

The background of the slide is a grayscale collage of various financial data visualizations. It includes line graphs with fluctuating lines, bar charts, and tables of numbers. Some legible text in the background includes "30 year yield", "10040", "9930", and "10000".

Moving Toward Transparency: Capital Market in Indonesia

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Overview

This report examines the efficiency of the Indonesian capital market within the context of the Asian financial crisis. The extreme volatility of Indonesia's markets, and especially its currency, reflects the uncertainties arising not only from the economy itself but also from the continuing vagaries and variances of Government policy. The state of the banking system and the uncertain duration of the restructuring process are certainly disturbing to domestic and foreign investors. Moreover, the seeming lack of direction as well as the insufficient thought and analysis given to policy measures before they are implemented have caused panic and fear especially among investors, adding to the uncertainty and prolonging the crisis. The capital market must therefore inevitably take a back seat until orderly government is fully restored.

The crisis is more intense in banking than in the capital market. The history of interest rate arbitrage attracting huge inflows of foreign borrowing and resulting in the subsequent crisis has been well documented. The capital market merely responded to the banking and currency crises: both domestic and international investors sold and ran for safety. Those who have not done so are either fearless (and rarely reap much reward in the world of portfolio investment) or in danger of breaching the trust of those whose money they were looking after.

This analysis makes three points:

- The resolution of the current crisis is distinct from the long-term development of the capital market. Indonesia needs a developed capital market if it is to realize its full potential. But while the rupiah is down to 25 percent of precrisis rates, interest rates have just been raised to over 40 percent (one-month Government paper was raised from 22 to 45 percent on 23 March 1998), inflation is expected by many to top 30 percent, and shop assistants are standing around in shops empty of customers. Structural, long-term reform of the capi-

tal market may take second place to crisis management.

- However, the response to the crisis must be careful of any longer-term, negative effects it may have. It is inevitable that a bout of severe inflation, for example, is likely to have persistent effects on the capital market, further stifling the still-underdeveloped bond market. But it is important to ensure that measures introduced to combat the crisis do not have long-term distorting effects on the financial sector. The recent changes in Malaysian capital controls show how short-term policies may do long-term damage to the capital market. The crisis also offers an opportunity, albeit unwelcome, to address some structural issues that have hampered the capital market's development.
- Inflows of foreign money have spurred development in most economies, including Indonesia and other Asian countries, at some time in their history. Infrastructure projects that would not otherwise have been feasible in such a short time and other investments to develop the industrial and financial sectors have been greatly facilitated by foreign capital. Of course, the foreign investors have gained too, achieving returns better than those in more developed economies. But they have also borne higher risks, as recent events have shown. It is only rational that foreign (and domestic) investors try to protect their investment in times of crisis. The problem of Asian economies has not been foreign investors, but misalignment of policy that led to overreliance on foreign capital at the expense of domestic, and consequent misallocation of that capital. The message is that when the crisis is resolved, Indonesia and the other Asian economies will continue to want sustainable foreign investment, and it is important that they do not introduce any confidence-damaging, ill-advised, ill-considered measures.

To sum up, the Indonesian economy suffers from

- (i) excessive dependence on bank finance for industry,
- (ii) poor investment strategies by long-term sav-

ings institutions encouraged by distortions in the economy, and (iii) overreliance on foreign capital. Thus, while Indonesia has the infrastructure for a successful capital market—a regulatory regime that, in terms of formal rules, appears sound, and an open capital account—its capital market is poorly developed, shallow, and with little resilience against economic shocks.

Bond and Equity Markets

The combination of high and volatile interest rates and inflation suggests that the corporate bond market that emerged in 1996/97 will be quiet for some years. Both investors and issuers in countries that have experienced this combination prefer assets that offer an inflation hedge. While index-linked bonds are a possible option for Government issues, they are not attractive to private issuers (since they involve an unquantifiable and possibly infinite commitment) or to investors (since they are complex, technical instruments).

It is possible to develop structured finance techniques, particularly securitization of trade (especially export) and credit card receivables. Securitization allows companies with low ratings to acquire cheaper finance by pledging high-quality income streams as collateral. Such conduits already exist in Indonesia with Australian financiers. No Capital Market Supervisory Agency (Bapepam) regulations govern the conduits, so they are set up in offshore special-purpose vehicles (SPVs). Tax rulings on SPVs have been unclear and unhelpful.

Another potentially attractive development is greater reliance on equity finance. However, it will require company owners to (i) relinquish their tight control, (ii) be open to disclosure, and (iii) accept a more aggressive market. The results will benefit the capital market, which, by international standards, is small compared to gross domestic product (GDP).

A deeper equity market will stimulate existing long-term savings vehicles whose assets have been channeled into short-term assets. Equity is also an attractive finance option for smaller, growing companies, which have considerable upside but are more

of a risk than larger companies. Debt is expensive, but equity can offer a cheap source of capital and assist the nascent venture capital industry by providing a market for small-company equity and thus an exit route for venture capital investors.

Foreign investors were burned by the crisis and remain cautious. In general, they seem bullish about the longer-term prospects for the Indonesian economy, but remain fearful of the following:

- Policy drift resulting from a lack of vision necessary to guide the economy out of the crisis and to restructure the financial and banking systems.
- The lack of rules, and the possibility that the Government will not honor contracts and obligations.
- The lack of transparent and reliable information on the state of companies and the economy.

Policy Issues

Equity Market

MARKET INFRASTRUCTURE

Microstructure

The trading system is based on a standard electronic order book, but has four slightly unusual, but not unique, features.

- The ticker displaying trades to the market as soon as they are made, showing the firms' codes. (All systems show the codes to the regulators, but most do not publish them.) This has two effects:
 - Firms can easily and precisely measure their own and their competitors' market shares. Since brokerage is a network business, market share is a critical competitive point: firms with larger market shares, since they see more orders, can be assumed to be better informed about the current state of the market. Therefore, in most stock markets, firms are secretive about their market share and prone to exaggerate.
 - Observers can easily tell where the business is at any one time. As a rule, the number of orders—probably only one sizeable order—is limited in the market at any one time. Knowing

where they assist other firms to capture part of the counterparty business to that order. It will be easier to negotiate deals outside the trading system by calling directly to the firm working the order.

It is difficult to predict the outcomes of the above. The first effect probably benefits larger firms by making it explicit who has the most market share, but the second one benefits smaller firms by allowing them to spot where the order flow is and to consummate trades that otherwise might have been crossed by the firm with the order. It could go either way, but it seems that the second effect is most likely: small firms may gain sight of order flow of which they would otherwise be unaware.

- Block trades and crossings (also known as the nonregular market, as opposed to the order book, which is the regular market). All markets handle large orders differently from the way they handle normal-sized orders. Otherwise, the markets would not be able to offer institutional liquidity at acceptable prices; the order would move the market by stimulating front-running behavior. In essence, the trading system offers a private negotiation facility where the trade can be constructed without alerting other traders. It is called upstairs trading on the New York Stock Exchange (NYSE), protected trading or worked principal agreements in London, and block trading or crossing on the Jakarta Stock Exchange (JSX).

When doing a cross, brokers find a counterparty from their own client base. They negotiate block trades with each other by telephone. They agree upon a price and report the trade to the exchange (usually the Surabaya Stock Exchange [SSX], which offers marginally lower transaction charges than JSX). Crosses or blocks are not required to interact with other orders on the regular market, and their prices are not constrained by the prevailing market price.

The existence of the nonregular market raises two important issues:

– **Fairness.** Not requiring interaction is often seen as allowing large trades to “jump the queue.” If the order book shows, say, Rp1,025–Rp1,050, and a cross takes place at Rp1,075, then investors submitting offers at Rp1,050 might feel that they are at a disadvantage as they would have liked the opportunity to sell at Rp1,075. The counterargument is that a large trade commands a different price from a small trade, and as long as smaller orders are not unduly put at a disadvantage or deterred, then the price difference is the cost of being able to offer liquidity in size. The meaning of “unduly” is an empirical question beyond the scope of this paper, but warrants further study.

– **Price quality.** The regular market displays prices that form the basis of trading for smaller orders. However, the larger orders—those done outside the order book—are often the price leaders because of their size (Table 1) and the heavy representation of foreign business in the crosses and blocks.

A two-tier market may emerge where the public order book imperfectly follows the nonregular market. Arbitrage may keep the two markets in line or it may not; again, this is an empirical question deserving further study.

- The unusually large tick size (Rp25 for all stocks). Tick sizes are designed to protect time priority in the order book. In order to jump ahead of the queue, an order has to represent a significant price improvement over orders currently in the book. Based on December 1997 figures, (which were unusually low), about half the stocks were priced Rp500 or below, so a tick size of Rp25 was 5 percent or more. Even if stock prices doubled, the tick size would still be large.

The effects of a large tick size are the following:

Table 1: Trading Value and Volume in the Equity Market, December 1997

Market Type	Total Value (Rp billion)	Total Number of Trades	Average Value per Trade (Rp million)
Regular	5,365	221,958	24
Nonregular	3,947	7,873	501
Of which:			
Crosses	3,664	6,985	525
Blocks	252	649	388
Total	9,312	229,831	41

Source: Jakarta Stock Exchange.

- It increases transaction costs. The minimum bid-offer spread is one tick. A brief glance at the screens suggests that spreads are fairly wide anyway—more than one tick—although further study is needed to verify this finding.
- It raises apparent volatility.
- It artificially increases the cost of improving on order book prices and hence deters investors from doing so.

On the whole, an excessively large tick size damages liquidity. There is no optimal tick size, but markets that use it have a graduated scale related to price.

- The market's lack of preopening period when orders can be entered and viewed without being executable. The market starts on the run at 9:30 a.m. Few investors commit themselves to blind orders before the opening, so the market opens with a very thin order book. Most markets open when most liquidity investors submit orders to catch the period when there is maximum two-way business. As it is also the time when most new information hits the market, having a thick order book optimizes price discovery.

The absence of a preopening will likely increase volatility around the opening as well as deny investors a natural trading focus. In fact, the maximum concentration of trading is said to be around 4:00 p.m., when foreign brokers assess whether they can trade and beat the volume-weighted average price (VWAP) execution measure used by many US funds.¹

Since September 1997, short selling has been permitted for 39 stocks, and 24 JSX member firms

have been allowed to offer margin trading to rich investors. It is not clear how significant these innovations will be, particularly in the absence of any formal stock-lending system that will limit short selling. (Informal stock lending has emerged to deal with settlement failures in the face of severe penalties for late delivery.)

Cost and Liquidity

Cost and liquidity are important attributes of markets seeking to attract large traders such as foreign institutions. Liquidity is the extent to which large trades can be made without moving the market. The evidence is conflicting. A number of practitioners indicated that in the top 20 stocks there was considerable liquidity in the regular market and that orders of up to \$2 million could be accommodated before the crisis, albeit by making a number of trades over a period of time. Orders above that size—\$5 million was the usual figure—would go to the nonregular market. However, statistics suggest that liquidity of that size is, at best, only available in the top two or three stocks.

Table 2 presents the daily trading values for December 1997 for the top 10 most active stocks. (December total values were not out of line with those for early 1997.) It shows that for most stocks the majority of the activity took place on the nonregular market and that average daily trading on the regular market was below Rp20 billion for all but two stocks and less than Rp5 billion for 7 of the 10 stocks. Even at precrisis exchange rates, Rp5 billion was only \$2 million, so it seems unlikely that orders of \$2 million could be traded on the regular market within a day for any but the top two stocks.

Table 2: Average Daily Trading Value for Top 10 Stocks, December 1997 (Rp billion)

Stock	Regular	Nonregular	Total	Nonregular (percent of total)
Telemunikasi	38.3	53.9	92.2	58.5
Astra	15.6	28.9	44.5	65.0
Bimantara Citra	2.9	25.7	28.6	89.8
Putra Surya Multidana	23.4	3.1	26.4	11.6
HM Sam Poerna	3.9	8.1	11.9	68.1
Gudang Garam	2.5	8.8	11.3	77.8
Bank Intl Indonesia	2.1	9.1	11.2	81.2
Daya Guna Samudra	3.8	7.1	10.9	65.4
Indah Kiat	1.3	9.0	10.3	87.8
Bank Negara	2.1	8.2	10.2	80.4
Total Top 10	95.6	161.9	257.5	62.8

Source: Jakarta Stock Exchange.

The exchange transaction charge is 0.04 percent of the transaction value. It includes the cost of clearing, settling, and guaranteeing the fund. There is also a tax of 0.01 percent, and 10 percent value-added tax (VAT) on commissions. Commissions are negotiable, with a maximum of 1 percent. Rates for institutional investors have come down during the 1990s and are now averaging 0.4–0.6 percent.

However, Indonesia is a relatively high-cost market by its neighbors' standards. Table 3 shows the results of the Elkins/McSherry analysis of transaction costs for the fourth quarter of 1997. Elkins/McSherry is a New York-based performance-measurement house with a US institutional client base. Its clients submit details of every transaction; it then

collates the results and calculates market impact using a comparison of trade price and VWAP for the day, or an average of high, low, open, close when VWAP is not available.

Elkins/McSherry's results show that Indonesia has the third-highest transaction costs among comparable Asian equity markets, mainly because of its relatively high commissions, fees, and taxes, which, for US clients at least, are at the upper end of the negotiable scale. Inevitably, the Elkins/McSherry methodology is not without critics—it is flawed in a number of ways—but its results are widely disseminated and noted in the US market. As observed elsewhere, investors' perceptions of a market are at least as important as the reality.

Table 3: Global Transaction Costs, Fourth Quarter 1997 (basis points)

Equity Market	Commissions, Fees, and Taxes	Market Impact	Total Cost
Hong Kong, China	46.45	9.46	55.91
India	20.70	49.53	70.23
Indonesia	77.90	23.38	101.28
Korea	60.77	158.81	219.58
Malaysia	71.36	16.36	87.72
Philippines	104.03	6.76	110.79
Singapore	55.32	16.64	71.96
Taipei, China	52.55	21.15	73.70
Thailand	66.79	20.66	87.45
Average	61.76	35.86	97.62
NYSE	12.36	22.11	34.47
World	44.28	27.17	71.45

Source: Elkins/McSherry Co., Inc.

Primary Market

Up to mid-1997, JSX attracted new companies to listing; it more than doubled the number of listed companies from 139 to 282 since 1990. Entry requirements are reasonable, although the requirement for two years' profitability will preclude new, high-technology companies, mineral exploration companies, and projects for new infrastructure.

There remains confusion over the merit-disclosure debate. JSX clearly sees itself as having some responsibility for the merit of companies admitted and has, it claims, the right to refuse on merit grounds. In practice, it does not seek to use this power and has never done so. Few, if any, smaller companies seek listing on JSX. SSX has attempted to attract smaller companies, but so far only 11 companies have sought listing.

The strong laws on preemption rights limit companies' flexibility, particularly in the area of executive remuneration. The arguments for preemption rights are not entirely convincing, but where such rights exist they are fiercely defended by investors. Therefore, it is neither practicable nor necessarily desirable to do away with them. However, in the UK, where preemption rights are strongly supported by institutions, their restrictiveness has been eased by allowing companies to make relatively small issues without respecting preemption rights. The facility has to be approved (and the approval renewed periodically) to ensure that shareholders do not feel they have lost control. But the greater freedom given to companies has allowed them to develop executive and employee share schemes as well as to finance relatively small acquisitions. Such schemes are valuable for motivation and, over time, also lead to a widening of the shareholder base.

Derivatives

There is no organized derivatives market, but an index futures market is planned. Trading is to be on SSX using an electronic system. Settlement is to be operated along conventional lines by the central

clearer through clearing members. The main concerns relate to the risk-management systems of member firms and exchanges. There is no evidence that securities firms are sufficiently capitalized to handle increased risk of derivatives or that the exchanges' ability to monitor exposures is up to the task. In practice, the clearinghouse will be exposed only to clearing members rather than all trading firms. However, the clearinghouses themselves may not be adequately capitalized or they may be excessively exposed due to their inability to manage the firms that clear through them.

Settlement

The equity settlement system is risky in that it is not delivery versus payment (DVP), and it is expensive because of the volume of paper it uses. DVP is the international standard for settlement systems and features in the Federation Internationale des Bourses de Valuers' (FIBV's, International Federation of Stock Exchanges') Best Practice.² A new system is planned, but it is highly unlikely that it will be built in the foreseeable future.

The current system of holding shares in multiple certificates adds significantly to the costs of the system. It also increases the risk and possibility of delay for the following reasons:

- Costs are increased because of the sheer volume of paper to be moved and stored (the stacks of certificates held by custodians are estimated to have a total height of 60,000 feet); brokers transport trolley-loads of certificates to the central stock settlement operation. With an average transaction size of 25,000 shares on JSX (1997), settlement requires movement of 50 certificates on average rather than just one. Each of the certificates has to be signed and stamped by the selling broker. The most significant cost in an initial public offering (IPO) is the administration of share certificates, dwarfing the legal, accounting, and underwriting costs, which are the dominant costs in other systems.

- Risks and delays occur because of the need to sign and stamp each certificate. The likelihood of missing or otherwise not completing the necessary paperwork is great. The fact that all the certificates are for the same amount further increases the chance of error. The UK experience during privatizations, when many identical certificates were issued to the public, demonstrates the problems that a multiplicity of certificates for identical amounts can cause. The result in the UK was a significant backlog that took several months to clear and resulted in limitations on trading for some firms.
- Issues of new certificates are frequently delayed and service standards are not met. Since it is not possible to sell shares without possessing the certificate, delays in the system of cancellation and reissue can impose risks and costs on shareholders, especially in volatile markets. Short selling is effectively deterred by the penalties for failure to deliver and by the absence of a formal system for stock borrowing.

The system also carries another risk arising from having no DVP—the risk of failure, and could result in parting of investors from both stock and money. The current guarantee fund is probably not adequate for possible losses, and the implicit guarantee of the membership's collective responsibility is unlikely to ensure the system's ability to compensate for loss in a crisis.

There is an informal stock borrowing system between brokers. How it functions is not clear, but any informal system is certain to contain significant risk that the same stock will be sold twice. A more formal system exists for Indonesian stocks listed on NYSE.

The future system, which will possess a central depository, could substantially reduce risks since the synchronization of cash and stock movements (i.e., DVP) will eliminate risk of an investor being out of stock and money. However, it is subject to three serious, possibly critical, problems:

- It is unlikely that the depository will be completed soon. The most pressing problem is cash. The

depository is to be built and supplied by outside contractors—selection is going on, although with few results—for \$4.6 million. The collapse of the rupiah has substantially increased the depository's rupiah cost, and none of the shareholders is willing to stump up additional money at the moment. It is not clear that there is any plan to address the problem other than wait for the rupiah to recover. The possibilities of building a partial system (which, given the economies of scale and the high proportion of costs devoted to software, is unlikely to help much) and of handing the project to one custodian bank (which is opposed by the other 13 custodians) have been examined and rejected.

- A governance problem may jeopardize the project when finance does become available. The shareholder group seems too large for effective management and the three-person board of directors too small to adequately represent the competing interests. Depository systems must compromise between meeting all special needs of participants and remaining cost-effective. The governance issues are critical and the structure of decision making and consultation is what makes a system viable.
- There has been little, if any, consultation with users and no formal involvement of the other custodian banks despite Bapepam's claims to the contrary. Users and custodians continue to harbor doubts about the new system's security (especially reconciliation of depository holdings) and compensation in the event of loss. A delegation of worried users and custodians went to Bapepam and brought up the following:
 - The current proposals do not conform to international best practice.
 - Unless they do, users and custodians will either withdraw from the market or continue to insist on certificated holdings.
 - Major users are not convinced of the proposed system's security.

REGULATION AND ENFORCEMENT

Regulatory Position

Market players strongly feel that Bapepam is absolutely dominant in the regulatory sphere and generally very powerful within the Government. They do not sense that it is independent of Government influence; indeed, as a department of the Ministry of Finance (MOF) and funded by subvention from the national budget, it is a direct extension of Government power. This means that, however well intentioned Bapepam may be, it cannot fulfill its stated intentions: (i) setting principles and allowing market-driven self-regulatory organizations (SROs) to operate within those principles and (ii) basing its rulings on consultations with users (as legally required). Observers believe that it is trying to engineer change according to its own plan and not engaging in real consultation despite its commitment to do so.

Bapepam's influence can be seen in the lifecycle of SSX, for example. The business share of SSX has long been minimal, but the exchange has been kept alive by the following:

- a requirement (before the Capital Markets Law of 1995) that companies should list on both exchanges; and, more recently,
- permission to undercut JSX in transaction charges (which confirms that the exchanges are not free to set their charges).

Bapepam, however, has decided that SSX has no future and that it is to be abolished, even though a committee is still considering the exchange's ultimate role.

On the surface, the regulatory structure has a high level of democratic accountability. For example, JSX directors are answerable to the members of the exchange rather than to a chief executive. However, this arrangement will almost certainly promote factionalism and unhealthy competition in the exchange management. It will also strengthen Bapepam's position, since it is the only fixed point in the regulatory arena. Bapepam also sets the budgets for JSX and SSX as well as determines their profit objectives and

pricing policy. Its role in rule making is supposed to be limited to giving final approval, but many feel that it does much more and that SROs are implementers of Bapepam decisions rather than decision makers and regulators in their own right.

Surveillance and Enforcement

The legal framework for prosecution of wrongdoing is in place and successful. In 1997, for example, Bank Pikko was penalized after a Bapepam investigation found that it had attempted to manipulate the market. After the investigation, the Government issued a public statement that because JSX's inspection and surveillance procedures were inadequate, its enforcement function was transferred to Bapepam.

Both Bapepam and JSX appear to monitor price movements. However, the techniques are not very sophisticated. (JSX uses 180 parameters in its monitoring, but most have to do with whether or not a stock has adequate liquidity to justify listings; incidentally, no stocks have ever been delisted for lack of liquidity.) Surveillance of price jumps comes down to asking a company to explain jumps of 30 percent, which is an extremely large cut-off; most markets use 10 percent or less, depending on the size of stock. In most cases, the concerned companies responded that there was no reason for the jump, even when there was, as found out later.

The traders interviewed for the study believe that market abuses, including insider trading and manipulation, are more common than is compatible with a fair and efficient market. They also said that concert parties are common.³ They have little confidence that cases will be enthusiastically prosecuted by Bapepam as it is too close to the Government and would rather avoid unpalatable investigations. It is not possible to judge the accuracy of the comments, but if important market users believe them, then the system is failing, if only in a presentational sense. This point is critical: traders and investors act upon not what actually happens, but on what they think is happening. A market

that is seen as fair and open will attract long-term investment business. One that is perceived as murky will attract largely speculative trading driven not by fundamentals but by a momentum.⁴

Company Information and Disclosure

The current crisis has brought out issues relating to the quality of information and disclosure. Essentially, the foreign debt exposure of banks and corporations was not well documented in published accounts and so investors did not see the warning signs; they still maintain deep misgivings about possible new disclosures. The fact that in the first six months of the crisis the Government still did not have a clear picture about the extent of private sector debt exposed the severe weaknesses of its disclosure requirements. One estimate revealed that about two thirds of private cross-border borrowings were issued by public companies listed on JSX, pointing to the information gap in the capital market.

Indonesian standards are similar to US Generally Accepted Accounting Principles (GAAP) except in the critical area of treatment of financial assets. But the more serious problem lies in the quality of reporting rather than the standards for compilation. The accounts are generally regarded as opaque because of the lack of accounting rigor and the complex structure of Indonesian companies.

The quality of auditing staff is often not as high as it could be, and staff members are not as assertive and inquiring as they should be. It is not apparent that stiff investigative techniques will gain reward for individual staff members or for the firm. Indeed, many who were interviewed for this study suggested that exactly the opposite was the case—that auditors who come up with controversial or contentious findings are not likely to progress well in their careers. Of course, there is always a temptation for auditors to give their customers an easy ride, but this is usually offset by the possibility that they will be held liable when audits fail to spot concerns and by the need to be credible to investors

and companies. (Auditors need credibility in order to get lucrative contracts for IPOs; IPOs that use “easy” auditors command poorer prices.)

Bankruptcy Laws

While not belittling the cost of bankruptcy to those dependent upon a company for their livelihood, not terminating ailing companies has serious costs for the economy:

- The industry retains excess capacity. (Rationalization of capacity levels would benefit and strengthen other firms in the industry.)
- Healthier firms are subject to unfair competition as they are forced to contend with firms that are not servicing their debts.
- Opportunities to rationalize industrial structures into larger, stronger units are lost.
- Capital resources are tied up in failing companies rather than used productively.
- Investors have no way of even partially salvaging their investment through an organized work-out of the assets.
- Strong recovery is prevented by a hangover of insolvency, which stifles recovery potential.
- The industry environment becomes stagnant and focused on job preservation rather than job creation.

It is instructive to compare the experience of the US, where destruction of failing enterprises and creation of new ones has been the thrust of economic policy, with that of Europe, where policy has focused on preservation. Statistics show that the US has had greater success in generating new jobs to replace those lost through insolvency and, as a by-product, a more innovative industrial sector.

Until 1998, Indonesia had no bankruptcy law, so that, in practice, failed companies were able to continue to operate and creditors had no way of forcing the issue. A law was enacted in 1998 at the suggestion of the International Monetary Fund (IMF), but reports suggest that “it is still virtually impossible to force a defaulted debtor into liquida-

tion (the few creditors that have tried are still tangled in legal appeals).”⁵

Corporate Governance

Foreign investors and securities firms are highly critical of the standards of governance. The need for good corporate governance is little appreciated in Indonesia. Naturally, regulators stress its importance and strive to encourage it, but progress is glacial because of (i) complex corporate structures, (ii) tight ownership structures, (iii) no separation of principal and agent, and (iv) monopoly power and lack of incentive to improve.

Complex corporate structures

Indonesian corporate structures are extremely complex for several reasons:

- The system encourages broad conglomerates. For example, most large conglomerates include a banking arm to exploit the retail-wholesale arbitrage. At the same time, unlike in the US and, increasingly, in Europe, the capital market is not sufficiently strong to punish the excesses of conglomerate builders.
- Regulatory requirements—for example, to split production and distribution functions—force a multiplicity of subsidiaries.
- Acceptability of opacity and regulatory avoidance allows complex structures to avoid excessive scrutiny.

Tight ownership structures

Most Indonesian companies—at least outside the top handful of international stocks—are very tightly held: the founder’s family group normally holds 70 percent. A study of block holdings (holdings of 5 percent or more) showed that Indonesia has 67 percent of equity in such holdings (second only to Thailand’s 73 percent, although block holders in Thailand tend to be financial institutions rather than other corporations).⁶ The same study indicated that ownership concentration damaged both operational

performance and market valuation across East Asian corporations.

JSX listing requirements are not very demanding—a minimum of 200 shareholders—although some propose to make them more stringent. However, there seems little likelihood that this in itself will make much difference as it would not affect the dominant position of the founders. It is even possible that the need to find a wider range of shareholders (and estimates put the total number in Indonesia at only 200,000) might increase the cost of IPOs and, at the margin, deter further listings.

No separation of principal and agent

Most family businesses are run by their shareholders, but in public companies the owners and the management are usually separate. The arrangement allows managers to manage the interest of all shareholders (not just the insider group) and minimizes problems of asymmetric information. Where managers are also shareholders, there must be safeguards to prevent abuse of position and misuse of information. The lack of separation doubtless contributes to the perception that insiders exploit information and that minorities are at a disadvantage. Systems that seem to be highly democratic in giving power to owners are, in fact, not at all fair or democratic, and usually lead to poor management and lack of initiative, as the JSX management structure shows.

Monopoly power and lack of incentive to improve

While legal monopolies have been largely dismantled, partly at the instigation of IMF, their legacy remains. For example, much of the economy is still controlled by strategically positioned distribution companies that are able to exert monopoly power.

Monopoly power promotes inefficiency and opacity in companies, tolerates poor management, and ensures that profits are sufficient to satisfy investors. Since corporate success depends more on contacts than on business acumen, there is little incentive to improve the transparency of companies. The

consequence is that Indonesian companies are probably badly managed by entrenched managements, which are even further entrenched by the absence of a proper bankruptcy law.

Bond Market

PRIMARY MARKET (INVESTORS AND ISSUERS)

The bond market in Indonesia expanded rapidly in 1992–1997, when listed bonds increased their market capital by 700 percent. However, the bond market remains small and bank finance is still the dominant form of nonequity capital. Table 4 shows the value of various assets in mid-1997 before the advent of the crisis.

Table 4: Asset Values in Indonesian Financial Markets, Mid-1997

Type of Asset	Value (Rp trillion)
Bank Loans	375.8
Equity Market Capitalization	301.6
Bank Indonesia Certificates (SBIs)	7.0
Corporate Bonds (market capitalization)	15.8
Rupiah Commercial Paper	0.8
US\$ Medium-term Notes, Floating-rate Notes, etc.	7.0

Source: Pefindo.

Domestic corporate bond issues represented about 5 percent of equity capitalization and just 4 percent of bank loans. Bond issuance was relatively short-term as Appendix Table A11 indicates; most issues were for five years, although some longer-dated issues were made in 1997.

From the early 1990s until the current crisis, the Government pursued a policy of slow but steady currency decline against the dollar, supported by high interest rates. High nominal rates do not necessarily prevent the development of active bond issuance and trading. However, bond investors and issuers require stability of real yields, otherwise bonds become extremely risky instruments. Stable real yields may well be consistent with high nominal yields, but real interest rates went through a period of high volatility in the early 1990s, and more recent rates have been

held at artificially high levels for reasons of macroeconomic policy. The period of very high interest rates in the early 1990s hurt bondholders, whose portfolios were devalued. Since then, most bonds have involved floating coupon rates. The recent high rates have deterred borrowers from domestic issues.

It is also true that the shift to floating rates has removed a key attraction of bonds for both issuers and lenders. Typical bond issuers look for stability of future servicing costs; bank finance offers easier access to floating-rate finance. Typical bondholders look for stable future cash flows to meet stable commitments; deposits offer a more convenient investment at floating rates (so floating-rate bonds need to offer a premium to compensate investors for loss of liquidity).

If domestic bonds become less attractive, then companies will look elsewhere for debt finance. Indonesian companies looked to the commercial paper (CP) market until 1995, and after that increasingly to overseas sources of debt finance. CP grew rapidly in the early 1990s as it offered a substitute for bonds. Since CP programs can be rolled over almost automatically, they are economically the same as floating-rate bonds, but involve less cost and effort. The market received a further boost in September 1994, when Bapepam introduced a requirement that bonds (i.e., not CP) could be listed only for rated companies, although it did not specify a minimum rating. But just over a year later, a similar requirement for CP introduced by the Bank of Indonesia (BI) effectively stifled the market.

Indonesian blue-chip companies also started to tap international bond markets beginning in 1994. Rates were lower than in the domestic market and costs of issue were substantially less. International investors priced the debt on the assumption that the steady but controlled devaluation of the rupiah would continue in the long term. In hindsight, it may be that international investors systematically mispriced the risk of Indonesian companies, but in 1994–1997, some 400 Indonesian companies were able to issue dollar-denominated debt as floating-rate notes (FRNs) or medium-term notes (MTNs).

Current interest rates are at unprecedented high levels as the Government attempts to shore up the currency and contain money-supply growth through open-market issues of SBIs. High precrisis interest rates were meant to give medium-term support to the rupiah against the dollar, but the reliance on foreign borrowing they engendered was a cause of the crisis.

Artificially high interest rates have stifled the development of the capital market, as it is easier to invest in Government paper or in deposits of institutions that have invested in Government paper. Practically all investments by domestic institutional investors are in bank deposits or SBIs. Generally, only foreign institutions have made significant investments in the equity market. Other equity-market players are speculative traders or those who have special access to information, who reckon they can beat deposit yields in the equity market.

Corporate bonds are attractive to institutions with long-term but predictable commitments, such as life insurance companies and pension funds. Mutual funds, as well as banks, have also been active buyers. Since mutual funds are relatively small, so is their demand for corporate bonds. The size of the market is further limited by the tendency of the natural buyers of bonds to concentrate their assets in bank deposits. Table 5 shows the portfolio of two classes of institutional investors.

Foreign investors' participation in the rupiah bond market represented 10–20 percent of new bond issuance, but was mainly limited to the most liquid bonds with good credit standing such as those issued

by the State-owned electricity company PLN, Citra Marga Nusaphala Persada, and State-owned Bank Tambungan Negara.

Investors choose bank deposits as their main investment vehicle because there are few superior investment options open to them. Bonds are in floating-rate form and so are unattractive to investors, and are in short supply anyway. State-owned companies are the large issuers, representing about 50 percent of current issued bonds. Industrial companies have become more important than infrastructure companies.

Since 1994, all listed bonds have been required to have a rating. BI permits banks to invest only in investment-grade paper. The rule does not affect fund managers but, in practice, guides institutional investors. Given the difficulty of evaluating sub-investment-grade bonds, even when skilled analysts possess sufficient information, the rule is a prudent one from which institutions should not be encouraged to stray at this time. Few Indonesian companies can meet the requirement, however, and they are precisely the companies that were able to tap international markets, thus limiting the number of issuers who could and would issue bonds in the domestic market.

Banks have been excessively willing to lend to corporations at rates that probably did not accurately capture the risk or their own cost of capital. Furthermore, the loans have not been backed by adequate and reliable information about the borrowers.

Until the crisis, demand in the primary market outstripped supply. The relatively fast growth of

Table 5: Institutional Portfolio, 1996 (Rp trillion)

Investor	Type of Investment			Total ^a
	Bonds	Equity	Deposits	
Pension Funds	1.2	1.2	6.6	12.2
Insurance Companies	1.0	1.0	9.9	20.0
Total	2.2	2.2	16.5	32.2
Share in Total Portfolio (%)	6.8	6.8	51.2	100.0

^a Includes property investments.
Source: Pefindo.

mutual funds and demand from foreign investors put pressure on the limited supply, stunting the domestic bond market.

It is worth noting that while many economies aspire for deep and liquid corporate bond markets, such markets are, in fact, rather rare. In most countries, the top few blue-chip companies have access to international capital markets and high debt ratings; thus, they can and do borrow extensively in a range of currencies. Most companies, however, do not have access to bond markets and are largely reliant on banks for debt finance. The main exceptions are US companies, the smaller of which have access to debt markets—even low-rated credits or the so-called junk-bond market. The reasons for the success of the US corporate bond market are the following:⁷

- Interest on corporate debt is deductible from corporation tax but dividends are not. Companies therefore tend to issue bonds, which are, in fact, close to equity but have the tax-break advantage.
- The US is a large, single-currency area with a relatively stable currency and inflation rate. Since risk is low, lenders and borrowers are willing to contract for the long term. Bond investors are also less able to make money speculating on national interest rates, so they have to “move down the credit curve,” something that European banks are considering now that the multiple European Government bond markets are drying up due to the single European currency.
- US funds, particularly life funds, have developed the skills to analyze lower-quality debt—that is, to assess the risk of default and also to “work out” defaulted debt to maximize what can be salvaged. They are helped by the public availability of high-quality information and by clear rules on seniority of debt, bankruptcy, and so on.

Many of these points can be identified in the policy recommendations discussed below. But it remains true that other countries with high standards of corporate reporting and clear bankruptcy laws do not have large corporate debt markets.

Yet, even if there were no crisis and even if all the recommendations were implemented, the emergence of a large corporate debt market in Indonesia would by no means be assured or, at best, would be the result of a long process.

MARKET INFRASTRUCTURE

Issue Process

The method of issue is similar to a book-building process, with likely investors sounded out by the lead underwriter. However, the pricing process is hindered by lack of useable, risk-free benchmarks for longer bonds—something provided by risk-free Government bonds in most markets.

The process of issuing a public bond is slow and expensive. Registration and listing of requirements generally take several months. Bapepam is involved twice, each time taking several weeks. There is no facility for shelf registration (i.e., gaining approval for a total bond issuance program that may then be issued as a tap by the company at rates and in currencies to suit current market conditions).

Besides reducing their interest costs by using the CP market and later the international market, Indonesian companies also avoided the high costs and long time scales associated with domestic bond issues. One estimate put the average cost of domestic bond issues at 259 basis points (bp). Another estimate put the cost at 5 percent of the issues' proceeds (including 4 percent underwriting fee) plus 2.5 percent annual cost. Whatever the precise figure, it was very high. (Initial and annual costs in other markets are a few basis points, certainly far less than 1 percent of money raised by the issue.)

Given the costs plus the heavy commitment of management time and protracted timetable, companies will seek bond finance only if it offers features that are absolutely unattainable through other debt instruments. By comparison, bank loans were cheaper (although still expensive) at 200 bp, but CP was about 8 bp. Overseas issues probably averaged about 100 bp—not as cheap as CP, but BI's regula-

tory actions largely closed the CP market beginning in 1995.

The Trading System

The World Bank noted in 1995 that Asian bond markets were highly illiquid and that Indonesia was no exception. Trading volume in Indonesia's secondary market was estimated at below 10 percent of total bond volume outstanding. A large part of the trading was conducted over the counter (OTC) in an informal market, and no information on liquidity is available for that segment. However, all evidence suggests that there was and continues to be limited liquidity even in the OTC market.

Since 1997, SSX has introduced a series of measures to promote the development of the bond market. An interdealer market (similar to the Bond Dealers Club in Bangkok) was formed to organize wholesale trades among market makers. There are 15 such market makers trading directly with other wholesale traders and offering markets for retail clients trading through brokers.

Both stock exchanges are licensed to list and trade bonds. SSX has become the de facto main market for debt instruments. About 95 percent of bonds were listed on SSX by end-1997. To issue debt instruments through SSX, issuers must fulfill the following requirements:

- The financial statement must be audited by a public accountant for the last three years with "unqualified opinion without exception" for the latest book year.
- The registration statement should be effective.
- The issuer should be a legal entity and recruit willing market makers.
- It should obtain a rating from a rating agency licensed by Bapepam.

Most secondary market transactions are OTC between bond dealers. There is no official record of OTC transactions, so SSX has been developing and implementing an over-the-counter fixed-income service (OTC-FIS) system since June 1997. Participa-

tion in OTC-FIS is open to dealers and market makers of fixed-income securities.

OTC-FIS, which is not yet functioning fully, is intended to facilitate and promote bond trading by introducing standard trading rules and transparency of prices by reporting trades and quotes. It is difficult to judge whether the measures have improved liquidity, since it all but dried up during the crisis.

Clearing and Settlement

Bond trading is mainly OTC, and settlement arrangements are similarly decentralized, i.e., interoffice between transacting parties. As most bonds are issued in bearer form, most investors, to avoid risky and costly physical delivery, maintain custodian accounts. Custody services are now offered by about a dozen large banks, including foreign ones. Almost all large, domestic institutional investors have their own custodian bank; foreign investors use a foreign bank as their custodian. Besides the large custodian banks, some smaller banks and brokerage houses offer custody services for their individual clients on an ad hoc basis. Payment includes accrued interest, and settlement is normally T+4 (fourth business day after the trade).

Where sellers and buyers use the same custodian bank, the process is simple, secure, and fast. But this is relatively rare, and most transactions involve movement of bearer certificates between custodians and corresponding movements of funds. The movements are not synchronized—not DVP—so there are default risks involved as well as the normal security risks of moving bearer documents.

The PT Kustodian Depositori Efek Indonesia (KDEI), the country's depository and clearing agency, was set up in 1993 to offer settlement for shares. An extension to offer immobilization of bonds was originally planned for 1997. The reorganization of KDEI into two new organizations—Kustodian Sentral Efek Indonesia (KSEI, depository) and Kliring Perjamin Efek Indonesia (KPEI, clearing and guarantees)—under the Capital Markets Law

interrupted this plan. The implementation of central settlement and depository systems has been delayed by lack of funds. A number of market users were not satisfied with the design and have indicated that they will not use the new system if it is implemented, preferring to stay with certificates lodged with foreign custodians.

Benchmark Rates

While the market has short-term benchmark rates from the SBI market and also had long-term benchmark rates for dollar issues based on the Government-issued Yankee, there is no long-term benchmark rate for pricing. Various proxies have been used:

- the rate on three- to six-month deposits plus a premium (1–4 percent was typical), which does not really help longer-term asset pricing; and
- the rate on rupiah swaps, which can be manipulated to give a yield curve up to 30 years, and has been applied with some success.

They are not perfect substitutes for a Government-bond-based yield curve, but the Government has a balanced-budget policy and does not issue long-dated bonds. Discussions about converting some SBIs to longer-term debt (although in the current situation it may look like rescheduling) or issuing rupiah debt by international agencies have yielded no results so far.

Credit-rating Agency

Indonesia's local credit-rating agency, Pefindo, was set up in 1994 by MOF and BI. Its international partner is Standard and Poor's (S&P). Another agency, Kasnik Duff and Phelps, was licensed in 1997, but is still preparing for operation. Pefindo has rated some 180 companies involving 249 debt securities (all types including CP) amounting to Rp28.2 trillion. The requirements for rating of listed bonds and CP have encouraged issuers to seek ratings, as has a growing acceptance among Indonesian issuers of the utility of a rating.

Pefindo works with S&P to ensure consistency—and so gain international credibility—while at the same time providing more meaningful credit-risk distinction among high- and medium-grade Indonesian issuers. Its ratings have generally been more conservative than those of other Southeast Asian local rating agencies. Pefindo revised its ratings during the crisis, especially for the property and financial sectors. The results are shown in Table 6, illustrating the small number of high-quality credits available in Indonesia.

REGULATION AND ENFORCEMENT

Regulatory Framework

Under the Capital Markets Law, the bond market is regulated by Bapepam, which is responsible for policy guidelines, licensing of participants,⁸ regula-

Table 6: Distribution of Pefindo's Public Ratings Before and During the Crisis (percent and number of debt securities rated)

Category	Precrisis	During Crisis		
	June 1997 (%)	October 1997 (%)	March 1998 (number)	March 1998 (%)
AAA	1	0	0	0
AA	7	7	2	1
A	25	25	47	19
BBB	48	59	80	32
BB	20	9	65	26
B	0	0	25	10
CCC	0	0	15	6
D	0	0	15	6
Total	100	100	249	100

Source: Pefindo.

tions, and day-to-day supervision of the capital market. BI is also involved, since it regulates banks that are major players in the bond market. JSX and SSX are self-regulatory and have a broad range of powers, including supervising trading and requiring listed companies to disclose financial and other information.

The asset boundaries between Bapepam and BI are supposedly clear. Under the Capital Markets Law, Bapepam regulates debt securities with maturity of more than one year, while the central bank supervises the money market and banks. In practice, rupiah bonds are defined as having a maturity of three years or more and are supervised by Bapepam, while short-term paper (less than one year) is regulated by BI. Therefore, a number of asset types with maturities of one to three years, including MTNs, particularly offshore MTNs, fall between the two regulators. Since the rating requirement does not apply to MTNs, many Indonesian companies have issued them, often with structures that made them identical to short-term CP.

The growing openness of the financial market has encouraged innovation in financial products. The regulatory system has not always been flexible enough to keep up with developments. Asset-backed securities (ABS) have increasingly gained popularity among financial institutions seeking to clean up their balance sheets as well as to circumvent the regulatory hurdles of capital adequacy and lending limits. But ABS encountered daunting regulatory, legal, and tax problems because Indonesia lacked a regulatory structure to handle them. Consequently, all asset-backed securitization is done offshore.⁹ Regulatory authorities are working to cover the gaps. New but untested measures are now in place to facilitate domestic ABS issues, and disclosure requirements for MTNs have been strengthened.

Indonesia's legal and regulatory infrastructure has a number of weaknesses that impede the development of debt markets, including (i) the absence of an effective bankruptcy law and (ii) a lack of clear precedents of commercial-dispute resolution and legal

enforcement of contracts. The weaknesses especially affect the development of structured-debt products, which are, by nature, complex, and they make bonds from lower-quality credits less acceptable. Much of the success or otherwise of an investor hinges on being clear about what can be salvaged in the event of a default.

Minimum Issue Standards

Since 1994, Bapepam has required that all listed bonds should be rated, although it does not stipulate the minimum acceptable rating. However, since 1995, BI has ruled that banks can only (i) be involved in CP programs where the CP carries an investment-grade rating (prior to that, CP was not rated) and (ii) invest in or guarantee investment-grade bonds. Institutional investors as well as banks follow the ruling.

Since the ruling was issued, the CP market has died and, until the crisis, issuers replaced CP with offshore FRNs and MTNs. Only investment-grade bonds have been acceptable and traded in the market. Indonesia has few investment-grade entities.

Corporate Disclosure

Bond investors are highly dependent upon corporate disclosure, even more so than equity investors, because they do not have the upside of equity investors: the best that can happen to a bond investor is that the promised payments are met and that inflation has not eroded their value. It is necessary to know what the likelihood is that an issuer will default and what will happen then, as a risky bond portfolio's success depends largely on being able to maximize recovery in the event of a default. Clearly, the laws on bankruptcy are critical in a recovery situation, but quality corporate information is vital throughout the process.

Investors in top-quality credits tend to rely on rating agencies and it is therefore crucial that the agencies be reputable and have access to reliable information. For smaller companies, ratings are not available or less likely to be relied upon, partly because the situation of smaller companies is less clear from

published information. (Smaller companies are more vulnerable to economic downturn and published results rarely show this even in fully developed economies.) Another reason is that a normal institutional holding in smaller companies is likely to represent a significant proportion of the total issue, so the investor has a less diversified exposure. Investors in smaller-company bonds will therefore do their own extensive due-diligence examination of the issuer.

A due-diligence examination requires skill that is rare among investors; in fact, such skill exists to any extent only in the US, where the active junk-bond market has spurred the development of credit analysis techniques. US investors are skeptical of levels of corporate disclosure that do not come up to US standards, and tend to avoid situations where they see disclosure as limited or defective. Indonesian institutional investors almost certainly do not possess the skills for analyzing risky bonds and would therefore be wise to avoid the instruments in the meantime. In the short to medium term, therefore, the bond market will grow only if the level of disclosure satisfies specialized US investors.

The quality of disclosure has been mentioned above and the same comments apply here. While Indonesian accounting standards are similar to US GAAP, except for the critical treatment of valuation of financial assets and liabilities, both the quality of disclosure that goes into accounts and the rigor applied by auditors are questionable. The domestic debt market has also been harmed by investor concerns over the quality of disclosures and market information. In the Yankee market in 1996, for example, an Indonesian entity with a BB rating from S&P or Moody was charged a 200–400 bp premium over T-bill, compared to about 130–200 bp premium for US entities with similar credit rating.¹⁰

The Government has issued new decrees to improve disclosure requirements. Privately held, unlisted companies with assets of Rp50 billion or more are now required to submit and publish their audited reports. Bapepam and the securities exchanges have

issued new guidelines on disclosures, particularly on cross-border borrowing and off-balance-sheet and intragroup transactions. Statistics on cross-border borrowings are now compiled and monitored regularly. However, compliance and enforcement may continue to be weak—a serious concern, as it was not a shortage of regulations that allowed minimal disclosure but a shortage of commitment to enforce them.

Participants

SECURITIES FIRMS

Stock exchange member firms' capital requirements are woefully inadequate and make no allowance for the level of risk. The minimum working capital requirement is Rp200 million, and all firms exceed it (Table 7).

Table 7: Net Working Capital, Mid-1997

Net Working Capital (Rp billion)	Number of Firms
0–1	61
1–5	35
5–10	43
10–20	32
20–50	13
50–100	6
100–200	1
Over 200	1
Inactive	5
Total	197

Source: Jakarta Stock Exchange.

However, nearly one third of all firms had working capital of less than Rp1 billion. It is unlikely that their position has improved since then—in 1996, a good year, 42 firms incurred losses; 1997 was catastrophic—and Rp1 billion is now less than \$100,000. But since there is no monitoring of capital compared to risk borne, little more can be said, which is cause for concern. Since many firms do not have compliance functions, there is little chance that best practice is being followed in any but the largest firms. (A local firm that was visited during the study seemed to have no record keeping or time stamping of customer orders. A number of customers were hanging

around the office and directing the brokers in trading, which seemed a recipe for front-running of orders and for mistakes in execution.) The fact that 28 firms were disciplined for late or incorrect working capital returns in the first nine months of 1997 confirms that the level of monitoring is inadequate to deal with serious risk exposures.

PENSION FUNDS

While Indonesia has a legal and fiscal framework for funded pension schemes and has developed a wide range of scheme types, penetration is shallow and asset allocation is distorted. Like other countries in the region, Indonesia has a young population, but projections suggest a significant increase in the dependency ratio by 2025. The actuarial solvency of funds is also questionable.

The total number of workers covered by schemes was about 16 million at end-1996, which means that most of the labor force of 80 million does not have formal pension provision. Workers may have alternative schemes linked to family structures, but there is a serious risk that these will not fully materialize. The loosening of family ties as migration and development continue, combined with the increased dependency ratio, will strain informal arrangements. A pension crisis may occur if more workers are not brought into formal schemes.

Asset allocation is almost exclusively in fixed-interest assets, except in private sector schemes, which do have significant equity and property assets, including a significant holding of unlisted equities, although it is not clear whether or not these are in the parent company. This makes it difficult to assess the viability of the schemes since most assets are short-term. It also leaves the schemes ill prepared for more volatile times. Before the crisis, some observers were already concerned that many schemes were not technically solvent; their concerns must have since strengthened. Inflation projections for Indonesia, if realized, will devastate the funds, which have invested mainly in fixed-interest assets, where real returns will fall sharply.

The distortion of allocations, while encouraged by investment limitations on Jamsostek (a State pension scheme), is largely a consequence of distortions in the economy, which have kept interest rates high. In addition to economic distortions, uncertain policy direction has deterred issue of longer-dated assets.

Indonesia has a low dependency ratio, but experience elsewhere shows that increasing prosperity is associated with a declining birth rate and, consequently, an aging of the population. Projections show that the proportion of population over age 65 to the total Indonesian population will rise to 10 percent by 2025 (Figure 1)—not a large number, but still a rise of 230 percent over the 1990 level. (It is also worth noting that Jamsostek retirement age is 55.)

Figure 1: Population Over Age 65



Besides providing for old age, pension funds also play an important role in mobilizing national savings, providing a conduit into the capital market. The capital market would benefit from the stabilizing influence of substantial domestic investors, and in most developed economies pension funds have provided that stability.

LIFE INSURANCE COMPANIES

Like pension funds, insurance companies' funds have been growing rapidly and are largely invested in short-term deposits. The mismatch of assets and liabilities presents a future problem. Funds are forced into short-term deposits because of a lack of suitable long-term assets (life insurance companies elsewhere are active bond investors) and the rates paid on deposits

are too attractive to make it worth looking further. The solvency problems of some companies resulting from excessive exposure to failing banks is the other side of the same coin.

MUTUAL FUNDS

Mutual funds were established under the Capital Markets Law. By mid-1997, 60 funds had an estimated total capitalization of Rp4.9 trillion. The funds are tax-exempt and, consequently, have attracted investments from banks. In fact, over 60 percent of mutual-fund capitalization was held by banks. At the same time, mutual funds held most of their assets in deposit instruments (60 percent), and very little in equity (15 percent), the balance being in money market instruments. Naturally, the current crisis has devastated their portfolios.

VENTURE CAPITAL

The level of venture capital development is low. Indonesia will need to develop new, smaller, possibly high-technology companies. The Bapepam licensing requirement for venture capital, which is essentially a vehicle for sophisticated investors, might limit growth. But given the large number of venture capital companies, this does not seem to be the case. However, the venture capital industry does not support growing companies, partly because the venture capital companies themselves lack the expertise to assess companies: relationships tend to be based on trust and influence rather than business assessment. But the more important reason seems to be the general reluctance of Indonesian companies to go public, for which there are several reasons (in addition to availability of bank finance):

- Non-enforcement of intellectual property rights frightens new companies from exposing their products. Laws exist but are not enforced.
- Distribution companies dominate their industries and tend to keep companies confined to local markets.
- Companies are generally averse to disclosure.

Policy Recommendations

Equity Market

MARKET INFRASTRUCTURE

Microstructure

There are no “right” answers to market microstructure questions. Each decision involves a trade-off between different outturns guided by the conditions, situation, and circumstances of the particular market. Choosing the best answer requires detailed analysis through empirical studies of the effects of policy differences and changes. Without such analysis it is impossible to judge the correctness or otherwise of microstructure policies. Also, without quantitative analysis, the suspicion persists that microstructure features are there to benefit intermediaries rather than market users, even where this is not the case.

The above analysis highlights a number of special features of the JSX market that warrant further empirical study either by JSX itself or by commissioned outsiders: (i) tick sizes, (ii) lack of a preopening, (iii) lack of integration of block and normal markets, and (iv) public disclosure of dealing parties.

Cost and Liquidity

The Indonesian market is illiquid and costly to trade. International investors have a choice and, other things being equal, will pick the markets where they can trade most cheaply. The problem seems to be high commissions charged to foreign investors, since taxes and charges are not excessive. JSX should monitor commission levels and publish results as part of a policy to reduce transaction costs.

Primary Market

Rather than focus on the minimum distribution for IPOs—which is unlikely to increase liquidity or dispersion of holdings—JSX should examine the requirement for profitability. Relaxation of the rule for the whole list or creation of a separate market segment would open the market to a range of start-up companies of all sizes.

JSX should also do the following:

- Examine the restrictive effect of strict preemption rights with a view to introducing modest flexibility, allowing companies to offer shares to executives and employees.
- Reappraise the market for smaller companies. It is clear that the SSX version is not making much progress; some say JSX would be the more logical and effective place to locate such a market.
- Resolve the confusion over merit. JSX and Bapepam should clearly state that companies will not be excluded on merit grounds, and strictly adhere to this policy.

Derivatives

A derivatives market would seem an extremely risky venture given the following: (i) the shaky state of many Indonesian securities firms, (ii) the absence of proper, risk-based monitoring, and (iii) high volatility in the near future. It may also have adverse effects on the cash market, which remains thin; the index is heavily dominated by two companies (Indosat and Telkom), which make up 25 percent of the index. Foreign speculators will use the index as an easy way to manage their Indonesian exposure, and while the arbitrage between the cash and future markets will bring in some extra business, the overall effect may be to reduce liquidity in the stock market.

The arbitrary decision of Bapepam to allocate derivatives to SSX is questionable. It is based on convenience rather than any business analysis of SSX's capabilities. The following should be considered:

- The derivatives market should not commence until capital adequacy monitoring is up to acceptable, international standards.
- The possible impact on the cash market should be assessed before launching the derivative contract.

Settlement

It is imperative that the system move toward full DVP without delay. Regulators should do the following:

- Restructure governance of depository for proper involvement of users, especially custodians. With the commitment of the main users, the budget issue, where the amounts involved are not huge, could be resolved. But at the moment, users and custodians do not have sufficient trust in the system to commit new capital.
- Reopen consultations with custodians to ensure that the planned depository system conforms, at least, to FIBV best practice. The financing could usefully be revisited as part of this progress. The sums involved are not such as would frighten major players if they were convinced of the structure's reliability.
- Reexamine settlement guarantees. Current guarantees are insufficiently strong to be reassuring, relying as they do on implicit guarantees by organizations or firms that patently do not have the funds to support such guarantees.

REGULATION AND ENFORCEMENT

Regulatory Position

Below are the recommended measures:

- Increase Bapepam's independence from MOF by making it an independent body reporting to MOF but funded by the industry it regulates. Bapepam's internal structure, where all authority rests in the chief executive (reporting to the minister), is unsatisfactory. A board of commissioners or a similar body could bring an element of independent scrutiny into its operations and policies. Naturally, the board should include independent members.
- Remove Bapepam's involvement in the day-to-day management of the exchanges, particularly in budgeting.
- Restructure JSX management to have a proper chief executive officer (CEO) function and a proper board including representatives of issuers and investors to give it greater credibility and strength.

Surveillance and Enforcement

Recommended measures are the following:

- Demonstrate the separation of Bapepam from political and other influences by separating it from MOF.
- Reestablish the policing role of SROs by ensuring adequate resources and independence of operation.

Company Information and Disclosure

The following measures are recommended:

- Tighten accounting standards for mark-to-market financial assets. Insist on consolidated accounts for groups and clearer statement of group accounting policies and close dates.
- Improve training of auditors.
- Encourage stock exchanges and give auditors incentives to be hard on companies suspected of failing to provide information. Exchanges often avoid acting against companies because their sanctions—such as suspension of listing—are likely to hurt investors. However, the number of examples required—especially given the current circumstances where companies are less able to raise funds—would probably be small, so the overall gains to investors would be strongly positive. It is difficult to see what the role of the exchange actually is if it has no disciplinary policy.

In practice, these measures are difficult to mandate. However, the likelihood is that investors, having been burned by nondisclosure, will be more cautious in the future. They are likely to insist on audits by reputable firms underwritten by commitments from those firms to stand by their work. They will heavily discount the stocks of companies where opaque structures seem to be obscuring the view or where international standards are not followed.

Bankruptcy Laws

The Government should investigate loopholes in the new bankruptcy law. It is probable that defaulters do not yet believe the law is real. The regulators

should make it clear that there is no going back to the old system and that they are siding with creditors rather than managements of failed enterprises.

Corporate Governance

Improvements in corporate governance are unlikely to come about as a result solely of regulatory actions. They will occur as a result of investor pressure (both explicit and through the market) on companies that fail to meet accepted standards. The current crisis will make investors, especially foreign investors, less likely to take things on trust, and so will intensify pressure for more transparency. Enhancing transparency by exposing weaknesses will create pressure for better governance. But while regulators cannot mandate good governance, they can be part of the standard setting by writing codes and by example.

JSX should introduce a code of governance. There are several such codes around the world and they usually cover issues such as separation of functions, remuneration decisions, and appointment of independent, nonexecutive directors. Finding suitable nonexecutive directors is difficult in all countries, especially at first, when there is no ready pool of people with the necessary experience. It would be difficult in Indonesia as elsewhere in the region since there are relatively few suitable appointees; the demand for their services, however, would create a supply. A model code should not be mandatory—as it could unreasonably burden smaller companies—but companies should be required to state the extent of their compliance. Investors, especially foreign investors, would favor companies that aim for better governance practices.

Privatization is an effective way of deepening markets and setting standards. If the Government intends to privatize significant State companies—which it should—then it can take the opportunity to set and adhere to good governance practices. State-owned companies, to the extent that they are not privatized, should similarly follow the code of best governance practice. The privatization program should, as already described, aim for best governance

practice in the privatized entities and enshrine it in their internal procedures and articles.

Bond Market

PRIMARY MARKET (INVESTORS AND ISSUERS)

The bond market is small because demand for bonds is limited and supply is short. Recently, demand has been rising, although it remains small. When Indonesia recovers from the current crisis, and if the management of monetary policy and the banking sector is reformed, then demand for bonds could increase. Institutions that are the natural buyers of bonds are developing and have shown an appetite for fixed-income assets, as have foreign investors, although their memories of the crisis may be long.

However, both demand and supply may remain limited unless bonds are able to offer issuers and investors what they want: stability of real-cash flows. This requires macroeconomic stability, a restructured economy and financial system, and a style of macroeconomic management that allows interest rates to be market-driven rather than administered. Longer-term rates should reflect the supply and demand for funds at relevant risk premiums. Otherwise, the banking system will retain its dominance over industrial finance, long-term savings institutions will continue to atrophy, and the capital market will remain shallow with little resilience against shocks.

Bond supply may remain limited because of the following:

- The number of high-quality credits is likely to remain small, and the companies are more likely to have access to international markets.
- Lower-quality credits (i.e., smaller companies) can borrow only if lenders receive adequate, trustworthy information before and during the life of the bond.

It is essential that there be clear rules for winding up in the event of default. Otherwise, banks will likely remain in a dominant position because of their monopoly of quality information and the security which their grip on cash flows gives them.

The Government can act directly to improve the supply of high-quality credits through privatization and infrastructure development projects, which should be pursued vigorously as soon as capital market conditions allow. It can also set an example to demonstrate that companies that offer investors high-quality information will gain access to cheaper, better finance.

Innovative financing techniques should be encouraged by the Asian Development Bank's initiative to develop a secondary mortgage facility and should be pursued as a way of developing ABS. More study of the costs and implications of the rules governing ABS could reduce costs and open the conduit market to more companies.¹¹

Issue Process

Below are the recommended measures:

- Examine ways to limit time taken for bond issues. The process of getting regulatory approval is too long and complex. Bonds are mainly attractive to professional investors, and so a light regulatory touch is more appropriate. If it is not possible to simplify the approval procedure, then, at least, examine some form of "shelf registration" to allow companies to scale the regulatory hurdles once and then issue the bonds when market opportunities arise.¹²
- Examine whether or not there are anticompetitive practices and encourage active competition in the market. Costs, particularly underwriting costs, are high. Companies tend not to query underwriting costs—or other issue costs for that matter—and it is not unknown for informal cartel arrangements to keep issue costs excessively high in relation to the risks and work undertaken.

The Trading System

Liquid corporate bond markets are rare. For all but the most highly rated issues, investors tend to buy and hold.¹³ However, reasonable liquidity, where it exists, tends to be supported by two features:

- A liquid Government bond market. Most primary dealers trade the full range of high-quality debt instruments. The skills and systems required can be supported only if there are major, liquid assets to be traded, and these are usually Government bonds. The Government bond market is small and almost entirely made up of the very short SBIs. The Government borrowed in the Yankee market in 1996/97, but maintains a strictly balanced budget so longer-term Government bonds have not been issued. This is not the place to comment on the balanced-budget policy, but in terms of intergenerational accounting, it may be inappropriate for a country like Indonesia.¹⁴ A budget deficit would certainly improve the secondary bond market.
- Market makers provide liquidity by going long or short of bonds in order to meet the needs of the market. To be effective, they need access to borrowable funds and stocks. An interdealer market helps by giving dealers a place to lay off positions, but for relatively illiquid stocks the interdealer market merely transfers an imbalance rather than resolves it. A system of stock borrowing and money market borrowing would meet this need. Typically, such a system grows up supported by an active Government bond market, an active money market, and clear legal structures covering ownership and resolution of failures.

Clearing and Settlement

The current system is risky and expensive. It is a drag upon the development of the market. A centralized system should therefore be implemented as speedily as possible. The Government should do the following, which are similar to the equity-settlement recommendations:

- Restructure governance of depository for proper involvement of users, especially custodians.
- Reopen consultations with custodians to ensure that the planned depository system conforms to FIBV best practice. The financing could usefully be revisited as part of the process.

Benchmark Rates

The Government might reconsider its balanced-budget policy once the current crisis has passed and a more democratically accountable government is in place after the elections. In addition, it might consider switching its international infrastructure borrowing (which will be difficult anyway) to rupiah debt issued in the domestic market.

Credit-rating Agency

Pefindo appears to have been prudent in its ratings. Foreign investors tend to be suspicious of non-US agencies, but the link with S&P adds credibility, and results show that Pefindo was, in fact, more conservative than S&P would have been. It remains to be seen how competition will affect the situation, but the international reputations of the partners, plus the skill and integrity of Pefindo, should prevent any pressure from issuers to lower standards. There seems little need for policy changes, although it is worth examining, in credit rating or elsewhere, whether or not it is necessary to have a licensing requirement for commercial, competitive organizations.

REGULATION AND ENFORCEMENT

Regulatory Framework

The overcentralization of power in Bapepam and the agency's lack of independence prevent proper development of SROs. However, SROs are closer to the market and have a better concept of new developments. The consequence of the system is that too many details are decided by the central regulators. At the same time, gaps allow regulations to be circumvented and regulation tends to obstruct rather than facilitate beneficial innovation.

The following are recommended:

- Set up a more flexible structure allowing more power to be devolved to SROs, with less formal division of responsibility. For example, it is almost impossible in a developing financial market to have watertight boundaries between the cen-

tral bank and the capital market regulator. One possibility is to merge the supervisory function of the central bank with capital market supervision; failing that, continuous communication and consultation between the bank and the regulator is a minimum requirement.

- Investigate loopholes in the new bankruptcy law. Defaulters probably do not yet believe the law is real. As recommended earlier for the equity market, the regulators should make it clear that there is no going back to the old system and that they are siding with creditors rather than managements of failed enterprises.

Minimum Issue Standards

The regulation allowing banks to invest only in investment-grade bonds and CP was introduced clearly because of BI concerns about banks' investment portfolios and may have been sound from that viewpoint. However, its effect was probably to force some borrowing offshore and exclude smaller companies from the bond market. This is not beneficial from a capital market viewpoint. Two measures are suggested:

- Reexamine the BI regulation, particularly whether or not there are alternative methods of risk management that will not exclude whole asset classes. After all, it is reasonable for a bank or institution to hold some risky assets. The regulation probably had a perverse effect of making bank portfolios more risky since subinvestment-grade companies would have been forced to borrow from the banks. The banks, however, would not have been able to divest part of the risk by holding only a part of the borrowing (as they would had the borrowing been through tradable bonds).
- Be aware of any unintended impact of regulations beyond their immediate targets as overlaps between regulatory responsibilities are increasingly common. Bapepam and BI should always coordinate their initiatives.

Corporate Disclosure

Recommended measures are the following:

- Tighten accounting standards for mark-to-market financial assets. Insist on consolidated accounts for groups and clearer statement of group accounting policies and close dates.
- Improve training of auditors.
- Encourage investors and regulators to hold auditors responsible for disclosure failures. Most Indonesian companies are audited by international firms since they rely on the latter's reputation for rigor and probity that they would not want to impair. If the accounting firms were held accountable for disclosure failures then the threat to their reputations would force them to apply more rigor to Indonesian companies.
- Encourage stock exchanges and give them incentives to be hard on companies suspected of failing to provide information.
- Encourage the rating agency, which is constrained by poor reporting, to highlight these concerns publicly. If nothing else, its own reputation would be further strengthened by a public stand against poor disclosure.

In the aftermath of the financial crisis, the Government issued new decrees to improve disclosure requirements. Privately held, unlisted companies with assets of Rp50 billion or more are now required to submit and publish their audited reports. Bapepam and the securities exchanges have issued new guidelines on disclosures, particularly on cross-border borrowing and on off-balance-sheet and intragroup transactions. Statistics on cross-border borrowings are now compiled and monitored regularly.

Participants

SECURITIES FIRMS

Regulations should be overhauled to allow for levels of risk. The innovative developments in margin trading (planned for JSX) and derivatives (planned for SSX) make this essential. JSX should adopt international standards for assessing position and

counterparty risk. An effective system will require facilities for frequent monitoring of member-firm exposures. Enforcement should be improved and strengthened to ensure that firms make returns. Exposures incurred through trading and periodic spot-checks should be monitored to ensure that firms' returns are honest. Firms should be obliged to demonstrate that they have a working compliance function.

PENSION FUNDS

Indonesia has a sound basic framework for the development of pension schemes, but their growth has been distorted by macroeconomic policies favoring high interest rates. Macroeconomic policies should be changed to avoid distorting allocation decisions in the capital market. The management of the State scheme is not highly regarded. It should be restructured to give a role to genuinely independent trustees.

It is likely that Indonesian schemes will face serious problems in the current crisis given their inappropriate asset mix. There will be a loss of confidence in their ability to meet future liabilities as inflation erodes the asset base. The Government should ensure that liabilities will be met as part of a planned restructuring of pension scheme investment policies. The reconstruction should include removing limitations on Jamsostek investment allocations—especially those relating to equity, property, and, ideally, foreign investment—but also require Jamsostek to demonstrate long-term solvency.

LIFE INSURANCE COMPANIES

The actuarial solvency requirements for life insurance companies (and pension funds) should operate so as to deter inappropriate investment—i.e., excessive reliance on short-term assets. Investing heavily in short-term assets against long-term liabilities implicitly assumes that the short-term assets will be replaced at equivalent yields when they expire, which is usually not the case. A solvency requirement that ignores such a duration mismatch is not, therefore, prudent or useful.

MUTUAL FUNDS

Mutual funds are intended to function as a retail instrument to develop a strong retail investor base, although pension funds and insurance companies sometimes also invest in mutual funds. Mutual-fund investment should be restricted to nonbanks.

VENTURE CAPITAL

The lifecycle of companies should be studied with a view to adjusting the regulation of venture capital companies to allow greater freedom of action in the sector. Typically, the sector is unregulated in other countries because it caters only to professional investors. In Indonesia, however, venture capital companies must be separately licensed and constituted. The following are recommended:

- Encourage smaller companies by enforcing intellectual property rights and limiting the power of distribution companies, which were important when transportation was more difficult. Now, however, with better infrastructure, the role of distribution companies has become restrictive rather than permissive.
- Examine fiscal assistance for venture capital. It is common to give tax breaks to investors in venture capital companies. Capital gains tax does not allow losses to be offset against gains, which is essential in a high-risk venture capital portfolio.
- Ensure that listing rules and processes do not block exit routes for venture capitalists. JSX rules do not exclude smaller companies but, in practice, only large companies come to the market. Admitting high-risk companies to the main list can tarnish an exchange's reputation for quality. Most European exchanges have set up second-tier markets, as Malaysia has done, to accommodate this type of company. The SSX market for smaller companies has not succeeded so far, and some of our respondents suggested that JSX could run the market more successfully.

Notes

¹Volume-weighted average price (VWAP) is a crude measure used by fund managers to see if their brokers achieved a good execution. It is calculated for each stock as value of trading in a day divided by share volume in the same day. A fund manager judges a good execution as a buy below VWAP or a sell above. Brokers in most markets, including Jakarta, try to game the measure by delaying execution of orders until the end of the day to see if the price at that time gives them an opportunity to beat VWAP. If they cannot beat VWAP, then they report that there was no liquidity or that conditions were not right, and delay the trade until the next day.

²FIBV is a voluntary body of which JSX is a member. Among other activities, it defines benchmarks for efficient exchange operation.

³Concert parties are agreements between apparently unconnected investors to act in concert to move the price of a stock.

⁴Momentum traders act on the basis of short-term movements in the market. In particular, they try to get out before the bubble bursts.

⁵"Indonesian Business—a Survival Guide," *Economist*, 30 January 1999.

⁶Claessens, Djankov, Fan, and Lang (1998).

⁷The secondary market for corporate bonds in the US is almost entirely off the stock exchanges. Most investors buy and hold, so the markets for all but the most highly rated bonds are illiquid.

⁸Licenses are required for stock exchanges, clearing guaranty institutions, central securities depository, investment funds, securities companies, individual market professionals, and credit-rating agencies.

⁹In fact, few jurisdictions have yet to develop workable asset-backed securities (ABS) regulations; hence, ABS continue to be arranged through offshore special-purpose vehicles. The lack of a simple procedure saddles issuers with large legal bills.

¹⁰The quality of disclosure, nonetheless, had improved. In 1994, Indonesia was ranked as having the poorest ac-

counting standard among eight other Asian countries. In 1996, however, there were more Indonesian listed companies (89 percent) audited by the Big-6 accounting firms and affiliates, compared to 70 percent in Korea and Malaysia and 71 percent in Japan.

¹¹Conduits are arrangements whereby rolling loans are collateralized against trade receivables. They are a form of securitization.

¹²Indonesian issuers need to get approval for each issue, and a bond must be issued all in one go. Other markets allow issuers to gain approval for omnibus issues, which then allows them to place the stock in smaller tranches at various rates and currencies as market conditions suggest.

¹³The information costs incurred by investors cannot be recouped easily in the secondary market, so swapping one bond for another causes the investor to lose his information on the sold bond and requires him to build up new information for the purchased bond.

¹⁴Intergenerational accounting measures the extent to which expected tax revenue will be sufficient to cover the transfer payments to the taxpayers and other Government expenditures during the taxpayers' lifetimes. In most developed countries, the current generation will pass on a deficit to be paid by future generations as populations are aging and declining in number. The current generation, however, has a pension entitlement, which has not been funded properly. Emerging countries have different demographics, and evidence for Thailand shows a substantial surplus—i.e., future generations can look forward to a lighter tax burden than the current generation.

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Appendix

The Indonesian Capital Market

THE CAPITAL MARKET SECTOR

Indonesia's capital market lags behind its neighbors'. The equity market, which has expanded quickly since liberalization in 1988, still represents a share of GDP smaller than that of other emerging Asian economies. As Table A1 shows, only Korea has a market-value/GDP ratio in the range of Indonesia's.

Table A1: Equity Market Capital and GDP, 1995

Equity Market	Equity Market Capital (\$ billion)	GDP (\$ billion)	Equity-market-capital/GDP Ratio (percent)
Jakarta	66.5	196.6	34
Korea	182.0	392.0	46
Kuala Lumpur	213.8	82.4	259
Philippines	58.8	72.6	81
Singapore	151.0	77.5	195
Thailand	135.9	142.9	95

Source: Federation Internationale des Bourses de Valeurs (FIBV) Annual Report, 1996.

Korea, however, has a much more developed bond market than Indonesia. Listed bonds are very small in Indonesia, although they grew rapidly in 1996 and early 1997.

Participants

Securities Firms

By end-1997, 215 brokers were licensed by the Capital Market Supervisory Agency (Bapepam), 197 of which were Jakarta Stock Exchange (JSX) members. Since foreign ownership up to 85 percent is permitted, the larger firms, which consist of 45 joint ventures, are in every respect foreign-controlled.

Table A2: Number of Licensed Brokers, end-1997

Function	Domestic	Joint Venture	Total
Broker/Dealer and Underwriter	71	39	110
Underwriter Only	0	3	3
Broker/Dealer Only	99	3	102
Total	170	45	215

Source: Bapepam, 1997 Annual Report.

Firms range in size from large to very small. The largest has a market share of just under 10 percent, and the top 20 account for 60 percent of total value. The top 20 firms' share of large (block and crossing) business is disproportionately high at 75 percent, and their share of transactions is disproportionately low at 34 percent.

Brokers are required to be licensed by Bapepam. Minimum paid-up capital and working capital are required for this purpose (Tables A3 and A4).

Table A3: Minimum Paid-up Capital Requirements (Rp million)

Type of Business	Domestic Securities Company	Joint Venture Securities Company
Broker/Dealer	500	1,000
Broker/Dealer and Underwriter	10,000	10,000
Investment Manager	500	1,000
Broker/Dealer and Investment Manager	1,000	2,000
Broker/Dealer, Underwriter and Investment Manager	10,500	11,000

Source: Implementing Regulation No. 45 (1995) Article 31 et seq., Capital Markets Law.

Table A4: Minimum Working Capital Requirements (Rp million)

Type of Business	Domestic Securities Company	Joint Venture Securities Company
Broker/Dealer	200	200
Broker/Dealer and Underwriter	500	500
Investment Manager	200	200
Broker/Dealer and Investment Manager	400	400
Broker/Dealer, Underwriter and Investment Manager	700	700

Source: Implementing Regulation No. 45 (1995) Article 31 et seq., Capital Markets Law.

There are no other requirements, although larger firms have prudential policies, which means they maintain more than the minimum. Joint venture firms are governed by their home regulator's requirements and so are adequately capitalized with appropriate risk adjustments. Most small, domestic brokers are seriously undercapitalized. Many broker-dealers (40 or more) have a minimum capital of Rp500 million

(\$200,000 at precrisis rates and below \$20,000 at current rates) and nearly half have less than Rp10 billion. The Government plans to impose more requirements, but only by raising the absolute levels, probably of paid-up capital.

Foreign Investors

Foreign access to the market has been liberalized and, on the surface, Indonesia has a fairly liberal regime, with no restrictions on ownership of listed companies outside the banking and brokerage sectors. Foreign investors are limited to 49 percent holdings in the banking sector and to 85 percent in the brokerage sector. However, foreign ownership is forbidden in large sections of the (unlisted) economy defined as “strategic,” such as minerals and distribution companies, which are a dominant force in Indonesia since they are industry-specific, generally monopolies, and effectively run.

Foreign investors—which throughout Asia mean US and European (mainly UK) fund managers—owned approximately 25 percent of the total listed equity capital at end-1997. Inevitably—because of the size of their transactions and familiarity—foreign holdings tend to be heaviest in the best-known blue chips, where foreign ownership is around 50 percent.

Foreign investors are generally more active than average. Even in late 1997, when foreign investors were less active than normal, they accounted for two thirds of trading.

Table A6: Foreign Investor Participation, November–December 1997 (percent)

Seller	Buyer		
	Foreign Investor	Domestic Investor	Total
Foreign Investor	31	17	48
Domestic Investor	19	33	52
Total	50	50	100

Source: Jakarta Stock Exchange Monthly Statistics, December 1997.

Their trades are usually larger than domestic investors’ (Table A7) and their orders are expected to be bigger in the future.

Table A7: Average Trade Size, December 1997

Type of Trade	Average Size (Rp million)
Foreign Sell/Foreign Buy	123
Foreign Sell/Domestic Buy	39
Domestic Sell/Foreign Buy	53
Domestic Sell/Domestic Buy	24

Source: Jakarta Stock Exchange Monthly Statistics, December 1997.

Table A5: Foreign Ownership of JSX Stocks, December 1997

Top 10 by Market Capital	Stock	Market Capital (Rp billion)	Foreign Ownership (Rp billion)	Foreign Ownership (percent)
1	Telemukasi	27,299	5,259	19.3
2	Gudang Garam	16,114	1,913	11.9
3	Indosat	10,562	3,648	34.5
4	Indah Kiat	4,513	2,262	50.1
5	Indocement	4,246	248	5.8
6	Polysindo	4,284	623	14.5
7	HM Sam Poerna	3,735	1,544	41.3
8	Astra	3,314	1,746	52.7
9	Indofood	3,296	1,541	46.8
10	Tambang Timah	2,969	1,016	34.2
	Total, Top 10	80,332	19,800	24.6
	Next 35 Stocks	46,609	10,881	23.3
	Remaining Stocks	32,989	8,639	26.2
	All Stocks	159,930	39,320	24.6

Source: Jakarta Stock Exchange Monthly Statistics, December 1997.

Pension Funds

Indonesia has a mix of pension provision schemes:

- public schemes for government employees (Taspen and Asabri);
- a general State scheme, which is compulsory for all employees, except in very small enterprises (Jamsostek);
- company schemes; and
- schemes run by financial institutions.

The legal framework for pensions was established in 1969 when a law was passed governing pension benefits for the civil service and armed forces. It became the template for private schemes. The Pension Law of 1992 established pension funds as separate legal entities with assets separate from those of their founders. It also allowed financial institutions—banks and insurance companies—to set up pension funds for individuals, including self-employed workers. The Social Security Law was also passed in 1992.

The framework theoretically allows all income earners in Indonesia (over 80 million as of 1996) to participate in a pension scheme, although in practice only a small portion of workers are covered by pension schemes (Table A8).

Table A8: Scheme Membership, 1996

Scheme	Number of Members (million)
Civil Service—Taspen	4.00
Armed Forces—Asabri	na
Social Security—Jamsostek	11.00
Private Schemes	0.90
Financial Institutions Schemes	0.14

na = not available.

Source: Directorate of Pension Funds, MOF.

All schemes are funded. Most are of the defined-benefit type, i.e., related to final salary, so the operator of the scheme bears the actuarial risk of meeting the obligations. Contributions to schemes are largely employer-financed, limited in relation to salary, and tax-exempt. Profits of schemes are tax-exempt, but pension payments and retirement lump sums are not.

The Social Security scheme is limited in its asset allocation. Table A9 compares the assets and investments of pension schemes.

The main points about pension funds are the following:

- Private schemes are the largest in the market by a significant factor.
- Assets per active member are low for all funds but disproportionately low for the public schemes.
- Asset allocations are very heavily weighted toward time deposits and Government debt (which, in Indonesia, is all short-term).
- Only the company schemes have any significant equity or property allocations.

Funds have no foreign assets. (Jamsostek is prohibited from having any.)

Life Insurance Companies

There are some 90 life insurance companies in Indonesia and they have been growing rapidly. Their funds are invested in deposits (55 percent), certificates of deposits (CDs), or SBIs (15 percent), making a total of 70 percent in short-term assets.

Mutual Funds

Mutual funds were allowed into Indonesia in 1988, but grew slowly until the Capital Markets Law of 1995 established a clear legal framework for their operations. Since then, the sector has expanded rapidly, from 7 funds in mid-1996 to 77 (managed by 20 firms) by end-1997, with 200,000 investors and assets of Rp1.6 trillion (an average of Rp8 million per investor). Mutual funds are tax-exempt on income and capital gains.

Due to high interest rates, the funds are invested mainly in fixed-income assets and bank deposits, unlike in other markets, where they are invested mainly in equity. The investments have performed badly and the sector is depressed. The funds were targeted at high-net-worth individuals and at institu-

Table A9: Assets and Investments of Pension Schemes, 31 December 1996 (Rp billion)

Item	Taspen	Asabri	Jamsostek		Private Schemes	Financial Institution Schemes
			Amount	Maximum % allowed		
Time Deposits			2,620	70	6,741	231
SBLs			637	100		
Listed Equity			257	50	1,247	3
Listed Bonds			388	50	1,300	6
Unlisted Shares					1,353	
Direct Investment			71	10		
Property			22	10	1,729	
Others			80	10		
Foreign Assets			0	0		
Total	4,039	1,000	4,075		12,370	240
Assets per active member (Rp thousand)	1,010	na	374		4,572	1,707

na = not available.

Source: Directorate of Pension Schemes.

tional investors. In any event, most investors were banks, which meant that the banks were buying their own deposits through mutual funds in order to avoid paying taxes.

Venture Capital and Private Equity

Venture capital companies, which number over 500, are licensed by Bapepam. However, there is little domestic expertise to manage them, and, with the exception of one partly State-owned company, they are foreign-owned. The exception is a joint venture (State and stockbroker) entity that channels money from the Government to small enterprises throughout Indonesia. Most observers believe that the private venture capital companies do not operate properly. Their investments are relatively small (Rp40 billion in 1996) and declining. Like most Indonesian investors, their focus has been on deposit investments rather than on equity of small companies. There are also companies linked to multifinance companies that follow a typical venture capitalist style of heavy investment and board-level involvement in a small number of companies.

The sector does not enjoy any special tax advantages, and its exit routes are limited by (i) the shallowness of the domestic equity market for any but the largest companies, (ii) the difficulty of gaining a listing for smaller companies, and (iii) the absence of any domestic, long-term equity investors.

The Surabaya Stock Exchange (SSX) did launch a market aimed at smaller companies, but has so far failed to attract all but 11 companies.

INFRASTRUCTURE

Equity Market

Equity markets are operated by JSX and SSX. JSX is reckoned to have over 95 percent of the business, but this was before the current crisis, when crossings were usually directed to SSX. SSX volume is minuscule and it is unlikely that SSX will survive as an equity market much longer. Previous attempts to preserve it as a regional exchange have been abandoned, although it shares a building, listed companies, and membership with JSX. Bapepam plans to merge the equity markets, and SSX is actively pursuing other niches, notably derivatives and bonds, following the path of the American Stock Exchange in New York.

Turnover has also increased rapidly, reaching Rp120 trillion in 1997 (Table A10). Velocity of turnover (computed as a ratio of trading to market capitalization, expressed as a percentage, and often used as a measure of market liquidity) has risen since 1995, reflecting increased foreign participation. By local standards (and indeed by international standards) the velocity is about par. It is similar to that in Hong Kong, China; Singapore; and Thailand. It is higher than in the Philippines and less than in Malaysia.

Table A10: JSX—Basic Statistics, 1990-1998

Year	Number of Companies	Market Value (Rp trillion)	Trading (Rp trillion)	Velocity ^a (percent)
1990	123	14.2	7.3	51.4
1991	139	16.4	5.8	35.4
1992	153	24.8	8.0	32.3
1993	172	69.3	19.1	27.6
1994	217	103.8	25.5	24.6
1995	238	152.2	32.4	21.3
1996	253	215.0	75.7	35.2
1997	282	159.9	120.4	75.3
1998 ^b	287	212.4	117.2 ^c	55.2

^a Using end-year market capitalization.

^b As of March.

^c Annualized.

Source: Jakarta Stock Exchange.

The JSX trading system is an automatic electronic order book of the type found in many markets. Trading terminals are located on the exchange floor, although remote terminals allowing read-access are located in brokers' offices. There is no technical reason why the trading terminals are not located remotely, except, perhaps, the risks associated with uncertain telephone connections.

Indonesian stocks are traded in New York and London. Four stocks are listed on the NYSE: Gulf Indonesian, Indonesian Satellite, PTT Telkom, and PT Tri Polytu—the first three through initial public offerings (IPOs). London trading of Indonesian stocks in 1997 amounted to £1.3 billion (\$2.2 billion). NYSE trading in 1997 was \$2.1 billion, compared to JSX trading of Rp120 trillion or \$42 billion (Federation Internationale des Bourses de Valeurs [FIBV] figures converted at month-end exchange rates).

Equity Primary Market

JSX, the dominant equity market, lists 287 companies with an end-1997 market value of Rp160 trillion (down from Rp265 trillion in July 1997). Since 1990, it has attracted a significant number of new companies' IPOs (35 IPOs valued at Rp4 trillion in 1997) and privatization issues. It has also seen a strong upward price movement. These have combined to contribute to rapid growth in market capitalization, which became even stronger in 1993/94.

Issuers on JSX include private companies, State enterprises, and a large number of subsidiaries of listed holding companies. The companies represent a range of industries. The size of issues is heavily concentrated in the largest companies. The top 5 percent of companies (14) represent 56 percent of the total listed market value but only 42 percent of the trading. FIBV figures indicate that these levels are about normal. Widespread, but anecdotal, evidence suggests that almost all companies are very tightly held, with the founder group holding about 70 percent.

Companies can be listed on either JSX or SSX and are generally listed on both. The listing requirements are the following:

- two years of profitability before application,
- minimum of 1 million shares (Bapepam is trying to enforce a minimum of 50 million),
- minimum of 200 shareholders,
- total assets of at least Rp200 billion and equity capital of at least Rp7.5 billion, and
- paid-up capital of at least Rp2 billion.

None of these is especially demanding and most listed companies easily exceed them. The requirement for two years' profitability will, however, exclude start-ups and high-technology companies. Exemptions may be granted by the Ministry of Finance (MOF), but it is not clear how often these are sought or gained.

Issuers are required to deliver regular reports to Bapepam and to publicly announce any material events that may affect the share price (within two days according to Bapepam but within the same day according to JSX rules). Directors or any party holding more than 5 percent must announce any changes in their holding.

Indonesia has strong laws on preemption rights: only rights issues are allowed for listed companies, preventing the emergence of share-option schemes, which require issues to new shareholders in management.

Companies are admitted to listing on JSX if they conform to the listing requirements. Since early 1998, they have no longer been required to list on SSX as well. The number of IPOs has been substantial; 1997 saw 35 IPOs with a total value of Rp4 trillion. The average size of over Rp100 billion and the fact that the smallest IPO value was Rp27 billion suggest that the IPO market is mainly for larger companies; smaller companies seem not to have access to the market.

IPO methods differ according to the firms' size. Larger issues (over \$100 million) go through a book-building process; the organizing broker assesses interest among investors before the issue and a price is established to clear the market. Smaller issues tend to be offered at a fixed price and underwritten. New shares are traded in allotment-letter form (i.e., a negotiable note specifying an allocation). The processing of allotment letters or scrips represents a major (some say *the* major) cost of running an IPO. Before the crisis, IPOs attracted numerous retail applications.

Existing companies can issue more shares only through underwritten rights issues. In 1997, there were 35 such issues with a total value of Rp15.8 trillion. Again, the average size of Rp450 billion for rights issues confirms that the listed primary market is for large issues only. Both IPOs and rights issues continued through the second half of 1997.

The Bond and Fixed-income Market

Domestic Bonds

The bond market is relatively underdeveloped. Private sector bodies were prohibited from issuing

bonds until 1988, and the Government has been effectively prohibited from issuing bonds since 1967 by the balanced-budget requirement. In 1988, private bonds were permitted, but the market was slow to take off until the Capital Markets Law set a clearer regulatory framework.

In contrast, the equity market grew rapidly in the same period. A part of the differential reflects the greater interest among foreign investors in equities, which offer exposure to the long-run growth of the Indonesian economy; bonds have no upside, only downside risk. (An investor will, if all goes well, get no more than what is promised. But if the issuer defaults, the investor gets less. In contrast, equity has upside potential.) Main investors in bonds are pension funds, insurance companies, and corporations. Since 1997, mutual funds have been active buyers.

The wholesale bond market remains largely over the counter and illiquid. Of the 14 firms that act as informal market makers, 7 are SSX members and 7 are banks; hence, they are regulated by Bank Indonesia (BI), not SSX. It is clear from SSX statistics that the secondary market is still illiquid, with the turnover at about 5 percent of the outstanding issues before the financial crisis. During the crisis, trading dropped even further to less than 1 percent, although market participants interviewed for this study noted that there is less "buy-and-hold" behavior now and that liquidity has improved.

From 1996 to the onset of the crisis, Indonesian corporate bonds—both listed and private placements—expanded considerably. Issuance was especially rapid up to August 1997, but ceased at the onset of the currency crisis. Bonds are normally issued at par with quarterly coupon payments. Maturities vary but have mainly been stable for five years in the 1990s.

Bonds for public offerings must be listed on a domestic stock exchange—which, in practice, has meant SSX—and obtain Bapepam approval. The bonds must comply with SSX listing requirements, which are not particularly demanding and potentially

Table A11: Private Bond Issuance by Maturity, 1990-1997

Private Debt Issued by Maturity, 1990-1997					
Year	Maturity				Total
	1-4 Years	5 Years	Over 5 Years	Others ^a	
Number of Bonds					
1990	0	3	1	0	4
1991	0	3	1	0	4
1992	0	12	4	0	16
1993	0	12	4	0	16
1994	1	4	1	0	6
1995	1	7	1	0	9
1996	0	10	2	0	12
1997	0	11	7	1	19
Nominal Value (Rp billion)					
1990	na	85	150	na	235
1991	na	125	25	na	150
1992	na	906	500	na	1,406
1993	na	780	1,125	na	1,905
1994	25	475	250	na	750
1995	688	1,548	100	na	2,336
1996	na	2,450	300	na	2,750
1997	na	3,800	1,725	600	6,125

na = not available.

^a No data on maturity.

Source: Sigma Batara Special Analysis.

open the bond market to a large number of companies. However, issuers are the largest companies in the Indonesian market and only the best-known names have managed to gain investor acceptance and to issue bonds. Bapepam regulations require bonds to be rated—a complex and demanding, although not very costly, process for lesser corporations.

Costs for issues are high. A study by Pefindo shows that bond-issue costs are over 5 percent of money raised by the issue, consisting mainly of the 4 percent underwriting charge (also payable on MTNs but not on commercial paper [CP]). Annual costs are also high, estimated at over 2.5 percent. (Initial and annual costs in other markets are a few basis points, certainly far less than 1 percent.) Given these costs, plus the heavy commitment of management time and protracted timetable, companies will seek bond finance only if it offers features which are absolutely unattainable through other debt instruments.

There is no Government bond market since the Government is prevented by the Balanced Budget Law of 1967 from issuing bonds to finance deficits.

BI conducts open-market operations using SBIs, which dominate the market. They are, however, only short-term bills rather than bonds, having a duration of less than one year. There is, in consequence, no “risk-free” yield curve to serve as the basis for pricing other bonds. Difficulty in pricing is a further impediment to the development of a domestic corporate bond market.

International Bonds

In 1996/97, Indonesian issuers were significant players in the international bond market. The lower interest rates charged on dollar and yen debt attracted Indonesian borrowers. In 1996, loans totaled \$5.3 billion—90 percent in dollars, the rest in yen. Most were unhedged or swapped.

The main issuers were private finance companies (80 percent), although the Government, private banks, private corporations, and public entities all participated. Bonds were issued and traded under International Securities Market Association rules for the Eurobond market.

Commercial Paper

CP has been an attractive alternative source of funding. The issuer derives little additional benefit from funding itself in the bond markets, and this accounts for issuers' eager acceptance of the CP or private placement market. Aside from offering funding for a shorter period and at a lower cost than bonds, CP market issues that can best identify a client's funding needs can be arranged by banks. For an issuer, the cost of borrowing using CP is generally below that of conventional bank borrowing rates. Short-term CP can usually be rolled over and therefore offers medium-term funding.

The market expanded rapidly in the early 1980s, but a regulatory change in 1995 requiring CP to be of investment grade has stalled growth, particularly of property and finance companies, which were major users.

Private Placements

Like the public bond market, the market for private placements was a strong feature of the Indonesian capital market in 1996/97. Private investors were attracted by its cheap and quick issuing process. By its nature, the market is unregulated (and therefore unmeasured) and investors need to exercise considerable due diligence. This, in turn, means that the costs to investors are high and they will therefore only take (i) issues by large companies which have chosen to issue privately or (ii) large proportions of issues by smaller companies with which they develop a deep and significant relationship. (The norm for a placement by a US corporation is from one to six investors.) Since (ii) is not possible with Indonesian companies, private placements, like public offerings, have been confined to the largest Indonesian companies. The practice in this market is to hold to maturity. There is little secondary-market activity.

The difficulties of small companies in accessing bond markets are not unique to Indonesia. (The European Commission has sponsored a study of the prob-

lem in Europe.) Only the US seems to have developed procedures and, more important, investors who are willing to invest in bonds of smaller companies.

Asset-backed Securities

Indonesian regulators have only recently started to build the framework for asset-backed securities (ABS). SSX is working on rules to accommodate ABS, and Bapepam promulgated rules in late 1997. However, the tax and accounting regime remains unclear. But this is not unusual outside the US. In Indonesia, as elsewhere, ABS are operated through offshore special-purpose vehicles, which are typically expensive to set up but effective.

In Indonesia, the only current ABS are conduits for trade receivables run by Australian banks. An Asian Development Bank proposal supports development of secondary (housing) mortgage facilities (SMFs), and a ministerial decree enables establishment of a market for them.

Derivatives

Indonesia has no formal derivatives market. However, there is a proposal for SSX to launch an index futures contract, which would provide a niche for SSX as its equity business disappears. The contracts would be for one- and three-month cycles. There are no proposals for other derivatives.

The situation as of 1998 was as follows:

- A member-based risk management committee met twice.
- Rules drafting was half finished. SSX was responsible for trading rules and Bapepam for suitability and other client rules.
- The SSX trading system was judged to be acceptable.
- Risk management and margins were to be managed by the central clearer.
- Simulations using live data commenced in May 1998 and ran for six months.

Live running was expected in six to nine months. (However, this was not yet achieved as of 1999.)

SETTLEMENT

Equity Settlement

The equity settlement system remains paper-based, with net cash payments. The stock side is complicated by the fact that all Indonesian shareholdings are represented by certificates of one round lot of 500 shares. Therefore, a holding of 5,000 shares requires 10 individual certificates of 500 shares each. Until recently, the lot size was 1,000 shares, but reduced to 500 shares in order to improve liquidity.

Holdings are in registered form, i.e., each certificate bears the name of the holder, and trading requires cancellation of the old certificate and issuance of a new one. The system runs on T+4, (i.e., settlement occurs on the fourth business day after the trade) and penalties for failure to deliver are severe, including fines and suspension from trading. Registrars, of which there are five, are required to deliver new certificates within seven days, but standards are frequently not met.

Foreign and large local investors leave their holdings with depositories. Five operate in Indonesia: Hong Kong and Shanghai Banking Corporation, Standard Chartered, Deutsche, Citibank, and Jardine Fleming.

The lack of a formal system of stock borrowing and the existence of penalties for late delivery force firms to rely on an informal interfirm system. A formal system exists in New York for the Indonesian stocks listed on NYSE.

The settlement system was restructured under the Capital Markets Law. Before 1995, the two settlement functions of cash clearing and stock transfer were performed by one organization. The new law follows the US model and separates the two functions—clearing being the responsibility of the PT Kliring Perjamin Efek Indonesia (KPEI) and stock transfer falling to the Kustodian Sentral Efek Indonesia (KSEI), which was intended to become the central depository.

The KSEI was incorporated in late December 1997. It is owned by 54 shareholders (Table A12).

Table A12: Number of KSEI Shareholders

Type of Shareholder	Number
SE Members (only the most active)	32
Custodian Banks	14
Registrars	5
Stock Exchanges	2
Clearing Corporation	1
Total	54

SE = stock exchange.
Source: KSEI website and interview.

KPEI is owned by JSX (90 percent) and SSX (10 percent). It became operational in 1997 and handles net payments among member firms. Only some member firms are eligible to be clearing members by virtue of their size and strength. The rest are required to clear through a clearing member. KPEI has three directors—the president and one representative each from Citibank and KPEI.

Under the Capital Markets Law, KPEI implements a central depository system, which will involve immobilization or dematerialization—a choice left to users, as both can be accommodated under Indonesian law. The depository is a self-regulatory organization (SRO) and, as such, its rules require Bapepam approval.

The new system will reduce transactions to electronic messages. Uplift of certificates will be an option for investors. Certificates for lodgment in the depository will first be validated for good delivery by registrars before delivery to the depository. The new system is designed by a small team made up of representatives from KPEI, KSEI, and Bapepam. KSEI, the depository, was granted a Bapepam license on 11 November 1998, while the book-entry settlement system is scheduled for implementation in 2000.

Bond Settlement

Bond market settlement is all interoffice. Bonds are issued in bearer form.

Credit Rating

Pefindo conducts credit rating. Its international partner since 1996 has been Standard and Poor's

(S&P), which gives Pefindo a degree of credibility. Duff & Phelps commenced operations in Indonesia in 1998 and formed the PT Kasnic Duff and Phelps Credit Rating Indonesia.

Established in 1994, Pefindo is nominally independent of the Government, although Bapepam appoints its steering committee. Its ownership is dispersed among 120 shareholders, including securities firms, pension funds, and stock exchanges.

Pefindo started slowly, but its rating activity picked up in 1996 and early 1997. By then, about 250 companies had been rated, although only 140 ratings had been published. It generally gives higher ratings than S&P (Table A13).

Table A13: Distribution of Ratings of Indonesian Companies, 1997 (%)

Rating	Pefindo Rating	S&P Rating
AAA	1	0
AA	14	0
A	26	3
BBB	38	28
BB	21	56
B	0	13
Total	100	100

Source: Pefindo.

Pefindo claims the rating difference reflects a more refined gradation suitable for local investors. (International investors will go to the international agencies anyway.) International agencies are constrained (while Pefindo is not) by the rule that corporate ratings cannot exceed the sovereign rating.

Pefindo sees itself as stricter than the other members of the ASEAN Forum of Credit Rating Agencies (AFCRA). Its precrisis (May 1997) ratings were generally lower than others (Table A14).

Information problems among Indonesian companies include (i) multiple layers of ownership; (ii) tight ownership (even in listed companies, only 30 percent is held outside the founder family); (iii) complex corporate structures; and (iv) doubtful quality of audit staff and reporting.

Pefindo rates both long-term debt and CP. Only companies with a rating are allowed by Bapepam to issue bonds and only companies with investment-grade ratings are permitted by BI to issue CP. Companies were not particularly concerned with rating, seeing it merely as a stamp necessary for Bapepam registration or BI approval. However, since 1996, prices have reflected ratings, and companies have become more concerned about ratings; some have even engaged in corruption to secure a desired rating. Pefindo's staff includes 27 analysts, 21 of whom have or are studying for a master's or doctorate degree.

Regulation and Enforcement

Bapepam

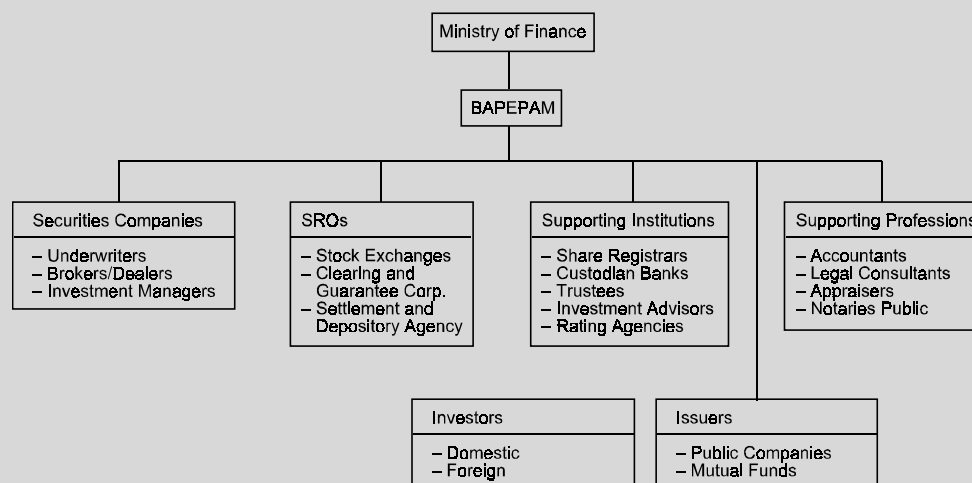
The structure of regulation was put in place by the Capital Markets Law and augmented by various decrees. Bapepam is the overall regulator, with SROs below it.

Bapepam is the pivotal player in regulation; it grants licenses and regulates trading, investment settlement, and issuance. (BI's role is small, being

Table A14: Distribution of Credit Ratings in Selected Asian Markets, May 1997 (%)

Rating	Pefindo Indonesia	Rating Agency of Malaysia	Credit Information Bureau, Inc. Philippines	Thai Rating and Information Services
AAA	1	9	13	4
AA	14	19	29	21
A	26	23	52	47
BBB	38	40	3	27
BB	21	9	3	1
B	0	0	0	0
Total	100	100	100	100

Source: Pefindo.

Figure A1: Capital Market Regulatory Structure

SRO = self-regulatory organization.

Sources: Capital Market Blueprint—Five-Year Development Plan (1996–2000), Ministry of Finance; Bapepam.

confined to regulating CP issues.) MOF determines capital market policy while Bapepam is responsible for the guidance, regulation, and day-to-day supervision of the market. It has rule-making powers but is legally obliged to consult with the industry. Bapepam is an administrative unit of MOF and is funded like any other Government department. However, a number of persons interviewed for this study suggested that its power and command over resources are greater than those of the other departments.

SROs have independent rule-making competence but must clear rules with Bapepam. The annual budgets of SROs are set by Bapepam, whose chairman is appointed by the minister of finance and approved by the President for an unspecified term. The current chairman is a long-term staff member.

Bapepam currently has the following departments: (i) legal, (ii) enforcement (added in 1997), (iii) investment management and research, (iv) securities transactions and institutions, (v) corporate finance, and (vi) accounting standards (added in 1997).

It (i) oversees IPO and issuance processes, (ii) regulates the securities firms (including capital adequacy), (iii) controls the settlement process, and

(iv) generally governs access to the industry. Theoretically, the exchanges regulate trading among members while Bapepam regulates the clients. Some areas, especially insider trading, straddle this divide. Bapepam also controls the qualifying examinations for those intending to work in the securities industry. About 4,000 people take the examination each year.

Stock Exchanges

Since SSX is in transition, this section focuses on JSX. Privatized in 1992, JSX operates as a limited-liability company owned by licensed brokers and underwriters. It is limited to 200 members, which must be securities companies, and each has one vote.

The exchange is governed by a board of five commissioners and operated by a board of four directors. Both boards are elected by the members. The commissioners must be stockbrokers. There is no chief executive position. The exchange has three committees: membership, listing, and trading. JSX's main income sources are a transaction fee of 0.04 percent and a listing fee of 0.1 percent of the face value of listed shares.

Bapepam licenses exchanges and can license competing exchanges, but only if a sufficient number of broker-dealers request it.

Accounting standards and disclosure

Indonesian accounting standards are broadly similar to international standards such as US Generally Accepted Accounting Principles (GAAP), the major difference being that Indonesian standards do not require marking of financial asset holdings to market. As a consequence, corporations, particularly banks, can carry depreciated assets at book value without revealing their true market value.

Bankruptcy law

Indonesia has no equivalent of the legal process by which creditors can force a company into receiv-

ership. In essence, as long as a company can continue to meet its current costs of wages and raw materials, it can continue indefinitely without servicing its debts or capital commitments. It is possible to get a court order, but the process is long and tortuous—one estimate is two years for the court order and five to ten years for the final wind-up. The process has worsened during the current crisis as the number of companies in default has risen and will continue to rise.

Intellectual Property Rights

Indonesia has laws on intellectual property rights, but many feel that they benefit only foreign companies and will not be applied to protect Indonesian intellectual property, which is one reason why smaller companies tend to avoid public capital markets.

