating agencies	Two private domestic agencies have external ties to the ADB and Standard & Poor's Corp. Ratings mandatory for all public issues.
Long-term credit ratings	A+/A3 (S&P & Moody's domestic currency sovereign bond rating). Aa2 (Moody's domestic currency ceiling). A-/Baa1 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Cagamas issues pass-through securities to fund mortgage purchases. Two public entities (Danaharta Nasional and Danamodal Nasional) were established after the Asian crisis, respectively to acquire and recycle NPLs, and to assist bank re-capitalisation. 1999 securitisation guidelines led to a new law governing ABS issues in 2001 but this has been little used, perhaps due to regulatory caution as to the originator's control or influence over a new SPV.
Derivatives & bond financing	Bond repurchases permitted. Short selling and securities lending barred. Bond options market permitted from 2004. Semi-liquid onshore market in interest rate swaps. Onshore synthetic instruments and credit derivatives are growing but may become subject to new central bank regulation.
Trading, settlement & custody	Central settlement and depositary mandatory for government, Cagamas and Khazanah bonds, but feasible for all listed debt securities, as is delivery against payment settlement. Settlement trading days may vary.
Announced reform	A 'master plan' for reform adopted in 2001 aims to improve the use and functioning of all capital markets by 2010. Most of the systemic reforms are in place. Regulatory changes affecting banks and investors being are progressively introduced, including greater freedom for state provident funds: this may eventually cause market activity to expand to its potential.

Table G7: Philippines debt market characteristics

Financial sector dominated by government funding needs and a strong banking sector. No traditional of non-governmental debt issuance except in money market instruments.

Instruments available	Government issues dominate the debt and money markets. Recurrent public sector fiscal deficits have led to heavy government issuance. Government auctions notes and bills, and has issued up to 25 year bonds through underwritten transactions, but most have tenors of up to 1-3 years. Except in short-term bills, liquidity is slight as most issues are held to maturity. Liquidity in government bond markets heavily constrained by bank liquidity requirements. Open auction for government securities through a relatively large group of primary dealers but there is no declared issuance programme, and retail issue methods are ineffectual. Structural weaknesses in the long-term domestic debt market have historically made the state equally dependent on foreign currency debt. There is no tradition of domestic corporate debt other than in very short maturities. No real attempt to create a long-term market, although pending ABS legislation may lead to constructive change. Credit concerns prevent the development of a market for public sector risk similar to the US municipal bond market despite announced intentions. Government sector foreign borrowing erratic and coloured by rescheduling history since 1980s, but foreign borrowing has been essential due to domestic market shortcomings.	
Absolute size	Outstanding market capitalisation US$25.3bn (96 per cent government issues). Net issuance 2002 US$0.9bn. Recognised domestic public issues 2003: Nil. No of ADBI index tradable constituents: 16.	
Main legal omissions	Several efforts since the 1990s to enact securities, regulatory and financial sector reform have suffered extensive political delay. Securitisation impossible despite central bank having introduced transaction guidelines in 1998. A new enabling act currently awaits presidential ratification. True sale may be treated as a secured loan to a seller of assets. Unclear how courts treat contractual and other priorities among secured creditors and with unsecured creditors. Controversy as to court enforcement of regulatory compliance matters.	
Taxation questions	Stamp duty levied on trades in non-government securities. The withholding tax regime is complex and deters inward portfolio investment.	
Rating agencies	Domestic agency concerned mainly with short-term corporate commercial paper.	
Long-term credit ratings	BBB/Ba2 A1 BB/Ba2	(S&P & Moody's domestic currency sovereign bond rating). (Moody's domestic currency ceiling). (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Guidelines 1998. Never effective. Most announced offshore transactions have never been completed, often due to contractual or legal problems.	
Derivatives & bond financing	Bond and note repurchases subject to capital charge. Foreign banks trade money market based OTC derivatives.	
Trading, settlement & custody	Generally fragmented. Use of central securities depositary is not mandatory for all instruments. No delivery against payment settlement. It is common for securities to be transferred by serial assignment to avoid stamp duties, making ownership unreliable. Settlement trading days varies. Certain settlement rules for government securities are inconsistent (for example, same day settlement conflicts with transfer mechanism).	
Announced reform	Securitisation act. Financial sector legal and administrative reform have been characterised by delay.	
Regulatory issues	No clear regulatory regime for debt securities. All securitisation, corporate issuance and foreign borrowing is tightly controlled, needing central bank approval.	

Table G8: Singapore debt market characteristics

Post-1998 policy changes led to a considerable increase in all market activity; this has not been sustained. New applications and greater foreign interest may be needed. Highly effective systems.

Instruments available	Money markets have been liquid for some years but the medium-term debt market was shallow and illiquid until 1999 (except for equity-linked issues favoured by local corporates). Government debt was modest and simply absorbed in the state-sponsored provident fund. In a series of 1998-99 reforms, government began an appreciable increase in bond issuance and secondary activity with an enlarged government debt programme, the relaxation of controls on foreign issuers and with targeted incentives to participants. Central government overfunding produced a substantial growth in outstanding (tradable) government bonds, raising liquidity and giving an effective term benchmark yield curve for the first time, and encouraged domestic and foreign corporate new issues, some of which have been sizeable. Foreign issuance has been more diverse than in Hong Kong. Open auction for government securities. Declared 12 months issuance programme but subject to variation. Foreign issuance encouraged, although there are restrictions on the use of proceeds. The market has strongly supported commercial property securitisations and bank regulatory capital transactions. However, market growth has now stalled and may need to be stimulated with further more modest reform: for example, foreign (especially regional) participation could be encouraged. Singapore could become a source of regulatory capital for ASEAN banks. The domestic market would be further helped by new instruments (CLOs) to assist SME finance and adjustments to the working of the mandatory provident scheme.	
Absolute size	Outstanding market capitalisation US$56.4bn (63 per cent government issues). Net issuance 2002 US$0.6bn. Recognised domestic public issues 2003: US$3.6bn (58). No of ADBI index tradable constituents: 6.	
Main legal omissions	Singapore's common law framework is generally amenable to securities markets.	
Taxation questions	Offshore withholding tax exemption on 'qualified debt securities'	
Rating agencies	None. International agencies active.	
Long-term credit ratings	AAA/Aaa	(S&P & Moody's domestic currency sovereign bond rating).
	Aaa	(Moody's domestic currency ceiling).
	AAA/Aaa	(S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Central bank maintains comprehensive regulatory guidelines. Commercial property securitisation popular since 1998.	
Derivatives & bond financing	Free use except securities lending. Strong exchange traded derivatives. Local interest rate swap market not consistently liquid (which dissuades foreign issuers) but has received central bank support.	
Trading, settlement & custody	Effective central securities depositary linked to domestic payments system.	
Announced reform	Further changes to listing and corporate disclosure rules.	
Regulatory issues	Restrictions on the overseas use of Singapore dollars and on domestic fundraising by foreign financial institutions.	

Table G9: Taiwan debt market characteristics

Dominant domestic banking sector has led to a semi-active, closely regulated debt market with little true liquidity. Reform has now allowed ABS transactions but the speed of all such change is slow.

Instruments available	Highly regulated government debt market and the financial system is dominated by banks. Closed auction for government securities (since 1992). Issuance programme announced irregularly and at short notice. No reliable benchmark yield curve due to general lack of liquidity. Government bonds and notes important in bank and financial institution liquidity requirements; heavy emphasis on repurchase trading, partly for tax reasons. Government bonds issued in maturities of up to 20 years, a majority for either 5 or 10 years. For an open, active government market to grow and encourage a transparent corporate debt market, there may need to be changes in the focus and importance of the banking sector. A limited number of supranational borrowers have issued fixed rate bonds in the domestic market. Corporate fundraising orientated to banks and equity markets.
Absolute size	Outstanding market capitalisation US$156.3bn (49 per cent government issues). Net issuance 2002 US$15.7bn. Recognised domestic public issues 2003: US$12.0bn (177). No of ADBI index tradable constituents: Nil (overseas issues largely equity-linked).
Main legal omissions	Non-equity markets have been undergoing deregulation at a slow rate for more than 10 years but the legal background needs reform for debt market activity to improve significantly. Securitisation legislation enacted in 2002 is the first such example: so far it is little used and may not be fully effective in tax implications and perfection of title. Legislation to allow real estate investment trusts was proposed in 1998 but not enacted.
Taxation questions	Transaction tax is a continuing deterrent to market growth. A punitive 20 per cent withholding tax and differentials in tax treatment distort trading activity and lessen active involvement by non-bank investors.
Rating agencies	Established domestic agency. Ratings are mandatory for public issues.
Long-term credit ratings	AA-/Aa3 (S&P & Moody's domestic currency sovereign bond rating). Aa3 (Moody's domestic currency ceiling). AA-/Aa3 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	ABS provisions enacted in 2002. The law is little tested but may now be effective. Since April 2003, non-bank investors permitted to invest in listed ABS issues.
Derivatives & bond financing	Restrictions on securities lending, short sales, bond futures and bond options. Bond repurchases limited by transaction tax on corporate issues. Limited exchange traded products and illiquid OTC derivatives.
Trading, settlement & custody	Use of central securities depositary is not mandatory for all instruments. Limited delivery against payment settlement. Settlement trading days varies.
Announced reform	ABS law became effective in 2003.
Regulatory issues	Full effects not yet seen of financial holding company legislation in 2001, separating bank shareholding in related companies from lending decisions. History of restrictions on portfolio inflows. Disclosure requirements needing attention. SEC must approve all domestic issues; offshore borrowing is tightly controlled.

Table G10: Thailand debt market characteristics

Expanding corporate debt market including active private placement issuance. Growing but irregular government and public sector issuance. All activity constrained by close regulatory control.

Instruments available	All issuance has grown markedly since the recovery from Asian crisis due to investor demand, disintermediation from banking sector and high state funding requirements and for bank recapitalisation. Irregular (but sizeable) government issuance except short-term instruments. Hence despite growing demand for government and corporate issues, there is no reliable benchmark yield curve and the corporate debt market has a bias to private issues and short maturities (3-5 years). Government issues or sponsors a variety of bills, bonds and public sector instruments that would benefit from consolidation. Open auction for government securities and issuance programme disclosed but not consistent other than for bills. Generally excess demand for government issues for liquidity purposes and from public sector provident schemes.
Absolute size	Outstanding market capitalisation US$54.8bn (58 per cent government issues). Net issuance 2002 US$10.5bn. Recognised domestic public issues 2003: US$5.1bn (45). No of ADBI index tradable constituents: 4.
Main legal omissions	Weak rules covering corporate new issue disclosure and documentation, based largely on 1992 legislative framework that initiated a market regulatory environment. Provisions relating to transfer are unclear in some respects despite ABS legislation, including notice requirements and the unwinding of sales. Market confidence not assisted by the frequent use of decrees compared to changes in primary legislation. Uncertainty as to principles adopted by the central bankruptcy court in adjudicating settlements. Other aspects of enforcement have been unreliable. Effects of external capital controls on all offshore borrowing is tightly controlled.
Taxation questions	Withholding taxes on interest and imposts on asset transfer are generally complex, affecting confidence and investor costs. Withholdings on public sector issues will be waived under 2004 decrees and the waiver may be extended to a variety of issues to assist activity.
Rating agencies	Well-established agency has limited resources. Ratings mandatory for public issues since 2000.
Long-term credit ratings	A/Baa1 (S&P & Moody's domestic currency sovereign bond rating). A1 (Moody's domestic currency rating ceiling). BBB/Baa1 (S&P & Moody's foreign currency sovereign bond ratings).
Securitisation	Single ABS transactions completed since 1999 (using car loans, credit card receivables and mortgage loans) but all have been highly structured. 1997 ABS legislation allows onshore SPVs but is ambiguous as to notice requirements in transfer. Central agency created 1998 to recycle banking sector assets.
Derivatives & bond financing	Restrictions on short sales by non-banks. No exchange traded bond option or futures markets. Limited domestic market in interest rate swaps and other OTC hedging instruments.
Trading, settlement & custody	Use of central securities depositary not mandatory for all instruments. Partial use of delivery against payment settlement.
Announced reform	Caution in all post-crisis reform has slowed development. Foreign (initially supranational) issues to be permitted subject to ceilings 2004.
Regulatory issues	Government has a promising outlook on reform but has yet to improve disclosure. Government bond consolidation is vital. Close informal control by finance ministry of most aspects of financial market activity, including transactional approvals and investment policy. Thai Bond Dealers' Centre is unusual in Asia as a self-regulatory organisation representing securities houses and regulating trading, but its core authority is unclear, and competition exists among other regulatory bodies. Controls on outward investment and portfolio inflows.

H. Summary data

The source for tables H1-H5 is the IMF's *World Economic Outlook* for September 2003 and April 2004. The data sets shown are illustrative and in each case not aggregable.

The IMF classifies four of the ten review economies as advanced and six as developing. The advanced (officially the 'newly-industrialised Asian economies') are Hong Kong, Korea, Singapore and Taiwan.

The remaining six form part of a group of twenty-five countries of developing Asia, comprising nine of ASEAN's members, China, Afghanistan, seven South Asian and seven South Pacific nations.

The world's twenty-nine advanced economies are those eighteen members of the G-7 economies and the European Union (before its May 2004 expansion), the four advanced Asian economies, Australia, Cyprus, Iceland, Israel, New Zealand, Norway and Switzerland.

Table H1: Period average growth rates, 1985-03

Change in real GDP	Period averages	
(% per annum)	1985-94	1995-03
All advanced economies	3.0	2.7
All developing countries	5.1	5.0
All developing Asia	7.7	6.7
Including:		
China	10.2	8.5
India	5.4	6.0
Indonesia	6.8	2.7
Malaysia	7.1	4.9
Philippines	2.2	3.9
Thailand	9.0	3.0
All advanced Asia	7.8	4.6
Comprising:		
Hong Kong	6.2	2.2
Korea	8.2	5.1
Singapore	7.8	4.6
Taiwan	8.0	3.0

Table H2: Evolution of per capita income, 1979-2002

GDP per capita at current prices *(US$)*	1979	2002
China	$271	$963
India	$220	$478
Indonesia	$425	$803
Malaysia	$1,577	$3,880
Philippines	$586	$969
Thailand	$568	$1,989
Hong Kong	$4,531	$23,912
Korea	$1,708	$9,602
Singapore	$4,086	$21,699
Taiwan	$1,899	$12,452
Germany	$12,574	$24,128
Japan	$8,727	$31,343
UK	$7,445	$26,286
USA	$11,406	$36,210

Table H3a: Comparison of selected central government fiscal balances

Central government fiscal balances 1995-2003 *(% of GDP)*	1995	1996	1997	1998	1999	2000	2001	2002	2003
Advanced economies	-3.4	-2.8	-1.6	-1.0	-1.1	0.2	-1.0	-2.5	-3.3
Advanced Asia	1.0	1.0	0.8	-1.1	-1.0	0.8	-0.9	-0.5	-0.5
Developing Asia	-2.5	-2.2	-2.7	-3.7	-4.3	-4.4	-4.2	-4.1	-3.7
Including:									
China	-2.1	-1.6	-1.9	-3.0	-4.0	-3.6	-3.2	-3.3	-2.9
India	-4.6	-4.2	-4.7	-5.3	-5.5	-5.7	-6.2	-6.1	-5.5
Other developing Asia	-1.5	-1.4	-2.2	-3.2	-3.2	-4.6	-4.3	-3.6	-3.6

Table H3b: Selected comparison of general government fiscal balances

General government fiscal balances 1995-2003 *(% of GDP, social security transactions excluded)*	1995	1996	1997	1998	1999	2000	2001	2002	2003
Advanced economies	-4.1	-3.2	-1.6	-1.2	-0.8	0.1	-1.3	-3.1	-4.0
Including:									
USA	-3.3	-2.2	-0.8	0.4	0.9	1.6	-0.2	-3.3	-4.9
Euro area	-5.0	-4.3	-2.6	-2.3	-1.3	-0.9	-1.7	-2.3	-2.8
UK	-5.8	-4.2	-2.2	0.1	1.1	3.9	0.8	-1.5	-3.0
Japan	-4.7	-5.1	-3.8	-5.5	-7.2	-7.5	-6.1	-7.9	-8.2
Advanced Asia	3.3	3.2	4.2	2.5	1.3	-2.1	-4.8	-3.4	-3.3
Comprising:									
Hong Kong	-0.3	2.1	6.5	-1.8	0.8	-0.6	-5.0	-4.9	-4.0
Korea	0.3	0.0	-1.5	-3.9	-3.0	1.1	0.6	2.3	2.3
Singapore	12.2	9.3	9.2	3.6	4.6	8.0	4.8	4.0	1.8
Taiwan	2.7	2.3	2.3	3.7	0.8	-4.5	-6.6	-4.3	-4.0

Table H4: Summary of balances on current account

Current account balances (US$bn)	1995	1996	1997	1998	1999	2000	2001	2002	2003
Advanced economies	56.3	38.5	90.2	38.1	-102.2	-246.3	-206.7	-193.3	-241.9
USA	-105.8	-117.2	-127.7	-204.7	-290.8	-411.5	-393.7	-480.9	-541.8
Euro area	57.2	79.7	100.0	61.4	28.9	-29.8	14.0	77.9	53.2
UK	-14.2	-10.9	-1.5	-6.6	-39.5	-36.5	-33.8	-27.0	-42.7
Japan	111.4	65.7	96.6	119.1	114.5	119.6	87.8	112.7	136.4
Newly industrialised Asian economies	2.8	-2.2	6.1	64.9	58.4	41.4	52.0	63.6	86.5
Hong Kong	-9.1	-4.0	-7.7	2.5	10.3	7.1	9.9	13.7	17.4
Korea	-8.5	-23.0	-8.2	40.4	24.5	12.2	8.0	5.4	12.3
Singapore	14.9	13.9	14.9	18.6	15.3	13.2	16.1	18.9	28.2
Taiwan	5.5	10.9	7.1	3.4	8.4	8.9	17.9	25.6	28.6
Developing Asia	-42.1	-38.6	9.2	48.9	48.1	45.4	38.1	68.1	61.8

Table H5: Summary of sources and uses of sectoral savings

(% of GDP) 2003 data are forecast		1981-88 average	1989-96 average	1997	1998	1999	2000	2001	2002	2003f
Advanced economies	Saving	22.1	21.6	22.0	22.0	21.6	21.8	20.6	19.7	19.6
	Private	21.5	20.8	19.8	19.2	18.3	18.0	17.7	18.1	18.5
	Public	0.5	0.9	2.2	2.8	3.3	3.8	2.8	1.6	1.1
	Investment	22.6	22.0	21.9	21.7	21.9	22.2	20.7	20.0	20.1
	Private	18.5	18.0	18.2	18.2	18.2	18.7	17.2	16.6	16.7
	Public	4.0	4.0	3.6	3.6	3.6	3.4	3.5	3.4	3.4
USA	Saving	18.4	16.7	18.1	18.8	18.4	18.4	16.5	15.2	14.8
	Investment	20.6	18.3	19.9	20.7	20.9	21.1	19.1	18.6	18.9
Euro area	Saving	na	21.5	21.9	21.9	21.9	22.0	21.4	21.3	21.5
	Investment	na	21.3	20.3	21.0	21.3	22.0	20.9	20.1	20.1
Japan	Saving	31.8	32.4	30.8	29.7	28.4	28.7	27.7	26.5	26.0
	Investment	29.4	30.3	28.6	26.8	25.9	26.2	25.6	23.7	23.5
Advanced Asia	Saving	na	34.5	32.5	32.6	31.8	30.8	28.9	28.7	28.2
	Private	na	27.6	25.1	26.0	25.5	22.8	20.9	20.7	20.2
	Public	na	6.9	7.3	6.6	6.2	8.0	8.0	8.0	8.0
	Investment	na	32.1	31.6	24.2	25.8	26.8	23.8	22.7	22.8
	Private	na	22.7	22.0	14.9	17.6	19.2	16.1	16.1	16.2
	Public	na	9.4	9.6	9.3	8.2	7.6	7.6	6.6	6.7
Developing Asia:	Saving	22.4	24.8	28.3	29.0	31.4	30.6	29.1	29.3	30.2
	Investment	27.3	32.3	32.8	30.0	29.5	29.6	31.2	32.4	32.6

Table H6: Comparison of corporate leverage

Total debt/equity *(%) year ending*	1992	1993	1994	1995	1996
Hong Kong	26	23	33	36	39
Indonesia	59	54	58	81	92
Korea	123	129	127	132	na
Malaysia	31	29	38	45	62
Philippines	81	78	50	49	69
Singapore	37	34	33	45	58
Taiwan	71	73	71	67	65
Thailand	71	81	103	135	155
France	141	133	117	112	111
Germany	61	67	61	59	58
Japan	136	139	139	135	138
US	106	102	97	94	90

Source: reproduced from Pomerleano (*op cit*).

Table H7: Functions and leaders of the current ASEAN+3 working groups

Working group leader	Function
Thailand	Creating new securitised debt instruments (active since February 2003)
Korea	Credit guarantee mechanisms (since February 2003)
Malaysia	Foreign exchange transactions and settlement systems (since June 2003)
China	Local currency debt issuance by multilateral organisations, sovereign agencies and foreign Asian companies (since June 2003)
Japan and Singapore	Local and regional credit rating agencies (since June 2003)
Indonesia (Malaysia and the Philippines are co-chairs)	Coordination of technical assistance (since June 2003)

Source: ASEAN

The aims of the ASEAN+3 bond market initiative are 'facilitating access to the market by a wide variety of issuers and creating an environment conducive to developing bond markets.'

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