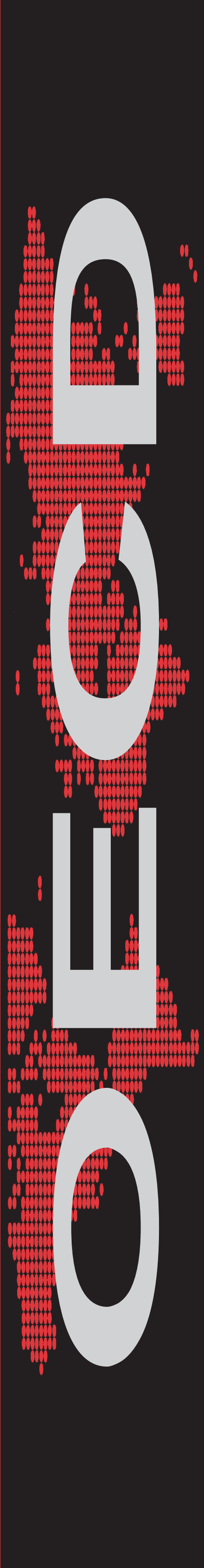

FINANCIAL MARKET TRENDS

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November 1998

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FINANCIAL MARKET TRENDS

71

NOVEMBER 1998

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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FINANCIAL MARKET TRENDS

This publication provides three times a year – in February, June and November – an assessment of trends and prospects in the international and major domestic financial markets of the OECD area. Each issue includes a comprehensive commentary, statistics and charts on current developments in internationally syndicated medium-term euro-credits, euro-bonds and traditional foreign bond issues as well as a review of monetary and financial trends in major OECD Member countries.

Analyses of, and statistics and charts on, current developments may from time to time be supplemented by special features dealing with financial matters of topical interest or with developments over the longer term in specific sectors of the international market or major domestic financial markets.

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- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

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The cut-off date was end-November 1998
Conventional signs:
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– Nil
Discrepancies in totals are due to rounding

Foreword

In the previous issue, *Financial Market Trends* introduced a change in editorial policy. In response to continuing market developments, the Directorate for Financial, Fiscal and Enterprise Affairs of the OECD recently assessed the availability of relevant data. As a result, we have decided that the OECD data series on international market operations will be discontinued.

The content of *Financial Market Trends* will be further developed in ways which better correspond to the comparative advantage of the OECD. First, analytic coverage of current developments in the international and national capital markets will be enhanced and the analysis of major trends will be upgraded, focusing on those sectors where major developments have occurred. Second, the coverage of structural and regulatory developments as well as of new financial statistics produced by the OECD will be expanded. Thus, the current issue contains articles on:

- Structural and Regulatory Developments in OECD Countries – France, Germany, Italy, Japan and Korea;
- International Financial Market Implications of Ageing Populations;
- The Financial Security of Private Pension Systems;
- The Development of Capital Markets in Central Asia;
- Foreign Direct Investment: Survey of implementation of Methodological Standards;
- New Financial Statistics.

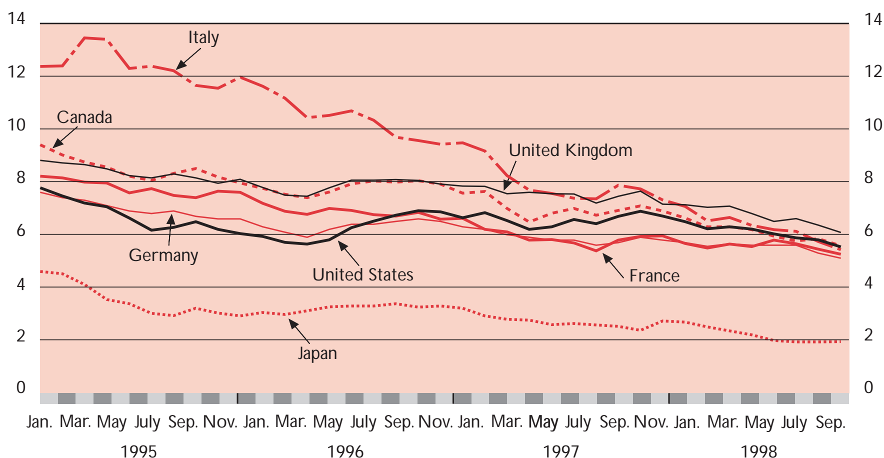
We sincerely hope that you will find the revamped *Financial Market Trends* relevant to your needs, as it will now systematically provide you with timely information and analysis. Comments and suggestions can be directly addressed to Hans Blommestein, Head of Financial Affairs Division (email: Hans.Blommestein@oecd.org).

Highlights of Recent Developments in Financial Markets

Conditions in international financial markets had shown signs of stabilising earlier in the year, but a new wave of turbulence emerged in mid-summer, affecting Russia and, to a lesser extent, other Eastern European countries as well as countries in Latin America. Russia's debt moratorium and effective default brought about a dramatic shift in investors' attitudes towards risk, characterised by flights-to-quality and eventually to an almost unprecedented preference for liquidity. Initially, the generalised flight to quality favoured government securities in OECD countries, contributing to lower nominal long-term interest rates (see Chart 1) and to higher equity prices. However, in mid-September the flight to quality became more severe and financial markets in some OECD countries began to be adversely affected as well, starting with swaps and credit spreads as well as equity premia and eventually even resulting in liquidity-induced spreads between different issues of prime issuers. In the United States, for example, the surge toward liquidity was so strong that spreads between on-the-run (newly issued) and off-the-run Treasury securities widened out several basis points, while most credit spreads gapped sharply upward (see Charts 2 and 3). The Federal Reserve brokered private-sector rescue of US hedge fund Long Term Capital Management (LTCM) was a defining moment in this year's turmoil in financial markets, reflecting serious concern that a sudden default of LTCM would lead to a fire sale of its assets, sufficiently intense and widespread that there was a chance of a systemic collapse because losses at banks and securities houses would have been further compounded. In light of growing anxiety about the impact of the ongoing financial crisis on the world economy and, more specifically, a deteriorating outlook for corporate earnings, equity prices plummeted. At their low points in early-October, a number of major indices (including the Dow Jones Industrials and the S&P 500) were off more than 20 per cent from their mid-July highs.

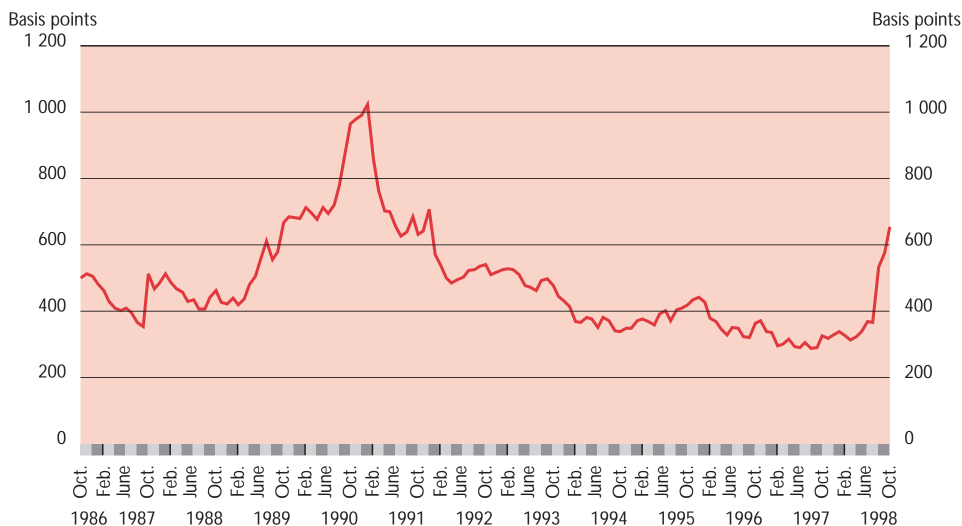
As expectations regarding interest rate policy and economic growth shifted light of the turmoil in global financial markets, the US dollar dropped sharply versus the yen (see Chart 4), as market participants began to unwind yen-carry trades given increasingly volatile market conditions. The dollar reached a low of ¥ 130.65 in mid-September, before partially retracing some of its losses as concerns about the prospects for resolving the banking crisis in Japan resurfaced.

◆ Chart 1. ***Long-term interest rates in G7 countries***



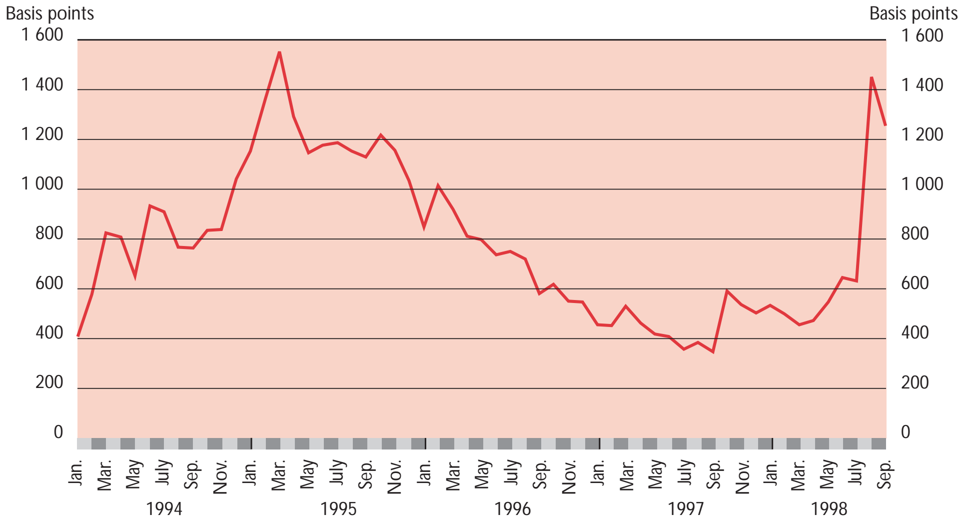
Source: OECD/Bloomberg.

◆ Chart 2. ***High-yield bond less 7-year Treasury (month end)***



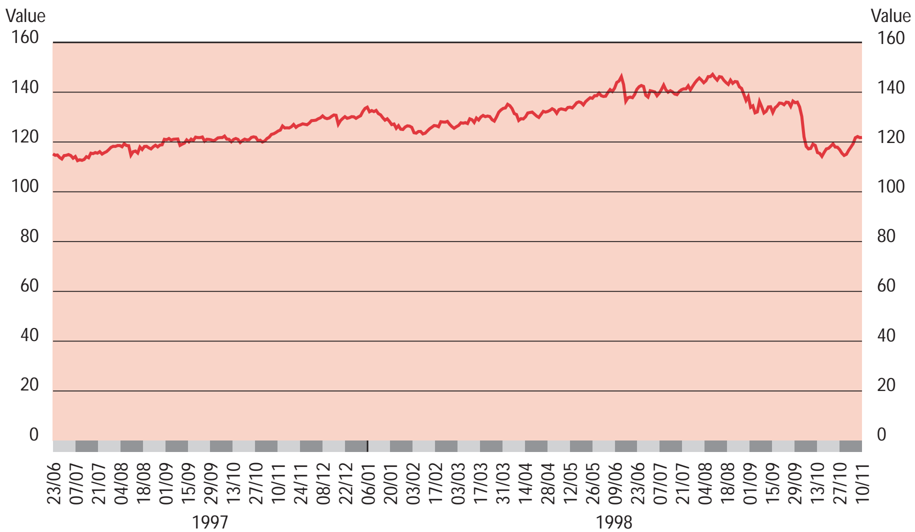
Source: Federal Reserve Board.

◆ Chart 3. ***Emerging market bonds index spread***



Source: Bloomberg.

◆ Chart 4. ***Cross-rate Yen-US$***



Source: Reuters.

With a number of securities firms and banks facing potential losses in their trading accounts and experiencing sharp declines in their equity prices (see Chart 5), many refrained from making bids in markets on behalf of their own accounts. The strong increase in demand for credit derivatives at the time, in part, may have reflected declining confidence in large banks in OECD countries over their losses in emerging markets and from highly-leveraged trading strategies as well as exposures to hedge funds.

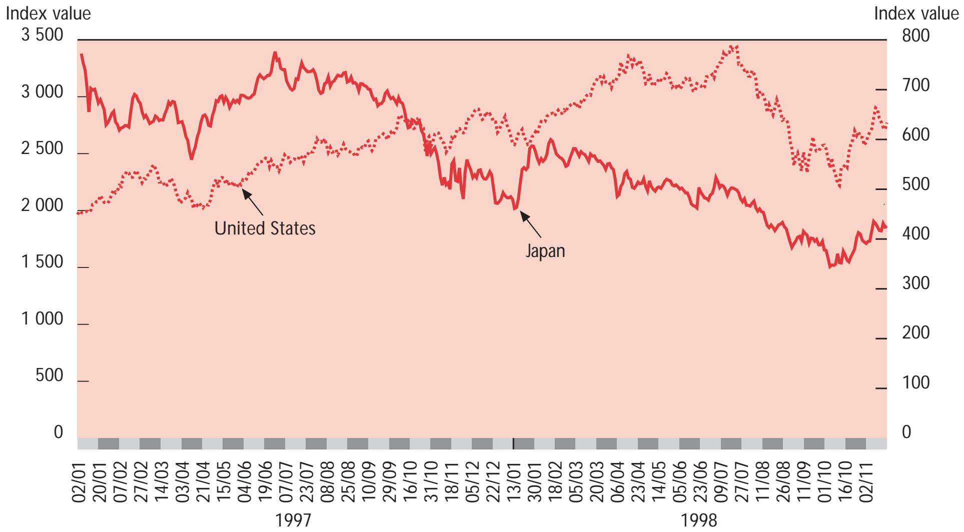
Investors, meanwhile, seemed unwilling to invest, especially in assets perceived to carry any credit risk, even at the generous spreads that were being offered. The downward pressure on asset prices was exacerbated by the unwinding of positions by hedge funds and other highly leveraged investors, including LTCM. Market sources were quoted as being astounded by the size of portfolios of different instruments liquidated by LTCM after the injection of capital. The combined effect of all these forces was a sharp drop in trading in many categories of risky assets, as liquidity essentially dried up (see Chart 6). In this environment, new issuance for all but the most highly rated securities was nearly impossible, which prompted fears that a major credit crunch would ensue.

That prospect led the Federal Reserve to lower its target for the federal funds rate by 25 basis points on two occasions, with the first cut coming at the FOMC meeting in late September, followed by an inter-meeting reduction in mid-October. In the wake of the Fed's actions, market sentiment improved somewhat, with modest reductions in risk spreads for swaps, corporate bonds, and emerging market debt.

Central banks in a number of other OECD countries have also recently lowered their official rates. The Bank of England reduced its official rate by 50 basis points in early November. Official rates also were reduced in Denmark, Ireland, Italy, Portugal, Spain, and Sweden. Among EMU participants, the recent rate reductions were part of the convergence of interest rates towards the lower levels of those rates prevailing in core countries ahead of the official January 1 start date, while for non-EMU members, the decreases largely reflect developments in their domestic economies. In Japan, the yield on the recent six-month Treasury bill even turned negative for the first time ever, as investors paid a tad over par for an instrument that will pay only par at maturity.

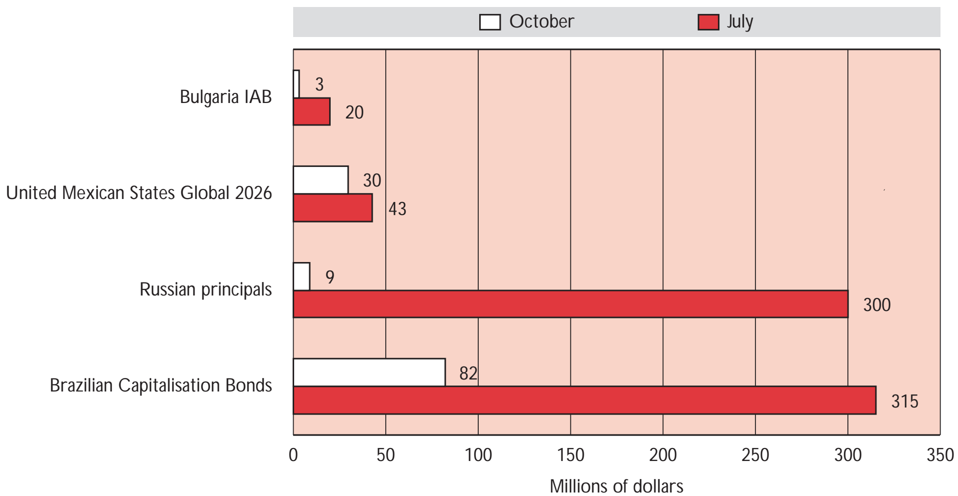
Concerns that the deteriorating conditions in international financial markets and investor flight to quality would lead to an across-the-board credit crunch appear to have been tempered somewhat by the moves to trim official interest rates. Global equities have rallied from the lows reached in early October, in most cases retracing by over half the losses that were sustained (see Chart 7). In fixed-income markets, credit spreads have narrowed to varying degrees and a moderate amount of new issues of lower-rated corporates and emerging market sovereign bonds have successfully been brought to market. However, most credit spreads remain quite wide by historical standards and the de-leveraging process likely has not fully run its course.

◆ Chart 5. ***Selected bank stock indices***



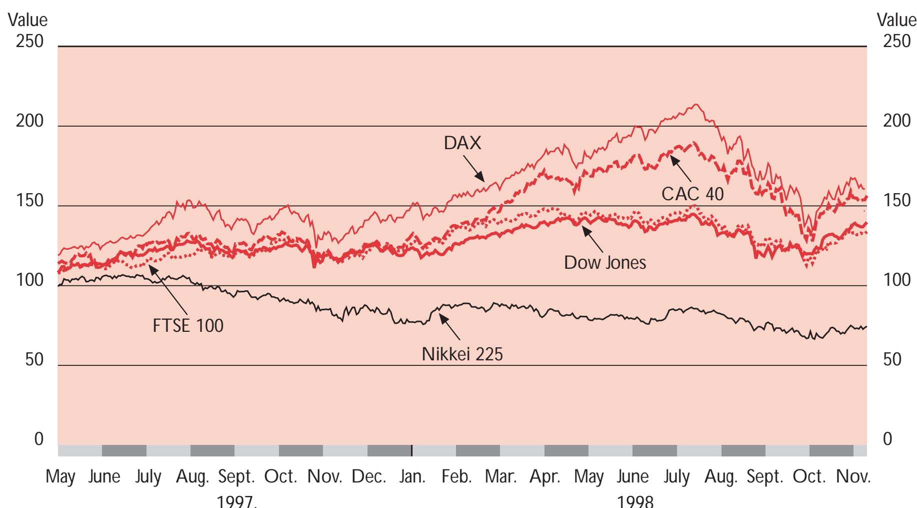
Source: OECD/Bloomberg.

◆ Chart 6. ***Daily trading volume***



Source: Euro Brokers, Salomon Brothers.

◆ Chart 7. ***Stock market indices in selected OECD countries***
1 January 1997 = 100



Source: Bloomberg/Reuters.

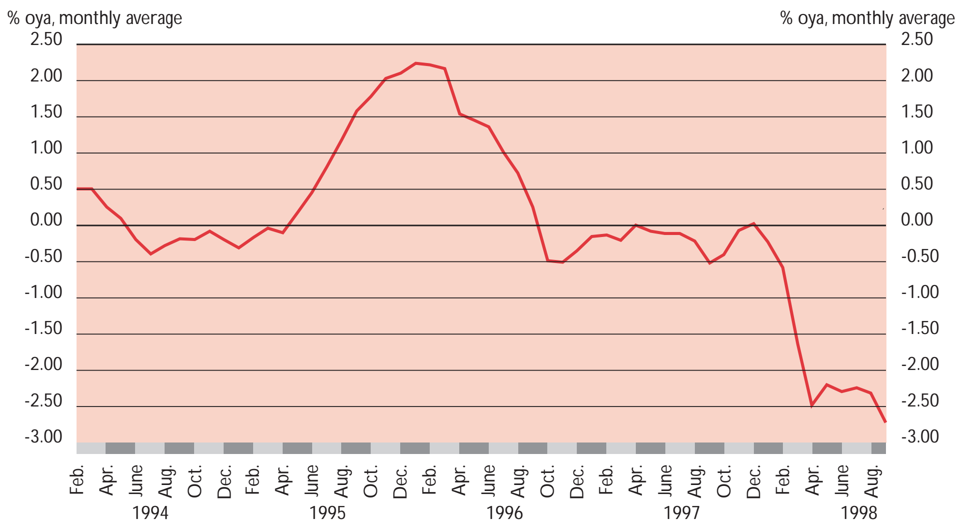
The extent to which the turbulence in financial markets has affected credit availability varies considerably across regions. For example, much of the tightening of credit in the US took place via the capital markets, as reflected in the virtual shut-down of the market for high-yield bonds. Concerns about the risks of a credit crunch were much less pronounced in Europe than in the United States (attributed to the cushioning influence of relationship banking in Europe), but reports indicate that the leveraged loan market in Europe also experienced a drastic fall-off in liquidity. Loan markets in both areas subsequently regained some liquidity as bond and stock markets improved. However, recent changes in lending arrangements remain in place and pricing has not reverted to the levels prevailing earlier in the year. With the year-end approaching, both banks and investors are likely to remain somewhat cautious.

In contrast to the US and Europe, the tightening of credit availability in Asia has been primarily a bank-related phenomenon. This is the historical norm for the start of most credit crunches. Typically, sharp contractions in credit availability have been associated with an unwillingness to lend on the part of the banking sector, usually after a period of fairly lax underwriting standards and a gradual deterioration in credit performance. For example, the asset price bubble that emerged in many advanced economies in the late-1980s burst early in this decade, resulting in many large-scale defaults. Banking sectors in a number of jurisdic-

tions were affected, including Japan, the United Kingdom, the United States, and the Nordic countries. Banks faced concerns from both regulators and shareholders about the rise in nonperforming assets, especially in their commercial loan and real estate portfolios. Around the same time, new guidelines for capital adequacy were being adopted, which left many banks undercapitalised, and forced them to reduce assets and to raise additional equity. Stock prices for institutions with significant holdings of highly leveraged loans were hammered, so most banks endeavoured to sell nonperforming loans and loans to highly leveraged borrowers. Those institutions that managed to survive the fallout retrenched. Few new transactions for below-investment grade credits were completed and liquidity for leveraged credits effectively dried up completely.

In the current episode, the degree to which credit has been tightened in Asia, where the financial crisis first began last year and where problems with nonperforming loans have been most pronounced, is generally far more severe than in other areas. In Japan, for example, bank lending has continued to decline in light of rising corporate bankruptcies and declining earnings. In September, domestic bank lending declined about 2.7 per cent from the year earlier period (see Chart 8), the biggest decline since the data were first reported in 1991. The contraction in bank credit has caused a number of corporate borrowers to turn to the bond market for funds. This in itself represents a structural change for the Japanese corporate sector, which

◆ Chart 8. ***Bank loans outstanding in Japan***



Source: JP Morgan.

historically has relied on close banking relationships for funds. However, with corporate bankruptcy rates holding at record levels, access to the bond market for corporations other than the triple-A rated utilities has been limited, especially for companies with credit ratings below single-A. Institutional investors in Japan are reported to have become much more cautious toward corporate credits, such that even borrowers with higher ratings may face some rationing of credit or outright rejection if they attempt to borrow too frequently. Moreover, some tiering has been reported in LIBOR spreads for companies with the same credit ratings, as investors have sought to distinguish companies with good business performance and lower debt multiples from others with similar overall ratings.

Bank lending arrangements in Japan have also changed in other ways. A few domestic banks have for the first time begun to offer standby liquidity facilities to high-rated corporate clients. Although standby commitment lines have long been the standard arrangement in the international lending markets, in Japan, use of bilateral facilities has been more common, owing in part to difficulties regarding the legal treatment of up-front fees. However, with both Japanese banks and their corporate borrowers experiencing difficulties raising funds, the advantages of commitment facilities have become more apparent. Bilateral lending facilities typically involve the use of bilateral loans held in deposit at the lending bank until needed by the borrower. These loans carry a risk weight of 100 per cent under capital adequacy guidelines in Japan, compared with a much lower risk weight for undrawn commitment lines. By lowering risk-weighted assets, the use of standby commitment frees up capital for the lending bank. Standby commitments also provide borrowers with advantages over bilateral loans. In particular, banks providing standby commitment lines usually are contractually obligated to provide the funds upon demand, while bilateral loan agreements typically can be withdrawn at any time.

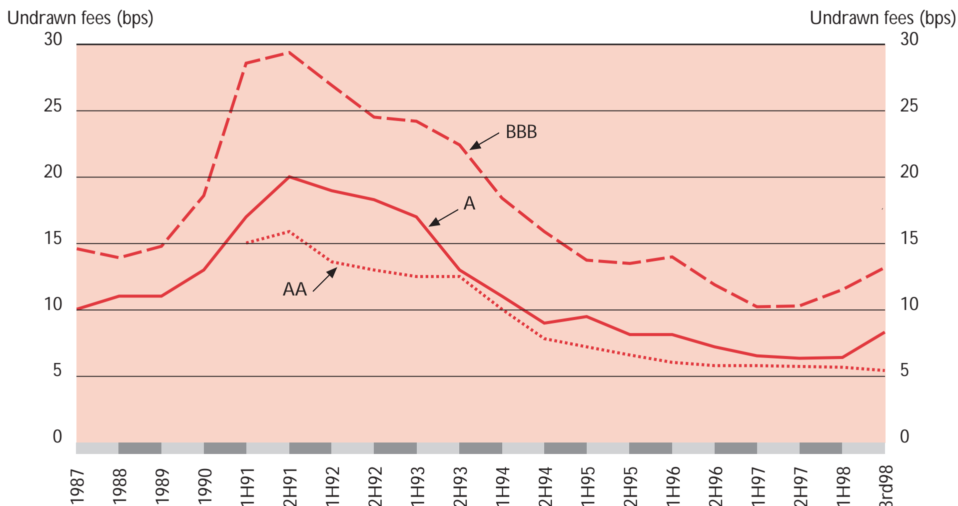
Japan is not the only jurisdiction to experience a change in bank lending practices as a consequence of the recent market turmoil. For emerging market borrowers, the use of flexible pricing and underwriting structures has become more widespread, whereby banks commit to lend the amount of funds requested, but not at a specific price. This so-called “flexibility clause” was originally created to enable an emerging market borrower to have access to the loan market during times of diminished liquidity, by allowing the lender to alter the terms of the loan as needed. Although first applied by Chase Manhattan to emerging market credits, the flexibility clause has begun to be used by many banks and for other segments of the loan market. In addition, banks have stepped up due diligence and have become more conservative regarding amortisation schedules and extended loan terms.

Actually, pricing in some segments of the loan market began to change earlier in the year. In the investment-grade sector, for example, bank fees for providing

these loans began to increase in the first quarter in light of a heavy volume of portfolio re-balancing by Asian banks. Prior to that time, bank fees for investment-grade credits had been on a general downtrend that began in 1991. By some accounts, margins had been driven sufficiently low that many institutions could not afford to book investment-grade loans at the prevailing fee levels. This was particularly the case for Japanese banks and other capital-constrained banks whose funding premiums, compared with other banks, had risen to over 100 basis points, exceeding in some cases the rates that were being paid on investment-grade loans. Unable to profitably underwrite investment-grade loans, many of these banks began to withdraw from the market. European lenders, meanwhile, had begun to exercise increased caution, owing to their exposures to emerging market credits. These developments combined to force borrowers to make some concessions as to pricing. The concessions generally took the form of higher up-front/commitment fees and higher utilisation fees on commitment facilities that were actually drawn against. Loan tenors also began to be weighted more toward the short-end.

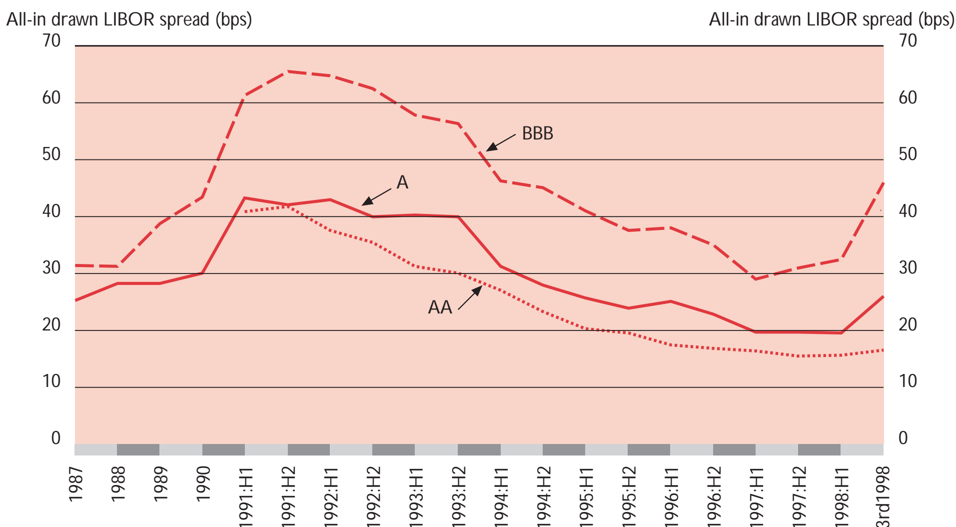
More recently, the unsettled conditions in financial markets spilled over into the loan market and institutional fees and spreads widened further, as pricing premiums were increased in order for new loan transactions to clear the market (see Charts 9 and 10). Increases for lower-rated credits were greater, with fees and

◆ Chart 9. ***Undrawn fees on investment grade loans, since 1987***



Source: Loan Pricing Corp./Gold Sheets.

◆ Chart 10. ***Drawn spreads for syndicated loans, since 1987***



Source: Loan Pricing Corp./Gold Sheets.

spreads climbing by more than 100 basis points in some ratings categories. In the leveraged loan market, many deals were either postponed or restructured with significant increases in spreads. Bank loans are senior in a borrower's capital structure, but the collapse in the high-yield bond market removed a layer of subordination. Syndicated loans began to attract investors other than banks back in 1995, when large numbers of fixed-income and high-yield investors crossed over into the leveraged loan market to take advantage of the relatively higher LIBOR spreads on loans relative to junk bonds. As recently as the second quarter this year, roughly 80 or so institutional investors were active in this segment of the loan market, a mix of insurance companies, mutual funds, hedge funds, leverage funds, pension funds, and private asset managers. However, in the wake of the recent flight to quality, the number of investors was about halved, as these investors avoided both loans and high-yield bonds.

Structural and Regulatory Developments in OECD Countries

I. France

The *Loi portant diverses dispositions d'ordre économique et financier* (Act on Sundry Economic and Financial Measures) passed by the French Parliament on 3 June 1998 makes several provisions with regard to financial activities. A brief outline of these provisions is found below.

A. Provisions relating to the entry of the euro

French firms will be permitted to keep their books and submit tax declarations in euros by as early as 1 January 1999. Provision has been made to facilitate the conversion of capital stock into euros by permitting firms not to specify the face value of shares in their statutes, thus allowing an *overall* conversion of their capital stock into euros.

The listing of financial instruments in euros is expressly authorised, and additions have been made to the legal framework for settlement/delivery systems to ensure that transactions made on such systems are irrevocable.

Under the new legislation, the Minister for the Economy will be allowed to determine the new indices or variable rates which, as a result of the entry of the euro, will replace the previous ones in conventions.

Procedures have been established for the conversion into euros of the negotiable debt held by the government and other issuers; to simplify matters, security assets in francs will be rounded down to the nearest euro after application of the conversion factor. To compensate for this rounding down, holders will be granted a cash payment, exempt of income tax, of less than one euro for each line held.

B. Overhaul of the rules governing public offerings

According to the new definition of a public offering, the placement of financial instruments with qualified investors or a restricted circle of investors will allow issuers to be exempted from the disclosure obligations relating to public offerings. The *Commission des Opérations de Bourse* (COB) (French Stock Exchange Committee) will focus its activities on protecting sales of stock to the public.

These new provisions have therefore introduced the notion of "qualified investor" into French law, following the example of provisions already in place in a number of other OECD countries.

C. Modernisation of third-party fund management

With the adoption of a single currency, and the subsequent internationalisation of asset collection methods that will ensue, it was felt that measures needed to be taken to promote the development of appropriate institutional vehicles.

"Umbrella" OPCVM (Undertakings for Collective Investment in Transferable Securities), offering investors differentiated products ("sub-funds"), each with its own management strategy and share subscription and redemption flows, are now permitted.

In addition, a category of OPCVM has been created for which relaxed COB controls will apply. This category will be reserved solely for qualified investors.

D. Share buybacks

In order to optimise the allocation of investment flows within the French economy, the conditions under which a firm can buy back its own shares have been clarified.

The Act of 24 July 1966 on trading companies made it illegal for a firm to subscribe to and buy its own shares, except under certain highly restrictive conditions (share allocations to employees, and purchase of shares with a view to their cancellation).

Firms whose shares may be traded in a regulated market are now allowed to introduce schemes to buy back shares worth up to 10 per cent of their capital. The scheme must be adopted by an ordinary general assembly of the company and may remain in place for a maximum period of eighteen months.

The new text, together with a standardised fiscal regime, improves the information given to shareholders and the transparency of the market by legitimising a number of ways in which the earlier texts could be circumvented, one example being the buyback of shares through a subsidiary of the holding company.

II. Germany

Recent changes in financial regulations

A. Laws adopted by the German parliament concerning financial markets:

1. The *Law on Control and Transparency in the Corporate Sector* (KonTraG) which took effect on 1 May 1998 is a further major advance in reforming and modernising the body of German law relating to corporations and capital markets. A reform of provisions relating to the supervisory board and the annual general meeting has enhanced shareholder control over corporations. Share repurchases have been liberalised, and corporations are now able to make their equity structures more flexible while stimulating the demand for their shares.

The basic framework also has been established for setting up an accounting body organised on a private-law basis. This private-sector body is intended in particular to draft recommendations for applying the principles of consolidated accounting and to articulate the German point of view in the appropriate international fora (for a detailed description of the Law see Annex).

2. The *Law on Admission of Nonpar Shares* (StückAG), which came into force on 1 April 1998, enables German stock corporations to convert their shares expressed in DM to nonpar shares. No special effort is now required for German stock corporations to convert to nonpar shares. This will serve to make shares less cost-intensive and even more flexible as a vehicle for financing. It will also resolve any problems relating to the face value of shares that might have arisen in connection with the introduction of the euro. Hence many companies already have plans to implement the conversion to nonpar shares at their 1998 annual general meetings.

3. The *Law to Ease Capital Procurement* (KapAEG) came into force on 24 April 1998. German companies quoted on the stock exchange may now prepare and submit consolidated financial statements in accordance with internationally accepted accounting standards. They are no longer required to submit financial statements as prescribed in German law. International accounting standards are more

closely geared to investor interests and give a clearer picture of a group's earnings situation. A meaningful and internationally comparable financial statement is increasingly important as a basis for investment decisions, especially for foreign investors. In the medium and longer terms, this reform will lend fresh momentum to corporate financing through the organised capital markets.

The new rules are scheduled to apply up to the end of 2004. The German government intends to use this time to put into effect a fundamental reform of Germany's legal provisions governing consolidated balance sheets and to bring them into line with international standards.

4. The *Third Financial Market Promotion Law* (3. FMFG), incorporating over 100 separate provisions to promote liberalisation and deregulation, took effect on 1 April 1998. Going public has been rendered a more attractive proposition by reducing transaction costs in the stock exchange and securities sector, among others by revising the stock exchange admission and prospectus requirements, shortening the period of liability for incorrect investment advice, and simplifying the listing procedure.

Investment funds will be made more attractive by the introduction of new types of funds and the admission of additional financial market products as vehicles for investment by funds. This will make investment funds an even more interesting proposition for inexperienced investors who intend to place their capital in shares for the first time. In the medium term this is likely to result in an increase in the supply of available capital.

The amendment of the law on equity investment companies and the improvement of tax treatment of those companies will enlarge the supply of capital to small and medium-sized unlisted firms, thus promoting structural change.

5. The *Law Introducing the Euro* (EuroEG) cleared the final parliamentary hurdle on 8 May 1998 and will enter into force on 1 January 1999. This creates the necessary basis in law for problem-free introduction of the euro, with particular emphasis on the areas of company law and financial statements. The following measures are of particular significance for financial markets.

- All federal bonds and treasury notes in circulation will be converted to euro on 1 January 1999. At the same time the conditions and the procedures will be set out under which other issuers will be able to convert their bonds from D-mark to euro. This will establish a large, liquid eurobond market in Germany which could prove to be of key significance for the financial centre.

- Germany's stock exchanges are provided with the fundamentals for converting stock exchange listings to euro as from 1 January 1999. At the same time, the exchanges will be afforded greater autonomy in their configuration of trading rules so that they are able to respond promptly and on their own initiative to fresh challenges.
- Capital market globalisation, the introduction of the euro and the growing pressure of competition in the financial services sector will call for further measures. Among others, the German government will review the possibility of restructuring German stock exchange legislation.
- Revision of the law governing exchange-traded futures contracts.
- Admitting further types of investment funds and vehicles for investment by funds.

Also under consideration is whether pension funds along Anglo-American lines can be introduced as a vehicle for company pension schemes. The German parliament has called upon the government to submit a draft for a new type of pension fund in the course of the coming legislative term.

The KonTraG-Law

Control and transparency in the corporate sector (KonTraG)

A. Corporate governance reform in Germany

National capital markets are no longer isolated. Quoted companies in Germany raise capital internationally. German stock corporations are in direct competition with other demands for venture capital worldwide. The shareholder structure is becoming more international. The influence of foreign institutional investors and their expectations are growing.

At the same time, a better stock market culture in Germany is developing. Investment behaviour is changing. A generation of heirs is investing in shares. The return on German share investment has increased. More innovative, young companies are aiming for the stock market.

Financial intermediaries are reacting to these changes. Big banks are gearing up their business in investment banking. They are gradually withdrawing from long-term holdings in industrial companies. They are under pressure from their shareholders to maximise profits and to invest in growth in their core businesses.

Against this background, there is growing pressure for changes and adaptation of German company law, stock corporation law and accounting law.

Discussion about corporate governance is under way in all industrialised nations. After wide-ranging talks with the parties concerned and with academics, the German government has recommended a package of changes for the reform of corporate governance. These are part of the *Law on Control and Transparency in the Corporate Sector* (KonTraG). The law came into force in May this year.

1. Basic principles:

- that the adoption of further mandatory provisions in our company law ought to be avoided as far as possible;
- that instead of strict legal directives, it is preferable to leave companies to organise themselves and for control to be provided by the existing supervisory bodies and the markets;
- and that the law should actively keep pace with public companies as they gear up to the requirements and expectations of international financial markets. This also means that corporate strategy needs to be more strongly oriented towards shareholder value.

The KonTraG-Law is therefore directly connected with reforms of corporate governance and capital market legislation already approved, as well as other planned reforms:

- the acceptance of internationally recognised accounting standards for German companies (Law to Ease Capital Procurement; KapAEG);
- authorisation of nonpar value shares (Law on Admission of Nonpar Shares; Stück AG);
- the “Third Financial Market Promotion Law”;
- the so called “Wertpapierhandelsrecht” (Securities Trading Law) with the new insider trading legislation;
- the Law Governing Small Non-Listed Stock Corporations (kleine AG) and for deregulation of our stock corporation law;
- Summary of the regulations in the “KonTraG”.

2. Board

Risk management; boards of stock corporations are obliged to ensure that adequate risk management and internal revision systems exist in their own companies.

Reporting obligations of the board of directors to the supervisory board over future corporate planning are increased.

3. Supervisory board

"Old boys network": The maximum number of supervisory board seats permitted per person, which is currently 10, is reduced as the chairman's seat counts as two.

Candidate recommendation: In the recommendation to shareholders on the election of new supervisory board members, details of their other board memberships and their main occupations are to be given, so as to avoid conflicts of interest and overload situations in advance.

Frequency of board meetings: Annual compulsory supervisory board meetings are increased for quoted companies from two to at least four (not counting committee meetings).

Contracts with auditors are no longer awarded by the board of directors, but by the supervisory board. This is intended to ensure a greater distance between auditors and management. The report has to be passed directly to the supervisory board, for the attention of the Chairman.

It will be obligatory for the auditor to be present at meetings of the supervisory board held to approve the annual report and accounts, or at financial audit committee meetings.

Distribution of the auditor's report to all supervisory board members or members of the financial audit committee will be mandatory.

In its report to shareholders, the supervisory board must state how often it has met over the year and how many committees have been formed.

Enforcement of compensation claims against members of one of the boards, particularly of supervisory boards, is eased by lowering the minimum quorum (5 per cent or a nominal 1 million marks) where there has been serious neglect of responsibilities.

In an appendix to the annual report and accounts, quoted companies must list for each board member all their other supervisory board seats and memberships of similar controlling bodies.

4. *Annual general meeting and shares*

Exercise of proxy voting rights of banks is more strongly oriented towards the interests of the shareholders represented. A bank must name a member of management who will have to ensure that the statutory obligations involved are being observed.

Banks and companies must advise shareholders of alternative ways of taking part in ballots (through transferring their vote to a proxy, or shareholders' groups, etc.).

The banks' reporting obligations to their depositors will be stricter, where there are possible conflicts of interest: They must make it known when bank employees are on the supervisory board of the company concerned, and give details of stockholdings in the company concerned.

The annual general meeting is authorised to provide rules of procedure for the conduct of the annual general meeting. This should create an opportunity for streamlining and revitalising annual general meetings.

Plural voting rights are no longer allowed.

Existing plural voting rights are to cease after five years, in exchange for a fair equalisation of their value. An annual general meeting may also, at any time, with a simple capital majority, cancel existing plural voting rights.

Maximum voting rights are no longer permissible in quoted companies. Existing maximum voting rights will cease after two years.

Where there are cross-holdings between companies, the possibility of the second company exercising voting rights in the first is excluded in the election of supervisory board members. This is intended to limit the risk of the administration controlling itself.

Listed companies must also make public in an appendix to the annual report and accounts all stakes of more than 5 per cent in large limited companies.

Share repurchase is generally allowed. This should give more flexibility and provide more price growth potential in the German stock markets.

The management should gear itself to increasing the value of the company. For that reason, provision of stock options as part of the remuneration for top management has been made easier. Abuse must be prevented, however. The annual general meeting has to regulate the major details of these programs.

5. *Banks as shareholders*

Limitation of exercise of voting rights: Banks may not exercise voting rights stemming from proxy voting rights at an annual general meeting if, at that meeting, they are also exercising votes of own-holdings in the company of more than 5 per cent. This regulation is targeted at dealing with criticism of the banks' accumulation of influence through holding equity stakes and exercising proxy votes.

Increased obligation for bank transparency in connection with annual report and accounts: Banks (of whatever legal constitution) are to make public all the mandates held by members of their boards and by other employees; any holdings of more than 5 per cent must also be stated.

6. *Audit*

Income dependency: To ensure the independence of the auditor, the auditor is excluded from performing the audit if more than *30 per cent* (previously 50 per cent) of its total revenue over the previous five years stems from that company.

Change of auditor: When the same auditor is contracted to a company over years, it can give an impression of dependency. However, as a switch of the auditing company generally is not expedient, a change at the level of the individual who signs the audit certificate must take place if the same person has signed the certificate more than six times in the past ten years.

The audit report should be geared more to problems.

The interests of the supervisory board are to be taken into greater consideration in the preparation of the audit report.

Accountability of auditor: Liability will be increased. Instead of the current limitation of liability to DM 500 000, a higher liability limit has been fixed: for audits of non-quoted companies DM 8 million, and DM 2 million for quoted companies.

Segmentation and cash flow statements are now a mandatory part of the consolidated financial statement for quoted companies.

The legal requirements for the acceptance of a private-organised standard setting body in Germany are introduced (similar to the ASB in GB and the FASB in the US). In particular, this private body is supposed to develop proposals for application of the basic principles of group accounting.

III. Italy

The Italian Law on Financial Markets and Investment Services

Italy's new Consolidated Law on Financial Intermediation, drawn up by the Government under a delegation of powers from Parliament, revises and renews the provisions of Italian law on financial markets and investment services.

The Government approved the draft text on 18 December 1997 and transmitted it to the competent committees of Parliament, which in January and February heard statements from spokesmen for the relevant professional associations, the regulated markets and the supervisory authorities. The publication of the draft text opened an ample discussion of the Government's proposals among the supervisory institutions, intermediaries and scholars. The definitive test was approved in February and is contained in Legislative Decree 58 of 28 February 1998.

The consolidated law is composed of three main parts regulating intermediaries, markets and issuers.

The part regarding intermediaries incorporates the provisions of Legislative Decree 415/1996, which transposed the European Investment Services and Capital Adequacy Directives into Italian law, implementing the principle of freedom of establishment for EU undertakings and liberalising access to the Italian market for non-EU ones. This part of the consolidated law contains some rules on the division of supervisory powers between the Bank of Italy and the Companies and Stock Exchange Commission (Consob).

The Ministry of the Treasury will be responsible for the definition of investment services and financial instruments, in line with developments in financial markets and EU legislation.

The law introduces and defines the basic features of a new type of investment firm, the asset management company.

The section of the law that deals with market regulation perfects the legislative framework proposed in Decree 415/1996, which transformed the regulated financial markets from public institutions into private enterprises charged with designing the organisational structure of trading and with managing trading activity. Consob is entrusted with supervising the regulated markets and is also given powers of intervention with regard to organised trading carried on outside the regulated markets.

The Bank of Italy is entrusted with supervising certain specific markets in which the term structure of interest rates is determined and which are thus the channels for the transmission of monetary policy – the interbank deposit market and the screen-based wholesale market in government securities.

The provisions of the consolidated law regarding solicitation of investment and the regulation of listed companies were prepared by the Government under a specific remit from Parliament, which allowed it to amend "the provisions governing companies that are issuers of securities in regulated markets, with particular reference to the board of auditors, rights of minority shareholders, voting trusts and group relations, according to criteria that strengthen the protection of savings and minority shareholders".

Parliament envisioned the reform of the financial markets and regulation of intermediaries being completed by rules improving the quality of information available in the markets and rules of corporate governance enhancing the value of the instruments of external control (contestability of ownership) and internal control (minority interests, auditing) on the management and development of listed companies.

A. *Supervision*

The opening articles of the law contain general provisions, including several concerning the principles and instruments on which supervisory activity is based.

The configuration of financial regulation in Italy has been influenced over time by the structure and evolution of the domestic market. Historically, the supervisory system was determined primarily with reference to individual categories of intermediaries.

The regulatory approach divided the financial market into the three segments of banking, securities and insurance and provided for a corresponding trio of authorities, respectively the Bank of Italy, Consob and Isvap.[1] Hence, until the early 1990s the division of tasks was essentially based on the "institutional" approach for the insurance and banking industries, with Isvap supervising the insurance companies with regard to stability and transparency and the Bank of Italy supervising the banks with regard to stability and transparency in typical banking activities (deposit-taking and lending) but not securities investment activities.[2]

In 1991, with the law on securities investment activity and the creation of dual-capacity securities investment firms (*società di intermediazione mobiliare, or SIMs*) first to complement and then to replace single-capacity stockbrokers, supervision of these

intermediaries was assigned to the Bank of Italy for matters regarding the control of financial stability and to Consob for matters regarding information and proper conduct requirements and the regularity of securities trading. This constituted a first partial realisation of the objective-based model of supervision, which was confirmed by the implementing provisions subsequently issued by the Bank of Italy and Consob within their respective spheres of authority.

As to the supervision of competition, the financial sector constitutes an exception with respect to the otherwise universal competence of the Anti-Trust Authority. In cases involving banks, the Bank of Italy decides after consulting the Anti-Trust Authority; in those involving insurance companies, the Anti-Trust Authority remains competent but must consult Isvap before using its powers.

Supervision according to objectives is founded on the distinction between stability controls and proper conduct and transparency controls. Characteristic of the most recent stratum of regulation, it is established as the linchpin of the whole system by Article 5, which makes all financial intermediaries (investment firms, banks, asset management companies, stockbrokers) except insurance companies and pension funds subject to control by the Bank of Italy for matters regarding risk containment and financial stability and by Consob for matters regarding transparency and proper conduct. The practical division of tasks in each instance is made consistent with this general principle.

The traditional distinction according to institutions had grown increasingly less effective with the blurring of the boundaries between activities and categories of institution. Intermediaries of differing origins now offer similar, composite financial products and service; moreover, the rules that once restricted some activities to certain types of intermediaries have been repealed. The objective-based model is better suited to a scenario of integrated markets whose actors include both multi-function intermediaries and conglomerates. It makes possible a clear definition of the spheres of competence attributable to the supervisory institutions, without requiring an undue proliferation of them, thus facilitating cross-border co-operation between authorities. In addition, on the basis of this model it is possible to match supervisory objectives with instruments in such a way as to limit the problems that might arise in the case of conflicting objectives.

The objective-based supervisory approach that is inscribed in the consolidated law implies that all intermediaries must be subject to control by two authorities. Because this could lead to a duplication of compliance requirements, the law provides for the Bank of Italy and Consob to operate in a co-ordinated fashion with the aim of minimising the burden on the supervised parties, notifying each other of any measures taken and irregularities discovered in the course of supervisory activity.

Co-operation and exchanges of information with the supervisory authorities of other countries is needed if the international activities of financial intermediaries are to develop in a stable and transparent environment. This principle, affirmed in the European Directives and the Documents of the Basle Committee on Banking Supervision and IOSCO, is reaffirmed in the consolidated law: The Bank of Italy and Consob co-operate, *inter alia* by exchanging information, with the competent authorities of member states of the European Union in order to facilitate their respective functions. The information received by the Bank and Consob may be transmitted to other Italian authorities and to third parties in conformity with Community legislation, subject to the consent of the organisation that provided the information. Provision is also made for similar co-operation with the competent authorities of non-EU states.

The Bank of Italy and Consob carry out supervisory activity by issuing regulations in their respective fields of competence after consulting the authority that is not directly competent (Article 6), by requesting the persons subject to supervision to supply figures and information and formally summoning the latter's legal representatives (Articles 7 and 8), and by carrying out inspections (Article 10). The Bank and Consob may request the competent authorities of another EU state to carry out on-the-spot verifications of branches of *SIMs* and banks established within the territory of such state or agree to have the verification performed directly by the two Italian authorities. Furthermore, the authorities of another EU state, after notifying the Bank and Consob, may inspect the branches established in Italy of EU investment firms and banks which they have authorised. The two authorities may also conclude agreements with supervisory bodies of non-EU states on procedures for the inspection of branches of investment firms and banks established in their respective territories.

In view of the important role played by group relations in the performance of financial activity, the new law introduces rules of consolidated supervision that apply not only to banking groups but also to financial groups which include *SIMs* or asset management companies (*società di gestione del risparmio*) (Articles 11 and 12). The Bank of Italy may conclude agreements with the supervisory bodies of other EU states for co-operation in carrying out consolidated supervision of groups that operate in more than one country.

Banks, investment firms and asset management companies are subject to uniform crisis procedures (Articles 56). The Bank of Italy and Consob may order intermediaries to put an end to any irregularities that have been found and may forbid them to undertake new transactions, for the protection of investors. These measures may be applied to both Italian and foreign intermediaries (Article 58). In the case of an EU investment firm, the violations involved must fall within the competence of the host state.

B. Asset management companies: The single manager and the expansion of the range of operations of collective investment management companies

The most significant innovation regarding investment services is the creation of the “single manager”, *i.e.* an entity active in the field of both collective and individual portfolio management. The asset management industry is less than fully developed in Italy, not least owing to the rigidities imposed by legislation and the splitting up of asset management activity among different types of institutions. Italian intermediaries are smaller than the major international actors in the field, which have enjoyed greater operational and legislative flexibility. Still, the past few years have seen considerable growth in the sector of individual and collective portfolio management. At the end of 1997 managed portfolios accounted for more than 18 per cent of households’ total financial assets.

Before the passage of the consolidated law, Italian legislation provided for the activity of asset management on an individual basis and that on a collective basis to be carried out by different entities: The former by *SIMs*, banks and trust companies, the latter by collective investment undertakings. However, the professional skills required for operating in both segments are much the same and large economies of scale can be achieved by centralising these services. From an operational point of view, in fact, both activities involve fulfilling a management mandate through appropriate investment decisions and correct reporting.

Asset management companies (Article 13) are the only entities authorised to provide both collective portfolio management services (investment funds and pension funds) and individual portfolio management services. Investment firms and banks may provide individual portfolio management (Article 18). Unification of both activities in a single entity can lead to conflicts of interest; these are controlled by increasing the safeguards for separation between the two services and restricting asset management companies to a sole corporate purpose so that they may not engage in any other type of financial or investment service. Authorisation involves a single licence covering an asset management company; separate authorisation of individual funds is no longer required (Article 34).

The centralisation of asset management functions is also permitted for the management of investment funds. This does away with the approach under which a fund could be managed only by the company that had established it, and allows intermediaries to entrust the promotion and management of funds to separate companies according to their organisational requirements. The delegation of management is also permitted for individual portfolios and allows intermediaries to opt for integrated operating solutions.

The task of defining the features and operating limits of collective investment vehicles, whether open- or closed-end and whether they invest in financial instruments or real estate, is referred to the administrative authorities so as to avoid the rigidities of the former system, which entrusted it to primary legislation.

Regulatory powers are divided between the Treasury Ministry, the Bank of Italy and Consob. The Ministry defines the operating guidelines of the different types of funds and may introduce new categories of financial instruments and investment services (Articles 37 and 18). The Bank of Italy regulates the aspects concerning the management of collective investment schemes' portfolios and supervises compliance with prudential rules (Articles 35, 36, 38 and 39), while Consob is responsible for transparency and proper-conduct requirements (Articles 5, 6 and 40). This arrangement applies the model of an objective-based division of supervisory responsibilities.

The law also introduces new types of investment funds, which can invest in assets other than financial instruments (valuables, works of art, merchandise) or claims (Article 1).

The Bank of Italy and Consob must be notified in advance of all offers of units of EU investment funds in Italy (provided for by Directives 85/611/EEC and 82/220/EEC). Bank of Italy regulations determine the content of said notification and the organisational procedures to be adopted; Consob regulations establish the disclosure requirements and distribution procedures. As regards offers of non-harmonised funds, the Bank grants authorisation after consulting Consob, provided that the operational arrangements are compatible with those governing Italian schemes (Article 42).

C. The reform of the stock exchange and regulated markets

The Italian Stock Exchange was formerly a public institution. Provisions regarding intermediaries admission to or exclusion from the market, the admission of securities to listing and regulatory powers regarding trading systems and the disclosure of information were vested in Consob, the supervisory authority.

This arrangement was judged to be outdated and unable to foster financial markets capable of competing with those of other countries. The new law affirms the principle that "the activity of organising and managing regulated markets for financial instruments is of an entrepreneurial nature, performed by limited companies, including non-profit organisations" (Article 61). The entrepreneurial na-

ture of the activity means that the markets must be managed according to criteria of economy and efficiency. The choice of the limited company form makes it possible to use the instruments provided by corporate law for raising funds and for defining management and supervisory bodies.

The rules governing the organisation and management of a market are drawn up by its management company and approved by an ordinary general meeting. The rules establish the conditions for the admission of intermediaries to trading and for the listing of instruments; the conduct of trading and obligations regarding the publication of prices (Article 62). The management company adopts the provisions regarding the participation of traders and the admission of securities.

The rules are submitted to Consob, which assesses their suitability "to ensure the transparency of the market, the orderly conduct of trading and the protection of investors" (Article 63), the criteria by which Consob is to be guided in establishing markets and supervising their activities (Article 74).

The responsibility for organisational and management strategies thus rests with the management company: The authorities evaluate their consistency with the general interest as defined in the three concepts mentioned in the law.

In view of the key role of the wholesale markets for government securities in financing the public sector borrowing requirement, the power of regulating this market and approving the rules drawn up by the management company is assigned to the Treasury Ministry.

Consob's responsibility for promoting the general interest extends to organised trading in financial instruments outside the regulated markets, where the powers it is assigned are aimed at ensuring the protection of investors and guaranteeing the efficiency of pricing mechanisms.

The transformation of the Italian financial markets began in 1997 with the replacement of existing organisational frameworks by newly-created management companies. The plans for establishing the new companies were approved by Consob (for the stock exchange) and the Treasury Ministry (for the wholesale market in government securities).

Consob has already approved the rules submitted by Borsa Italiana S.p.A., which was established to manage the stock exchange and the "second" and derivatives markets. MTS S.p.A. has drawn up the new rules for management of the screen-based wholesale market in government securities.

The competitiveness of the markets will depend partly on the economies of scale and scope that can be achieved through co-ordination between markets and by concentrating some auxiliary services such as clearing, settlement and trade guarantee offered by clearing houses. The management companies are currently engaged in seeking the most effective solutions.

The approval of the articles of incorporation and bylaws of Borsa Italiana S.p.A. and the sale of the shares of the market management companies prompted a search for the best solutions for overcoming possible conflicts of interest between the shareholders and other persons and among the various categories of market participants.

The constituent instrument provides for the setting up of a consultative committee to represent issuers, intermediaries and institutional investors and for the adoption of a code of conduct to govern conflicts of interest.

The sale of the shares of Borsa Italiana S.p.A. was carried out in September 1997 by means of a multiple-price auction in which 51 per cent of the capital was earmarked for banks and investment firms. Banks actually bought 63 per cent of the shares, investment firms 29 per cent and institutional investors 8 per cent. The sale valued Borsa Italiana S.p.A. at 53 billion lire ($30 million). The majority of the members of the Board of Directors represent the Italian banking industry; one director represents the foreign banks; two, the institutional investors; and one, the issuers of listed securities.

One characteristic aspect of the rules introduced by the consolidated law is the assignment of responsibility for the supervision by the Bank of Italy of the markets of importance for monetary policy. The basis of this assignment is thus different from that underlying the attribution of the function of supervising the stability and capital solidity of banks, investment firms and other financial intermediaries.

To this end the law identifies two categories of "monetary policy" markets: wholesale markets in government securities and markets in interbank funds.

The wholesale market in government securities, which qualifies as a regulated market, is subject to supervision by the Bank of Italy as regards the overall efficiency of the market and orderly trading conditions. The Bank of Italy also supervises the company that manages the market (Article 76). The interbank deposit market is not a regulated market at present; the Bank of Italy exercises the same powers as Consob with respect to other over-the-counter markets (Article 79).

In addition to a plurality of management companies and markets, the law permits a plurality of competing central depositories for financial instruments and abol-

ishes the monopoly granted to Monte Titoli S.p.A. The Bank of Italy will dispose of its interest in this company in conformity with the principle that the organisation and management of the activities in question must be entrusted to private businesses. The responsibilities of the Bank of Italy have been shifted to the supervision of central depository companies, to be performed jointly with Consob (Article 82). The system of centralised government securities accounts, which have been run by the Bank of Italy, might be transferred to a private management company, within a regulatory framework designed by the Ministry of Treasury.

D. Freedom of establishment and cross-border provision of services by European investment firms; access for non-EU firms

EU directives provide that European investment firms can freely establish branches and provide cross-border investment services in Italy.

The access of non-EU investment firms through the establishment of a branch is subject to requirements equivalent to those applicable to Italian firms (minimum capital, submission of a business plan and a report on organisation, experience and integrity standards for managers, all appraised at the level of the branch itself) and to the following additional conditions:

- performance in its home country of the investment and auxiliary services that the firm intends to provide in Italy;
- existence in the home country of regulations equivalent to those governing investment firms in Italy;
- agreements for co-operation between the Bank of Italy and Consob and the competent home country authorities;
- reciprocity, insofar as this is allowed by international agreements.

Foreign investment firms, European and non-EU alike, can operate in regulated Italian markets (Article 25).

E. The new rules on corporate governance

In general, the problem in designing rules on corporate governance is finding the proper balance between the independence and continuity of management action and the adequacy of the shareholders' powers of control.

Corporate control needs to be stable if consistent strategies are to be pursued over time, but it must also be contestable in order to allow for the replacement of managers and directors if new entrepreneurs propose to develop the

company's potential in new directions. The contestability of control is heavily affected by rules mandating compulsory public offers, which can raise the cost of take-overs, by limitations on cross-shareholding and by the duration of formal shareholder agreements.

As investors in securities offered to the public, shareholders also deserve economic protection. A prerequisite to raising equity capital in the European single market and on international markets is market information of high quality, enabling investors to make informed judgements on firms.

All in all, the provisions of the law that bear on corporate governance move in the direction of favouring the contestability of control and the reallocation of capital. In the medium run the new rules on compulsory offers, the retention of strict limits on cross-shareholding, the short duration of shareholder agreements and the new rules on proxy votes could radically transform the ownership structure of Italian corporations.

As regards public offers subsequent to acquiring control, investor protection requires that when control has been transferred to a new majority the shareholders who wish to can dispose of the company's equity on satisfactory terms. The law mandates the partial allocation to such shareholders of the premium paid by the new majority to acquire control.

The solution adopted is similar to that in force in France and Britain. The law makes a public take-over bid for all of the target company's remaining shares mandatory once a specified equity interest is exceeded (30 per cent of ordinary shares). The bid price in this case is the average between the shares' market price over the preceding twelve months and the higher price paid by the bidder for the shares acquired during that period.

The offer for all outstanding shares is also compulsory when the threshold is exceeded by a group of investors acting in concert. Concerted action is inferred from the existence of agreements between the purchasers or by their membership in the same group of companies.

The obligation to make a bid for all outstanding shares does not apply if the holding of more than 30 per cent has been obtained through a voluntary public offer for at least 60 per cent of the shares.

Voluntary offers may compete with one another, with no limit on increases. The shareholders' meeting of the target company can authorise defensive measures against a hostile take-over.

The law maintains the present limit of 2 per cent on cross-holdings between listed companies, which is more restrictive than in other European countries.

The ban on acquiring interests in excess of this limit has been extended to all companies belonging to the same group in order to prevent circumvention of the principle established in the law. Violations of the ban are punished by the suspension of the voting rights attaching to all shares in excess of the limit.

On the other hand, it is recognised that cross-holdings may be part of the industrial strategies of the companies concerned. Accordingly, the law states that the shareholders' meetings of the companies involved may authorise the acquisition of cross-shareholdings up to 5 per cent, thereby rendering the arrangements for the alliance transparent.

Agreements among shareholders on the exercise of voting rights in shareholders' meetings and on the transfer of shares are an important instrument for maintaining the control of companies. The agreements are the expression of the free will of the parties but reduce the contestability of control.

The solution adopted requires agreements to be publicised and imposes limits on their duration. The new law provides, in addition to the notification of agreements to Consob and their publication of extracts in daily newspapers, for the text to be filed with the Company Register. The time limit set for the duration of fixed-term agreements is three years, while the parties to open-end agreements may withdraw on giving six months' notice.

Parties to an agreement who wish to accept a tender offer for the shares in question may withdraw without giving any notice.

The Consolidated Law makes it possible to go beyond the narrow limits laid down in the Civil Code for proxies to represent shareholders in shareholders' meetings. The system introduced by the law allows a person who holds at least 1 per cent of the share capital to engage an intermediary to collect proxies to vote in conformity with the content of the proxy proposal form. The role of intermediary may be played by banks and other intermediaries subject to supervision but also by companies whose corporate purpose is the solicitation of proxies and the representation of shareholders in general meetings. Shareholder associations may collect proxies from among their members.

The rules of proper conduct and transparency for the solicitation and collection of proxies are to be laid down by Consob in a regulation.

F. The board of auditors and the rights of minority shareholders

The shareholders' meeting is required to elect a board of statutory auditors *(collegio sindacale)* charged with overseeing the operation of the company. In the past the controls carried out by these boards were not particularly effective, owing in part to the limited scope of the powers they were given and their lack of independence with respect to the directors. Moreover, in the field of accounting controls, there was an overlap between the tasks entrusted to the board of auditors and those performed by external auditors that risked making both groups feel less responsible for their work.

The new law redefines the tasks of the board of auditors with the focus shifted towards controls on the correctness of the way the company is run, with special reference to conflicts of interest and the disclosure of information to the public by companies belonging to the group. Accounting controls will be carried out by the external auditors from now on. In order to enhance the independence of the board of auditors, the law requires that at least one member be elected by the minority shareholders.

With a view to linking the controls carried out by the board of auditors with those performed by the supervisory authority, the law requires the board to inform Consob of any irregularities it may find while performing its duties. The board of auditors is authorised to co-operate with the external auditors insofar as the law provides for the exchange of information needed for the performance of their respective duties.

The law strengthens the rights of minority shareholders by lowering the minimum shareholding requirements for taking action such as the calling of shareholders' meetings, initiating investigations by the board of auditors and reporting alleged irregularities on the part of directors and auditors to the tribunal. The threshold of 10 per cent of the share capital established for the calling of shareholders' meetings is in line with the requirements of British and French company law.

Under the new law minority shareholders owning at least one twentieth of the share capital may bring derivative actions to enforce the liability of directors, members of the board of auditors and general managers. In this way minority shareholders are authorised to exercise a power that is attributed to the majority of the shareholders meeting, which may of course be dominated by the shareholders who elected the directors against whom the action in question is to be brought. The solution is similar to that adopted in French law and in German law, albeit with a shareholding threshold of 10 per cent.

The quorum for extraordinary shareholders' meetings is fixed at two thirds of the capital represented at the meeting, as under French law. The raising of the quorum, which is currently fixed at half the share capital on the first call, protects minority interests from decisions that would be detrimental to them and provides an incentive for shareholders to attend meetings.

IV. Japan

Revitalisation of the financial system

A. Adoption of financial institution failure resolution schemes

In order to revitalise the financial system, after active discussions between the ruling and opposition parties, draft financial revitalisation legislation, including a "Bill concerning Emergency Measures for the Revitalisation of the Functions of the Financial System" which is aimed at developing and improving schemes to resolve failed financial institutions, was submitted to the House of Representatives on October 2 and passed the same day. Subsequently, the draft legislation was passed by the House of Councilors and enacted on October 12. The outline of the new legislation is as follows:

Overview

The legislation has the following two objectives. First, it aims to develop and improve schemes for resolving failed financial institutions, in part, through the establishment of systems such as financial administrators, bridge banks, special public management, and the purchase of the assets of financial institutions. Second, it will strengthen the structure for dealing with failed financial institutions by such means as establishing a Financial Revitalisation Commission (FRC) and a Resolution and Collection Organisation (RCO).

1. Establishment of the Financial Revitalisation Commission

The Financial Revitalisation Commission (FRC), composed of a chairperson (minister of state) and four prominent private individuals, is to be established within the Prime Minister's Office. The Financial Supervisory Agency (FSA) is to be placed

under the auspices of the FRC. The FRC will assume responsibility for dealing with failures of financial institutions, for planning systems for financial failure resolution and for financial crisis management, and for inspecting and supervising financial institutions.

a. Improvements to the system for dealing with failed financial institutions

Until March 31, 2001, the FRC will be able to deal with failures of financial institutions either: 1) by appointing financial administrators and placing the management of a failed financial institution under their authority; or 2) through special public management of financial institutions that have failed or are in imminent danger of failure, in effect, through nationalisation via compulsory acquisition of the shares of the institutions by the Deposit Insurance Corporation (DIC).

In the event that a private successor institution comes forward to take over the failed financial institution, the appointed financial administrators will transfer the business of the failed institution to that successor institution. If such a successor institution does not emerge, the business will be assumed by a bridge bank (Public Bridge Bank) established by the DIC. Acting as a "bridge," the bridge bank will continue to make loans to sound borrowers in good faith, on a temporary basis, until the business is taken over by a private successor institution.

Special public management will occur in the following cases: 1) If a bank fails, and it is determined that there is a danger that the bank's failure poses systemic risks for the financial system as a whole, or is likely to precipitate a severe drop in economic activity in the geographic regions or industry sectors in which the bank has been lending; and 2) if it is determined that a bank failure will occur, and there will be a consequent danger that such an event will both lead to a series of other failures and have a serious impact on international financial markets. The existing managers of a bank subject to special public management will be terminated either when it is rehabilitated in accordance with a plan to restore the soundness of management, its business is transferred to another private successor institution, or its shares are transferred or disposed of otherwise.

b. Reporting and public disclosure of the self-assessment of financial institutions' assets

Financial institutions are required to conduct self-assessments of the quality of their assets, in accordance with the criteria stipulated under the rules of the FRC. Institutions will be obliged to report the results of their self-assessments to the FRC and to disclose them publicly.

2. Establishment of the Resolution and Collection Organisation

The RCO, a Japanese version of the Resolution and Trust Corporation in the United States, is to be established through the merger of the Resolution and Collection Bank (RCB) and the Housing Loan Administration Corporation (HLAC), thereby strengthening the structure for the recovery of non-performing loans.

Until March 31, 2001, the RCO will be able to purchase non-performing loans from failed financial institutions placed under the administration of financial administrators, bridge banks, banks subject to special public management, and other financial institutions.

3. Establishment of a ¥ 18 trillion ceiling on government guarantees with respect to the Financial Revitalisation Account

Government guarantees will be given for funds borrowed by the DIC for its Financial Revitalisation Account and used to conduct financial revitalisation activities such as the establishment of bridge banks, special public management, and the purchase of financial institutions' assets. For this, a guarantee ceiling of ¥18 trillion has been established by the second supplementary budget for the 1998 fiscal year.

B. Adoption of early strengthening measures for the financial system

The ruling and opposition parties also consulted on the revision of the ruling party's proposal of measures for early strengthening of the financial system to deal with weak but viable financial institutions. A revised draft of the "Financial Function Early Strengthening Bill" was submitted to the House of Representatives on October 12 and passed on the following day. Subsequently, the bill was submitted to the House of Councilors and enacted on October 16. The outline of the new law is as follows:

Overview

"The Financial Function Early Strengthening Law" was passed by the Diet on October 16th. The objective of this law is to ensure the early restoration of soundness to the functions of the financial system by swiftly disposing of non-performing loans of financial institutions, and by establishing a new system of recapitalisation of financial institutions.

1. Recapitalisation by acquisition of common stocks

The RCO will be able to acquire the common stock of banks with *significant* undercapitalisation or with *critical* undercapitalisation, based upon applications filed by the banks.

Banks filing applications will provide the FRC with plans for restoring sound management, for example, through proposed restructuring. The FRC will approve these applications provided that there is a prospect that, in accordance with these plans, the applying banks will properly implement necessary measures, including perhaps the reshuffling of management; the development of systems for clarifying the responsibility of managers; revisions to wage structures; reductions in the numbers of management personnel, other staff, and branches; the suspension of dividend payments; and reduction in capital.

Subject to the approval of the DIC, the RCO will exercise voting rights. Particularly with regard to banks that have become RCO subsidiaries, the RCO will, subject to the guidance and advice of the DIC, manage the subsidiaries in a manner that will enable them to implement plans for restoring sound management.

Shares that have been acquired will be disposed of promptly. In the event that more than 50 per cent of an institution's common stock has been acquired, the percentage held will be reduced to 50 per cent or less within one year (with the possibility of up to two one-year extensions).

2. Recapitalisation by acquisitions of preferred stocks, etc.

Based upon applications filed by financial institutions, the RCO will be able to acquire their preferred stock and/or subordinated bonds, and make subordinated loans.

The FRC will approve these applications, provided that there is a prospect that, in accordance with plans for restoring sound management, the applying financial institutions will properly implement strict restructuring and other measures as may be required, depending on the adequacy of the institutions' equity capital. With respect to financial institutions with capital ratios of 8 per cent or above, in principle, such approvals will be granted only in cases in which these institutions merge with other financial institutions that have fallen into operating difficulties, or in which the recapitalisation is essential in order to avoid an abrupt and substantial credit crunch.

In addition, the preferred stock and other categories of shares of financial institutions that take over failed financial institutions may, upon application, also be acquired.

3. Exception to procedures for capital reduction

In the event of capital reductions to clarify shareholders' responsibility of financial institutions, an exception will be made so that the procedures for the protection of creditors prescribed by the Commercial Code are not required.

4. Establishment of a ¥ 25 trillion ceiling on government guarantees with respect to the Financial Function Early Strengthening Account

Government guarantees will be given for funds borrowed by the DIC for its Financial Function Early Strengthening Account and used for the conduct of early strengthening activities such as the acquisition of shares of financial institutions. A guarantee ceiling of ¥ 25 trillion has been established by the second supplementary budget for the 1998 fiscal year.

C. Promotion of the revitalisation of the financial system

With the enactment of the above-mentioned two laws, the basic framework for the revitalisation and stabilisation of the financial system has been put in place. In addition, efforts will be made to enhance the liquidity of real estate and other assets through the establishment of a so-called "servicer" system for the creation of private businesses who engage in the management and collection of claims. Currently, only attorneys are permitted to carry out this activity. Further, auction procedures, which are often time-consuming and complex, will be simplified.

The government believes that it is necessary to revitalise and stabilise the financial system as quickly as possible by promoting the disposal of non-performing loans through every available measure.

V. Korea

Financial restructuring in Korea is being carried out in accordance with evaluation criteria agreed upon with the IMF and the IBRD, as well as with previously announced plans. Korea's financial sector reform centers on restructuring of the financial industry, capital market liberalisation and augmentation, strengthening prudential regulation and supervision. The Korean government has already closed a number of non-viable financial institutions, including 16 merchant banks, 2 securities companies, and 1 investment trust company, while the operations of other troubled financial institutions, including insurance companies, have been suspended. In total, 94 financial institutions had their operations suspended or were closed as of the end of September 1998.

A. *Banking sector*

As of the end of December 1997, 13 banks satisfied the BIS ratio requirement of 8 per cent, while 12 banks had reported BIS ratios of less than 8 per cent. The Financial Supervisory Commission (FSC) reviewed the rehabilitation plans submitted by the 12 unsound banks.

1. Viability assessment:

Based upon the prospects for viability, the FSC classified the 12 unsound banks into three categories: “disapproved”, “conditionally approved”, and “approved”.

- *Disapproved*: This category is comprised of banks whose rehabilitation plans were rejected outright. These banks were considered to have little chance of achieving their rehabilitation plans and, thus, were deemed to be incapable of carrying out normal business operations. Five banks fell under this category.
- *Conditionally Approved*: This category includes 7 banks whose plans were approved conditional upon their fulfilment of corrective actions imposed by the FSC.
- *Approved:* None of the 12 banks reviewed fell under this category.

2. Closure of non-viable banks

The five non-viable (disapproved) banks (Dong Hwa Bank, Dongnam Bank, Dac Dong Bank, Chung Chong Bank, and Kyungi Bank) were liquidated through “purchase and assumption” arrangements (P&As) in July. Their assets and liabilities were transferred to acquiring banks, which were selected based upon their financial soundness (BIS ratio of 10 per cent or higher), long-term business strategy, and comparative advantages. The five acquiring banks were respectively Shinhan Bank, Housing and Commercial Bank, Kookmin Bank, Hana Bank, and Koram Bank.

To ensure the soundness of acquiring banks, only high-grade assets of the liquidated banks were transferred. Non-performing assets classified as “substandard” or lower were excluded. On the liability side, all liabilities were transferred, excluding the liquidating banks’ provisioning funds for severance and retirement payments.

Additional safeguard measures were taken to prevent inherent risks involved in P&As:

- The Korea Deposit Insurance Corporation (KDIC) has covered for any shortfalls in net worth of transferred assets and liabilities.
- The Korea Asset Management Corporation (KAMCO) and the KDIC are supporting the disposal of non-performing loans by the acquiring banks, and their recapitalisation.
- Within a set time period after P&A transactions, the acquiring banks can exercise a put-back option by requesting KAMCO to purchase acquired assets if these are later found to be non-performing.

3. International auction of two troubled banks:

Korea First Bank and Seoul Bank are to be sold in an open auction at the earliest possible date. Necessary preparatory steps for the auction, such as employment adjustment and the streamlining of branches, are currently underway.

In order to maintain transparency in the auction process, an internationally respected accounting firm (Coopers and Lybrand) has assessed the net worth of the two banks, while Morgan Stanley, a U.S.-based investment bank, has been chosen as lead manager for the auction.

4. Restructuring of viable banks:

Viable banks, including the 13 healthy banks and the 7 banks receiving conditional approvals of their rehabilitation plans, are following through on the corrective actions imposed by the FSC to further improve their soundness. At present, the modality of restructuring for viable banks varies in accordance to their financial soundness and business strategies.

a. Mergers: Currently, 6 large banks are, on a voluntary basis, proceeding with mergers so as to increase their scale economies and efficiency.

- Commercial Bank of Korea and Hanil Bank, both of which were conditionally approved by the FSC, are now taking steps to merge and to fulfil the corrective actions required as a prerequisite for government support, including equity write-offs.
- Hana Bank (a healthy bank) and Boram Bank are expected to sign their merger contract in the very near term.

- Kookmin Bank and Korea Long Term Credit Bank announced on September 11 their decision to merge and are now making necessary arrangements. The merger was scheduled for completion in November.

b. Rehabilitation Actions: The conditionally approved banks not involved in merger deals are taking rehabilitation actions, such as disposing of non-performing loans, raising new equity capital, and streamlining business operations.

- These banks' rehabilitation plans, after having been revised, were finally approved by the FSC. The actual implementation of these plans will be closely monitored before any government support is provided.

- Banks deemed to be non-viable even after having taken all redemptive measures will have to consider either mergers and acquisitions or P&As as an ultimate means to improve their capital bases.

c. Management Reform: Nine healthy banks not involved in mergers, including those five receiving banks involved in P&As, may still be at risk with respect to their overall financial status.

The FSC has reviewed these relatively healthy banks for their financial soundness and management practices. In September, the FSC imposed necessary corrective actions for management reform on the banks deemed to have the potential to become distressed.

B. Non-bank financial institutions

Merchant Banks: The government revoked the licenses of 16 merchant banks, out of a total of 30. The remaining 14 merchant banks will be monitored for the implementation of rehabilitation plans and the achievement of the required BIS ratio of 8 per cent.

Leasing Companies: Out of a total of 25 leasing companies, 10 will be either liquidated or acquired. These 10 companies are currently either undergoing liquidation on their own accord or proceeding with a transfer of assets and liabilities to a bridge leasing company. The government will monitor the remaining 15 leasing companies to ensure that they implement their rehabilitation plans.

Insurance Companies: The FSC decided to liquidate the 4 insurance companies that had previously been suspended. The remaining 16 insurance companies must

implement management improvement measures. The FSC will monitor their progress.

Other Non-bank Financial Institutions: Other non-bank financial institutions – including securities companies, investment trust companies and mutual savings and finance companies – are going through a similar process of restructuring.

C. Fiscal support for financial restructuring

The Korean government has emphasised that financial restructuring should, in principle, be financed by the financial institutions themselves. In practice, however, it is almost always necessary to provide some assistance to financial institutions, as it is extremely difficult for them to raise funds in the stock and property markets during times of economic difficulties. The government is fully aware, however, that granting financial support could create a moral hazard problem. Therefore, the government's basic position is that it will not financially support a financial institution unless the institution takes decisive action to reduce expenses and recapitalise by attracting foreign investment. Banks are required to write-down the capital of current shareholders, and make their managers accountable for their misdeeds. If a financial institution fulfils these conditions, the Korean government will provide enough support to save it from insolvency.

The Korean government is planning to spend a total of 64 trillion won (of which 14 trillion won has already been spent) to facilitate the financial reform process. 32.5 trillion of the 64 trillion won will be used to finance the purchase of non-performing loans, and 31.5 trillion won will be used for recapitalisation and deposit payments.

D. Capital market liberalisation

Korea has been rapidly liberalising its capital market:

- The ceiling on foreign equity ownership was completely eliminated in May 1998.
- Foreigners are now able to invest in local bonds and short-term money market instruments without restriction.
- The full liberalisation of foreign exchange transactions was legislated and will be put into effect in two stages, beginning April 1, 1999.

- Restrictions on hostile takeovers by foreigners were completely lifted in May 1998.

1. New Foreign Investment Promotion Act:

The newly legislated Foreign Investment Promotion Act will be put into effect in November 1998. According to the new law, administrative procedures for FDI will be dramatically simplified and transparent:

- *Tax Exemption and Reduction:* Corporate and income taxes will be exempted or reduced for FDI in target industries, such as the high-tech industry, for 10 -years (full exemption for the first 7 years and 50% tax reduction for the remaining 3 years).

- *Low Cost Rental Facility:* National and public real properties will be rented to foreign-investment firms for up to 50 years. The new law allows rental cost exemptions and reductions for FDI.

- *Free Investment Zone (FIZ):* A free investment zone will be developed to accommodate large-scale FDI. The location of the FIZ will be determined at the request of foreign investors. Various support measures, including infrastructure and tax support, will be provided to foreign firms in the FIZ.

2. Liberalisation of Foreign Exchange Transactions:

The Foreign Exchange Management Act was replaced by the new Foreign Exchange Transaction Act in September 1998. The liberalisation measures in the new law will be put into effect in two stages: by April 1, 1999, and by the end of the year 2000.

The primary objectives of the law are the liberalisation of the capital account, and the development of the foreign exchange market (see Table below).

Summary of the New Foreign Exchange Transaction Act

	Effective date	Major items
First stage liberalisation	4/1/99	Introduction of a negative list system in place of the current positive system for capital account transactions. Liberalisation of capital account transactions related to business activities of firms and financial institutions, including firms' short-term borrowings from abroad. Foreign exchange business will be allowed for all financial institutions meeting the requirements.
Second stage liberalisation	End-2000	Liberalisation of those capital account transactions that remained restricted in the first stage, except for those related to national security and the prevention of criminal activities. This stage of liberalisation will include: Non-residents' investment in won-denominated domestic deposits with maturities of less than 1 year. Resident individuals' investment in foreign-currency denominated overseas deposits, etc.

Notes

1. This is a simplified picture. Other authorities and institutions were or are part of the supervisory framework, including government ministries, the Credit Committee and independent authorities.

2. In particular, under Articles 115 ff. of the 1993 Banking Law the supervisory authorities still do not exercise primary responsibility for regulating banking disclosure. This power is vested instead in the Minister of the Treasury (Article 116, para. 2) and Credit Committee (Articles 116, para. 3; 117, para. 2; 118, para. 1; 119 para. 1). However, the Bank of Italy is assigned quite ample regulatory powers to set a standardised content for certain contacts or securities. Transparency and proper conduct of business by intermediaries, banks and Italian securities investment firms are supervised by Consob exclusively with regard to the performance of investment services.

Maintaining Prosperity in an Ageing Society

The ageing of societies over coming decades presents OECD countries with a complex and formidable set of inter-related challenges. It is for this reason that OECD Ministers requested the Organisation to further its analysis of the challenges in key policy areas in relation to population ageing, resulting in the 1998 OECD report on "*Maintaining Prosperity in an Ageing Society*".

This report makes clear that meeting the challenge of ageing populations will require comprehensive reform that addresses the fiscal, financial and labour market implications of ageing, as well as the implications for pensions, social benefits, and systems of health and long-term care.

The previous issue of *Financial Market Trends* contained three papers dealing with the impact of ageing populations on the economies of OECD countries. This issue contains two articles: The first article focuses on the international financial market implications of ageing populations; the second one is Part II of the analysis of regulatory policy for private pensions.

International Financial Market Implications of Ageing Populations[1]

Introduction

This study examines the probable effects that the rapid growth of pension funds will have on financial markets and their implications for government policy. The first section details the recent growth of pension funds and the future implications of continued pension fund growth on financial markets. The second section lists some of the key issues and challenges resulting from these developments. The last section then provides general guidelines for financial market policy to ensure that the adverse consequences are avoided and that financial markets are instrumental in allocating retirement assets and risks efficiently.

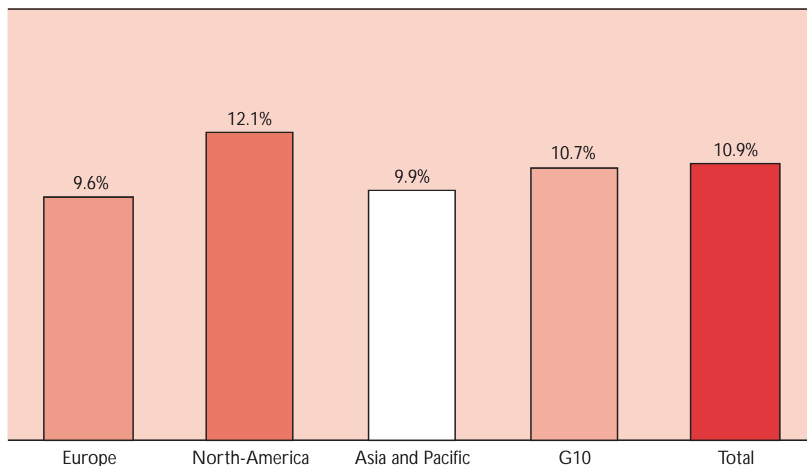
I. The implications of rapid pension fund growth

A. The recent growth of pension funds

The past decade has witnessed a pronounced expansion of pension fund assets.[2] Over the period 1990-96, the average annual growth of these assets was 10.9 per cent (Chart 1). As a result, total pension assets in the OECD area rose from almost 29 per cent of GDP in 1987, to almost 38 per cent of GDP, or around $8.7 trillion, in 1996. This understates the financial importance of population ageing and pre-funded systems because life-insurance companies and mutual funds are involved in retirement income products. Unfortunately, since reliable data across countries is not available, it is not possible to assess their aggregate importance for financial markets.[3]

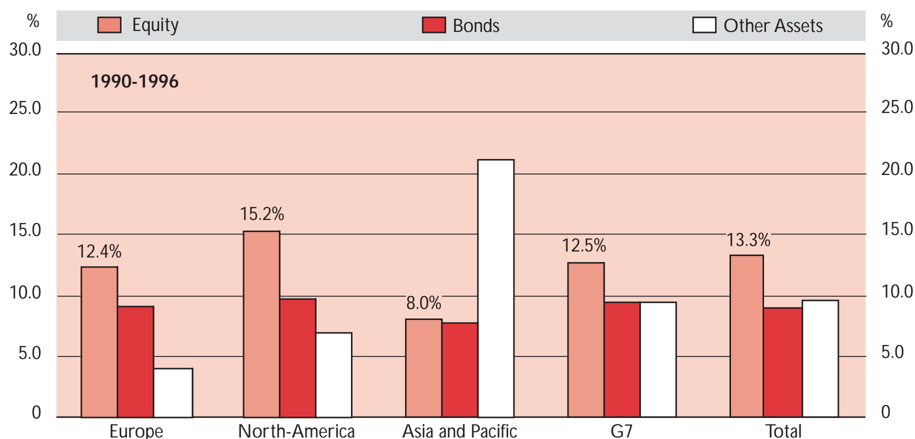
Moreover, these aggregate figures conceal a considerable degree of variation among individual OECD countries. Pension fund assets total more than 110 per cent of GDP in Switzerland, nearly 90 per cent in the Netherlands and around 60 per cent in the United States but only 2-5 per cent of GDP in France, Germany and Italy (Table 1). An important reason for this variation is the dominant role of pay-as-you-go (PAYG) financing in ageing countries with a relatively small pre-funded pension

◆ Chart 1. ***Average annual growth rate of total asset holdings by pension funds Regional breakdown, 1990-1996***



Source: OECD.

◆ Chart 2. ***Pension funds' annual average growth rate of equities, bonds and other assets, regional breakdown, 1990-1996***



Notes: *Other Assets:* including non-financial assets, cash, loans and other financial assets.
Asia and Pacific: including Japan, Korea, Australia.

Source: OECD/DAFFE, 1997.

◆ Table 1. **Assets of pension funds in OECD Countries, 1987-96**

As per cent of GDP

	1987	1990	1992	1994	1995	1996
Australia	..	17.6	23.9	30.3	31.4	31.6
Austria	–	–	0.5	0.8	0.9	1.2
Belgium	2.4	2.5	2.5	3.1	3.7	4.1
Canada	26.4	30.0	32.8	37.7	41.0	43.0
Czech Republic	–	–	–	0.1	0.2	0.5
Denmark[1]	10.9	12.4	16.6	18.9	21.1	23.9
Finland[2]	19.7	25.1	34.7	39.3	39.6	40.8
France	..	3.4	3.2	3.8	4.3	5.6
Germany[3]	3.4	3.3	5.1	5.4	5.2	5.8
Greece	..	6.5	6.9	10.3	10.9	12.7
Hungary	–	–	–	0.2	0.2	0.2
Iceland	..	..	..	..	..	..
Ireland	..	31.5	30.6	38.9	40.5	45.0
Italy	..	..	1.1	2.2	2.6	3.0
Japan	38.0	37.4	37.3	49.4	40.6	41.8
Korea	3.2	3.1	3.2	3.3	3.1	3.3
Luxembourg	19.5	19.7	18.8	20.3	19.6	19.7
Mexico	..	..	..	..	..	..
Netherlands	45.5	78.4	72.1	85.0	86.6	87.3
New Zealand	..	..	..	..	..	..
Norway	3.8	4.6	4.7	6.6	6.6	7.3
Poland	–	–	–	–	–	–
Portugal	..	1.9	2.9	7.3	8.0	9.9
Spain	–	1.5	2.9	2.3	3.1	3.8
Sweden[4]	33.4	31.0	29.6	25.7	30.5	32.6
Switzerland	74.7	72.5	74.7	86.5	104.3	117.1
Turkey	–	–	–	–	–	–
United Kingdom	62.3	59.7	58.2	69.2	73.2	74.7
United States	35.7	38.1	48.2	50.6	58.9	58.2

.. Not available; – nil or negligible.
1. Including company pension funds as from 1995.
2. Financial assets.
3. Including company pension funds as from 1992.
4. Including first pillar assets up to 1992.
Source: Pragma Consulting and OECD.

sector. This range provides, therefore, a broad indication of the scope for further growth of pension fund assets in these countries. Clearly, a sustained move toward a more fully funded pension system in the latter group of countries would have an enormous effect on the size and nature of their individual capital markets.

Along with the growth in total pension assets in recent years, there has been a shift in the investment allocation of pension funds toward higher-yielding, riskier assets (in terms of short-term volatility). For example, equity holdings of pension funds increased remarkably in the period 1990-1996. The increase in equity holdings was largest in North America, while Asian-Pacific pension funds recorded the lowest increase (Chart 2).

Pension funds have begun to diversify across borders, although only a relatively small portion of pension funds' assets are currently invested in foreign assets. In G-10 countries with significant pension fund holdings, the share of foreign assets increased from 12 per cent in 1990 to 17 per cent in 1996. Among G-10 countries, only pension funds in Belgium, the Netherlands and the United Kingdom have very significant foreign asset holdings (Table 2). Furthermore, little of this international exposure is in emerging markets, although in some countries (United States, United Kingdom) exposure has been rising fast.[4] All the evidence indicates that all types of institutional investors are much less internationally diversified than the world market portfolio. Pension fund portfolios display a strong home bias.[5]

◆ Table 2. **G10 Pension Fund Holdings of securities issued by non-residents**

In per cent of total assets

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Pension funds										
Belgium	34.1	37.4	33.4	30.0	29.4	29.2	34.3	33.0	35.8	35.4
Canada	–	5.9	–	7.0	9.0	11.0	12.0	14.0	14.0	–
France	–	–	–	–	–	2.0	2.0	5.0	4.4	–
Germany	–	–	–	4.5	4.5	4.3	4.5	7.0	5.3	7.7
Italy	–	–	–	–	–	4.0	4.0	5.0	–	–
Japan	14.3	14.8	14.3	16.0	14.8	14.4	14.0	10.8	12.5	14.9
Netherlands	12.8	13.3	15.2	15.8	14.9	17.1	19.7	22.0	21.0	30.2
Sweden	–	–	–	–	–	–	–	11.0	9.1	14.8
Switzerland	4.0	4.0	4.0	4.2	6.0	6.0	6.0	13.0	16.0	18.6
United Kingdom	14.0	17.0	22.0	20.0	23.0	24.0	27.0	27.0	26.8	29.2
United States	2.5	2.9	3.7	3.5	3.9	4.3	8.1	8.1	9.1	10.4

Source: OECD, 1998.

B. *The implications of pension fund growth*

One implication of the ageing of populations in the OECD area and the associated growth of pension fund and other institutional assets is the increased demand for professional fund management services. Professional portfolio managers, in turn, have an important influence on financial markets through investment and trading strategies.[6] Countries with large funded pension schemes tend to have highly developed securities markets, while equity markets are relatively underdeveloped in countries with small pension-fund sectors.[7]

The trend toward more investment in foreign assets, especially in emerging markets, can also be expected to continue. The scale of flows from the "mature" industrial countries to the "younger" emerging markets and the broadening of market access constitute evidence that in the 1990s, global financial market integration was rapidly increasing.[8] More recently, the ongoing global crisis resulted in a sharp reversal of this

trend. Net private capital flows to major emerging market economies are projected to fall a little below $160 billion this year from $240 billion in 1997.[9] Nonetheless, with continued efforts to liberalise cross-border financial flows and to strengthen capital markets in developing countries, this upward trend is likely to persist as pension funds and other institutional investors continue to seek to achieve greater diversification of portfolios.

All of these developments serve to increase the breadth and depth of financial markets across the world. They also facilitate greater diversification of pension fund portfolios. Fund managers thus can improve the return-to-risk ratio of the portfolios, which would help ensure that there are sufficient funds to pay the benefits to retirees. These structural changes should also facilitate the flow of funds from savers to investors, leading to a more efficient allocation of resources and risks in the economy. As such, these developments would have a positive impact on growth and living standards.

II. Key issues and challenges

Although the positive aspects of the growth of retirement assets will help countries to manage the problems associated with ageing, there are a number of key issues and challenges that need to be taken into account in order to fully reap the benefits.

A. Upward pressure on financial asset prices

There have been concerns that the growing demand for high-quality private securities (equity and corporate bonds) associated with the growth of advance-funded pension systems and falling public sector borrowing requirements would put strong upward pressure on financial asset prices.[10] In this context, the linking of privatisation of state-owned enterprises and pension reform offers opportunities to achieve important synergies. Undertaking pension reform (leading to an increase in demand for equity) and privatisation (leading to an increase in supply) at the same time permits, at least over the medium-term, a more balanced growth in private securities markets.

In a somewhat longer-term perspective, population ageing may have an impact on the risk premium (*i.e.* the difference between the returns on stocks and the yield on bonds). Because asset preferences vary across age groups, the ageing of the baby boom generation could affect both absolute and relative levels of stock and bond prices. On average, middle-age is the portion of the life cycle when saving rates are highest.[11] Moreover, middle-aged workers are generally more able and willing to hold a riskier portfolio; that is, one weighted more heavily towards stocks than bonds.[12] This is a consequence of two factors: 1) while still working, a stock-

holder is better able to make up for any bad equity returns and 2) in middle age, workers have a longer time horizon and thus are willing to accept more risk in exchange for the expectation of higher returns. In this case, the ageing of OECD populations will tend to increase the demand of stocks and bonds, exerting downward pressure on their rates of return. Moreover, higher demand for stocks relative to bonds should increase the price of stocks relative to bonds; *i.e.* decrease the equity premium.[13] After the baby boomers begin to retire, saving rates would tend to fall, stock and bond prices to decline, and the equity premium to rise as baby boom retirees shift their portfolios away from stocks toward bonds.

Against this backdrop, supervisors and pension fund managers need to exercise great care in extrapolating rates of return realised over a relatively short period of "boom" conditions to claim that this will "solve" the problems associated with ageing. Even the long-term evidence does not lead to straightforward conclusions, except that equity is more risky than fixed-income instruments.[14]

B. Volatility and stability of financial markets

In situations with no liquidity problems, there is nothing inherently wrong with the use of computerised portfolio insurance/programme trading strategies by pension funds and other institutional investors, because they may facilitate moving prices more quickly to their fundamental (*i.e.* equilibrium) values, although this may induce an increase in short-term volatility. If, in contrast, investment strategies are contrary to fundamentals, herding, "noise" trading and computerised trading strategies, may cause a rise in volatility that is welfare decreasing.[15]

C. Solvency risk and government intervention

It cannot be excluded that even a well and prudently managed pension fund would find itself in difficulties in conditions of a general and protected period of depressed asset prices and returns. And not all funds have been well or prudently managed in the past. The spectacle of many citizens finding themselves bereft of adequate income on retirement would generate pressure on governments to intervene in the future, as in the past. There is a delicate tradeoff here between individual and collective interests because of potential moral hazard problems.[16] Setting up an explicit system of government pension guarantees might inadvertently encourage excessive risk taking or inadequate funding by private pension sponsors.[17] The experience of financial policy makers in the design and operation of deposit guarantee systems seems especially rel-

evant in this context.[18] In any event, the likelihood of a government "bailout" in extreme circumstances points to the need for at least some government oversight.[19]

D. The benefits of investments in emerging markets need to be carefully assessed against risks

Studies indicate that international portfolio diversification strongly enhances the power of portfolio diversification.[20] Nevertheless, increased international diversification, may not be as beneficial as it at first appears. For example, over the last ten years, the G-7 stock markets have given better returns than the emerging markets. Although investments in the United States equity market over the 1975-1995 period would have given United States pension funds both higher returns and lower risks than the emerging markets as a group, there are still benefits from diversification.[21] Naturally, the future might bring better news in terms of higher expected returns and/ or lower risks, especially in the light of further improvements in the financial infrastructure in emerging securities markets as well as a strengthening of the domestic institutional investor base in emerging markets.[22]

At the same time, however, analysts have pointed out that the benefits of international diversification may be decreasing.[23] It is argued that increasing financial integration is leading to an increase in correlation of returns, which reduces the potential for reducing risk through international diversification. Moreover, the fact that an increasing amount of institutional money is managed using diversification is causing the benefits of diversification to become smaller, although they remain positive.[24] High correlation of returns between countries has in some cases led to a restructuring of portfolios by diversifying across sectors.[25]

III. Implications for policy

The guiding principle for government policy should be to facilitate the development of the proper infrastructure (in particular by providing an efficient regulatory and supervisory framework) that will enable pension funds to efficiently allocate retirement savings and risks.[26]

The first implication is that it is necessary for those making the risk-return trade-off decisions on behalf of pension beneficiaries to be well-informed, to have the proper incentives and to be adequately supervised. A supervisory framework based on prudent-man principles and sound risk management standards, is better adapted to this purpose than an approach with "blunt" quantitative restrictions on asset allocations.

Although it is difficult to isolate the impact of different aspects of the regulatory structure on the investment performance of pension funds, comparing the aggregate returns on pension fund portfolios in countries with "prudent man" investment rules[27] with those of countries with quantitative restrictions can give us a rough idea.[28] Since 1984, returns on pension fund portfolios in countries using prudent man principles have been 2.5 to 4 per cent higher than returns in countries using quantitative limits (Table 3).

◆ Table 3. **Returns on pension fund portfolios, 1984-1996**
Mean of real total return in local currency

	1984-1993	1984-1996
Belgium	8.8%	9.0%
Denmark	6.3%	6.0%
Germany	7.2%	7.0%
Ireland*	10.3%	11.0%
Japan	6.5%	–
Netherlands*	7.7%	8.0%
Spain	7.0%	–
Sweden	8.1%	–
Switzerland	4.4%	4.0%
United Kingdom*	10.2%	10.0%
United States*	9.7%	9.0%
Prudent man	9.5%	9.5%
Asset limits	6.9%	5.2%

Note: *Countries with prudent man principle.
Sources: EFRP Report, June 1996; Pragma Consulting; and OECD Staff calculations.

The evidence examining longer periods confirms this conclusion. Over 1967-1990, pension funds' portfolio returns exceeded real wage growth in prudent-man rule countries while the difference between returns and wage growth was on average zero in countries with quantitative limits. Since differences of 1 or 2 percentage points on the return of pension fund assets can make an enormous difference to both contribution rates and retirement benefits over a life-time, it is important that governments do not unnecessarily hamper the investment policies of pension funds. The worst situation is when regulations would impede both investment performance and the adequate management of risks.

A second implication for policy is to recognise that financial innovations can improve the functioning of financial markets. Government regulatory actions can do much to either mitigate or aggravate the dysfunctional aspects of financial innovations. The "correct" policy response to financial innovations will enhance financial stability without hampering the entrepreneurial activities of financial market participants. The process of financial innovation has been driven strongly by the growth of pension funds and other institutions involved in the retirement sector (mutual funds and life insurance companies). The role of public policy in

"optimal" pension plan design is to support – or in some cases act as a catalyst for – the development of new[29] and better[30] retirement products by the private sector.

The third implication is that financial market infrastructure influences the ability of pension funds to implement asset investment strategies in accordance with planned or desired risk-return profiles. A well-functioning funded pension system requires a stable and efficient financial market infrastructure consisting of the legal framework, the financial accounting system, the regulatory and supervisory framework, clearing and settlement systems, and the micro-structure for trading securities.

Most industrial countries have made considerable progress in the development of a solid regulatory and supervisory framework, although much still needs to be done.[31] Differences in disclosure requirements among countries are marked, partly due to different legal systems. Weaknesses in the infrastructure of emerging financial markets need to be addressed urgently. For example, recent financial turmoil in Asia demonstrates that lack of transparency and inadequate disclosure standards can prolong or exacerbate a confidence crisis.

Accounting and auditing standards are important to the effective management of risk. Accounting standards are key because disclosure will be effective only if the financial information provided by the company is based on solid accounting principles and practices. Internationally accepted accounting standards are essential for pension funds to be able to assess accurately the "value" of investments.[32] Auditing standards and practices also need to be high enough to ensure the reliability of disclosed information.

The role and scope of regulations on pension funds should be considered, taking account of the extent to which the implementation of sound risk management standards for pension funds can be linked to a relaxation of regulatory constraints concerning asset allocation.

The last implication of global ageing for policy is that scale of and scope for a possible international systemic crisis will become more important as pension funds and other institutional investors continue to diversify into international markets. One lesson from recent events is that the abrupt loss of access by individual countries to the global capital market may continue to occur. This is due to two factors: divergent macroeconomic conditions in capital-exporting and capital importing countries and crises in individual capital-importing countries. In such cases, the currency of the capital-importing country will be "tested" through a sustained speculative attack, leading to a sudden drying-up of capital inflows and major capital outflows.[33]

The globalisation of financial markets, driven in part by population ageing and other structural factors, is reflected in the quicker international transmission of short-term price movements in financial markets, as occurred in the Mexican crisis in 1994-95, the ongoing Asian crisis and the recent Russian financial turmoil and their impact on OECD financial markets. Financial integration has also increased the potential intensity and duration of speculative attacks. There is evidence that pension funds and other institutional investors have played a crucial role at times in determining asset prices in emerging financial markets, with shifts in institutional investor sentiment occasionally contributing to increased volatility in markets.[34]

In this context, the key challenge for financial policy makers is how to effectively deal with periods of financial turmoil without creating moral hazard situations. Bailing out investors should be avoided because it would encourage excessive risk-taking. Capital-importing countries should implement sound macroeconomic and structural policies (a modern financial securities market infrastructure, a healthy banking sector, high accounting and disclosure standards, etc.) so as to restore confidence to investors and to curb unnecessary volatility.

Notes

1. This article – prepared by Hans Blommestein, Head of the Financial Affairs Division, OECD – is based on Chapter 3 of the Group of Ten study, "The Macroeconomic and Financial Implications of Ageing Populations", published in April 1998 by the OECD/IMF/BIS and the author's study: "Ageing Populations and the Role of the Financial System in the Provision of Retirement Income in the OECD Area", OECD, 1998.

2. See for a methodological definition of pension fund assets: Institutional Investors – *Statistical Yearbook 1997*, OECD.

3. A very rough indication of the (potential) financial importance can be gauged, however, from the estimates available for some countries. For example, in the United States the mutual fund business forms a cornerstone of the retirement market, holding an estimated 15 per cent of the retirement sector's total assets at year-end 1995 [see M.R. Berlinski and S.R. Westin (1998), Perspectives on the United States Asset Management Business, in: *Institutional Investors in the New Financial Landscape*, OECD].

4. Surveys suggest that United States pension funds and mutual funds currently have about 2 per cent of their assets invested in emerging markets. Emerging market exposure of United Kingdom pension funds and mutual funds is somewhat higher (3-4 per cent) but Japanese and continental European institutional investors have negligible emerging market assets in their portfolios.

5. Reasons for this home bias are given in *Financial Market Trends* No. 68, November 1997, OECD.

6. See H.J. Blommestein (1998), Impact of Institutional Investors on Financial Markets in OECD countries, in: *Institutional Investors in the New Financial Landscape*, OECD, Paris.

7. The growth of a dynamic institutional sector may contribute to a stronger role of capital market intermediation. In particular, pension funds that are investing significant parts of their portfolios in equities would pressure for changes in laws and regulations of companies that can usually be found in "bank dominated" financial systems. Modernisation in turn would promote the growth of securities markets because they become more attractive for investment by pension funds. See H.J. Blommestein (1998) "Impact of Institutional Investors on Financial Markets in OECD countries", in: *Institutional Investors in the New Financial Landscape*, OECD, Paris.

8. During 1996, net private capital flows increased to a record level of over $300 billion [Institute of International Finance, 1998].

9. Institute of International Finance, 1998.

10. See H.J. Blommestein (1998), "Ageing-Induced Capital Flows to Emerging Markets do not Solve the Basic Pension Problem in the OECD Area", in: *Financial Market Trends* No. 70, June 1998, OECD and *Maintaining Prosperity in an Ageing Society*, OECD, 1998.

11. This type of saving behaviour is a feature of both a theoretical life-cycle model and, more importantly, the type of saving behaviour seen empirically in household data.

12. The real return on United States stocks, for example, averaged 9 per cent over the period 1947-96 with a standard deviation of 17 per cent. This implies that there is about a 30 per cent probability of a decline bigger than minus 8 per cent or a rise bigger than 26 per cent in any given year. The average real return on long-term United States government bonds over 1953-96, however, is much lower – 3 per cent – but also less volatile – these returns have a standard deviation of 2 per cent.

13. It is generally held that risk aversion increases with age, holding length of life constant. Thus, some have hypothesised that an ageing population would cause the equity premium to increase. But if the age of the population is increasing at least in part because life span is increasing, and thus time horizons are lengthening, then the ageing of the population does not necessarily imply that average risk aversion should be increasing and the risk premium on stocks should be rising.

14. See footnote 12.

15. In extreme cases, the monetary authorities may have to intervene to address a systemic liquidity crisis in financial markets. However, in order to avoid a conflict with the price stability objective, excess liquidity needs to be taken out of the market after the market stabilising intervention. At the same time, the financial authorities need to maintain a situation of "constructive ambiguity". The monetary authorities should be concerned about creating the expectation that they will intervene when securities prices fall, lest they create a serious moral hazard problem. The danger of creating excess liquidity is present at many times, and is not unique to periods of sharp declines in securities prices. This means that central banks should not announce in advance their willingness to move to suppress all large asset price movements. Instead, market-participants (banks, money managers, pension funds, etc.) have to be induced to adopt and use adequate risk management standards and systems.

16. An in-depth analysis can be found in: R.C. Merton and Z. Bodie (1992), "On the Management of Financial Guarantees", *Financial Management*, winter issue, pp. 87-109.

17. Z. Bodie and R.C. Merton (1992), "Pension Benefit Guarantees in the United States: A Functional Analysis", in R. Schmitt, ed., *The Future of Pensions in the United States*, University of Pennsylvania Press.

18. Z. Bodie (1996), "What the Pension Benefit Guaranty Corporation Can Learn from the Federal Savings and Loans Insurance", *Journal of Financial Services Research* 10, pp. 83-100.

19. Effective regulation and supervisory oversight of the financial situation of pension funds is indispensable for the development of sound private systems. The primary objective is to protect beneficiaries from the effect of sponsor's insolvency, insufficient funding of the plans reflecting improper technical and/or investment decisions, misappropriations by managers or the risk of default by other operators involved in the provision of pensions. Appropriate

criteria should guide the licensing of pension operators and plans; proper funding, actuarial, accounting and disclosure requirements as well as limits on self-investment should be set in place. Fair competition among private operators should also be ensured. Continued attention needs to be paid to the evolution of market practices so as to ensure that supervisory methods are adapted to the realities of the marketplace. Monitoring and understanding of developments in other countries may be particularly helpful in this regard [A. Laboul, "Private Pension Systems: Regulatory Policies", DAFFE/CMF/AS(97)2/REV1, Paris].

20. H.J. Blommestein (1998), "Ageing Populations and the Role of the Financial system in the Provision of Retirement Income in the OECD Area", DAFFE/CMF/AS(97)1/REV1, Paris.

21. See H.J. Blommestein (1998), "Ageing-Induced Capital Flows to Emerging Markets do not Solve the Basic Pension Problem in the OECD Area", in: *Financial Market Trends* No. 70, June 1998, OECD.

22. See Hans J. Blommestein (1998), "Institutional Investors, Pension Reform and Emerging Securities Markets", in *Capital Market Development in Transition Economies*, OECD, Paris.

23. C. Kessler (1996), "Diversification – Is It Still Alive?", *Economic and Financial Prospects* No. 6, Swiss Banking Corporation.

24. The potential benefits of international diversification are also reduced by the fact that downside market movements occur much more in parallel than upside ones. A recent study shows that shocks in volatility are closely linked with rising correlations, in particular in the case of stock markets. Unfortunately, the fact that most assets seem to move uniformly during market crash situations reduces the benefits of controlling downside risks using investment strategies based on diversified benchmarks. Although there is evidence that the risk-reducing benefits of international investments have become less powerful, studies show that they are still positive, even during sharp downside moves of securities markets.

25. For example, Heston and Rouwenhorst found that diversifying across countries, but staying within a single industry, reduces volatility more than diversifying across industries in a single country, even though both portfolios carry the same average return; S. Heston and G. Rouwenhorst (1994), "Does Industrial Structure Explain the Benefits of International Diversification?", *Journal of Financial Economics*, August.

26. *Maintaining Prosperity In An Ageing Society*, OECD, 1998, Paris.

27. A number of countries do not impose quantitative limits but impose guidelines such as the so-called "prudent man rule" or "prudent man principle". Under the prudent man rule, fiduciaries, trustees, and bank trust departments are expected to behave as careful professionals in making investment decisions. In the United States, the Employment Retirement Security Act (ERISA) stipulates that the fiduciary must be knowledgeable enough to act as a careful professional, experienced and educated in trust and financial matters. "Prudence" is a design standard, not a performance standard. This is reflected in the two most significant elements of the rule: *i)* the requirement to diversify; *ii)* the exhortation to favour "seasoned" situations that similarly-placed institutions find appropriate.

28. Several caveats are in order when interpreting these aggregate performance results. First, it is not possible to control for important other determinants of investment performance such as macroeconomic policies, structural factors that influence economic growth (*e.g.* capital market segmentation, discoveries of mineral wealth, etc.), and features of the regulatory regime other

than portfolio investment restrictions. Second, to get more conclusive answers it would also be necessary to take into account the details of the institutional investment infrastructure such as the structure of the asset management industry, the "style" of investment, and the dominant investment strategy (*e.g.* passive versus active).

29. Of particular importance is the inflation proofing of private pension plans. From a public policy standpoint, consideration should be given to promoting the growth of markets in inflation-indexed or consumption-indexed government bonds, which would facilitate the development of retirement products that are indexed to inflation (*i.e.* cost-of-living protection) or to aggregate per capita consumption (*i.e.* standard-of-living protection), respectively [Robert C. Merton, (1983), "On Consumption-Indexed Public Pension Plans", in: Z. Bodie and J.J.B. Shoven, eds., *Financial Aspects of the United States Pension System*, Chicago University Press].

30. Annuity markets are vulnerable to adverse selection problems, leading to the non-availability of annuities at an actuarially fair price for "good risks" [B. Friedmann and M. Warshawsky (1990), "The Cost of Annuities: Implications for Saving Behavior and Bequests", *Quarterly Journal of Economics*, 105(1), pp. 135-154; S. James (1997), "A Public versus a Private Pension Plan: A Survey of the Economics", Working Paper 97-04, Department of Finance, Canada; H.J. Blommestein (1998), "Ageing Populations and the Role of the Financial System in the Provision of Retirement Income in the OECD Area, OECD]. Although recent evidence for the United States indicates that the expected pay-out on annuity policies has increased significantly there still seems to be a need, in view of the growing importance of these markets for managing longevity risks, to investigate further what public policy role there is (if any) in improving annuity markets.

31. Several industrial countries have not established the proper legal and regulatory basis for dealing with take-overs, minority shareholders protection, insider trading and institutional investor operations [see H.J. Blommestein, (1997), "The Impact of Institutional Investors on OECD Financial Markets", *Financial Market Trends* No. 68, November 1997, OECD].

32. An important deterrent for equity investments by pension funds in emerging markets is the non-transparency of the balance sheets of companies in these countries.

33. The IMF concludes that despite all the structural changes that have occurred in the new financial landscape, the potential sources of capital flight remain the same [IMF (1997), International Capital Markets, Washington].

34. The IMF (1997) notes that the growing participation of institutional investors in international markets and improved access of emerging markets to the international capital market have "led to the growth of highly leveraged hedge funds and proprietary traders who are prepared to tolerate significant risk in their search for weaknesses in foreign exchange arrangements…". [IMF (1997), International Capital Markets, Washington]. See also H.J. Blommestein (1998), "Ageing Populations and the Role of the Financial system in the Provision of Retirement Income in the OECD Area", OECD, Paris.

The Financial Security of Private Pension Systems (Part II)[1]

Introduction

One of the essential components of the regulation of private schemes involves the security of such schemes, which entail a series of financial risks requiring appropriate prevention and supervision. The authorities' involvement is all the more vital now that pension funds and other financial vehicles on the retirement market have come to represent an enormous financial power. The recent OECD study on Institutional Investors shows that insurance companies and pension funds are the largest OECD institutional investors with 46 per cent of the investments in 1995.[2] The financial assets of these two institutions amounted to more than $14 000 billion in 1995. Major failures on the part of these institutions could potentially have considerable repercussions on financial markets.

This part of the paper considers some of the main financial risks of private schemes and then, after placing government action in its regulatory context, reviews the fundamental options for appropriate regulation and supervision of these schemes, namely: licensing, segregation of assets, minimum funding requirements, capital/own funds, calculation methods, modalities of supervision, regulation of investments, insolvency insurance, disclosure to members and, briefly, tax issues.

The summary and policy conclusions of Parts I and II can be found in the previous issue (No. 70) of *Financial Market Trends*.

I. Exposure of private systems to risks

Private pension systems are exposed to a wide range of risks, some of which are the same as for all pension systems while others are specific to private plans. Problems of unfairness, inadequacy and discrimination, or those connected with portability or early retirement, referred to in the previous chapter, affect the rights of retired individuals and the protection to which they are entitled. Other risks have more to do with the financial features of private systems. A non-exhaustive list of these risks includes:

– the risk of the fund becoming insolvent;

– the investment portfolio risk for the employer in defined benefit plans, and for employees in defined contribution schemes;

– interest-rate and inflation risks in funded schemes;

– the risk of employers failing to make adequate contributions, in all plans;

– the risk of misappropriation, in all plans;

– the risk that the employer's pension policy may change with regard to non-mandatory benefits;

– the risk that the sponsor may change (*e.g.* following a take-over or merger);

– the risk of default by an entity other than the fund (*e.g.* the insurance company);

– longevity risks for plans paying out annuities;

– risks from the structural shortcomings of certain systems.

The principal risk relating to the expansion of pension funds is the risk that they may become insolvent. A fund may become insolvent due to many factors, from the employer's failure to make contributions, to miscalculations of provisions, to ill-advised investments, including purely external factors linked to unforeseeable events. They primarily concern defined benefit plans. A defined contribution plan is similarly exposed, but here the risk is generally one of misappropriation. Such risks affect pension funds as well as their alternatives, such as insurance companies, even though these may have better safeguards against bankruptcy to the extent that they are usually regulated more strictly. If a fund is managed in-house, or externally but in an autonomous manner, the employer is liable in case it goes bankrupt. If it is managed by an outside insurer, liability would normally be shifted. This is not always the case, however.[3] Failure can be caused by technical or financial factors. Technical risks include those arising from actuarial methods and practices, and from the underlying projections used. The risk of insolvency is reduced by adequate safeguards (government and/or industry supervision), minimum funding regulations, sound actuarial and accounting principles, minimum levels of capital and prudent investment rules.

Financial risks (investments, interest rates, inflation) are inherent to funded systems because those funds depend heavily on the growth of their investments.

When the investment of assets yields a high return, this works to the advantage of the plan's members, producing increased benefits in the case of defined contribution plans, or lower contributions in the case of defined benefit systems, provided a plan is fully funded. In this instance, however, employers are more likely to lower or suspend their contributions ("contribution holiday"), in particular if tax regulations include ceilings on excess funding. On the other hand, when investments perform poorly, funded systems are exposed to major risks, particularly if assets have been invested in speculative instruments. Recent developments in the Asian financial markets have served as a reminder to investors that high yields also carry a high risk, which are in principle borne by employees in the case of defined contribution plans and by the employer under defined benefit systems. The level of risk can be reduced, however, through the use of safeguards, careful asset-liability management or the purchase of annuities (even though this only shifts the risk over to the insurer). Risks can also be lessened if investment policies include basic diversification principles and, in general, if portfolios are prudently managed. An analysis of past experience shows that the investment policies of funds are often sufficiently prudent, at times even more so than is called for by regulations. Besides investment risks *per se*, which are related to the management of portfolios, there are risks linked with interest rates and inflation. Significant changes in interest rates and in the level of inflation have a considerable impact on the funding of pensions, hence on the benefits paid out, in particular if assets are not adequately indexed.

Private pension systems are also exposed to the risk of default by the employer. This risk, which is connected to the performance of companies, is more acute in depressed industrial sectors or in those undergoing restructuring. The bankruptcy of a company causes its fund to be terminated. If the plan is funded, the risk is reduced. Investing substantial fund assets in shares of the company, even in the case of fully funded plans, would considerably reduce benefits under the plan. Such investments may be explicit or implicit in the case of insufficient funding or when the plan is financed by book reserves. The winding up of the employer can shift the burden of the risk to other creditors, to the extent that the fund's claims take precedence over theirs. Insurance carried by the system also shifts the risk over to the insurer. Less serious than default, but also dependent on the profitability of the company, is the risk that an employer cannot afford to continue contributing to the fund as in the past and is forced to reduce or suspend its contributions. In the absence of corrective measures, employees may have to forego some of their expected benefits.

The risk of misappropriation has been well publicised and people have not forgotten recent incidents of this type. Both employers and fund managers can be tempted to misuse funds. Misappropriation refers to unlawful acts that are distinct from simple mismanagement, even though the end-result may be the same. This

risk is present in particular if there is no clear separation between the fund and the company, or a lack of supervision of its management (by the government, employer and employee representatives, actuaries, etc.).

In many instances, employers are allowed a certain leeway and may at times take unfair advantage of it. For example, an employer who increases benefits in the absence of explicit provisions to that effect in the fund's rules can very well suddenly decide to stop. A plan can also expressly provide for this type of flexibility, as in the case of profit-sharing plans in the United States, where employers may vary their contribution at their discretion. As long as employees do not have an irrevocable claim to benefits, the risk always exists that these benefits may disappear or be reduced.

The risk of changes in the status of an employer, as in the case of a company being taken over, must also be considered, since an acquisition can result in the fund being terminated, in violation of the rights of its members. Certain takeovers are motivated by the fact that pension funds have excess reserves (overfunding).

Insured plans are also exposed to many specific risks which can cause their collapse. They include[4] the fact (this applies also for pension funds for similar operations) that:

- More individuals may live to retire than the mortality tables anticipated (mortality risk).
- Those who retire may live longer than the mortality tables anticipated (longevity risk).
- The rate of interest earned on investments may fall below the anticipated level (investment risk).
- There may be defaults in the investment portfolio, or it may be necessary to sell particular investments at a loss.
- Expenses of handling the plan (management, promotion, distribution) may be higher than anticipated.

For example, the longevity risk raises a problem in the case of life annuities. Insurers generally fear that annuities attract a selected clientele of potential buyers who expect to live long. More generally, insurers have to deal with risks related to underestimated life-expectancy tables (even prospective ones). In Germany, for

instance, mortality tables formerly used (which were prospective tables taking into account future increases in life expectancy) no longer reflected reality only six years after they were issued.[5]

Lastly, certain systems have built-in financial risks, as in the case of those funded through provisions set aside in company books and, even more so, private "pay-as-you-go" plans which are not specifically secured.

II. Regulatory measures

Regulations governing the security of private pension systems vary a great deal from one country to another, even though their goals are the same. Whereas the protection of members' interests calls in general for the regulation of plans and funds, protecting the solvency of institutions primarily concerns the funds. However, since many different types of providers are active in the private pension sector, a purely institutional approach would not be practical. It is probably best to look at institutions as well as operations, concentrating exclusively on the pension business of those institutions.

There are several ways of regulating private pension systems, which are at times in conflict with each other. From the point of view of the tax authorities, for instance, it is preferable not to permit excess funding as this removes income from taxation beyond what pension plans actually need. For the supervisory authorities, however, excess funding represents an additional guarantee in the form of additional reserves. The funding of plans can also be considered from a winding-up standpoint or as an on-going concern, which implies different actuarial methods and solvency rules. Accounting principles may not coincide with the concerns of supervisory authorities. Prudential rules can and must be considered in terms of whether the operation has an obligation of result or best effort. A distinction should also be made between private and funded systems, as was pointed out earlier. Public-sector funded plans (such as those in the Netherlands before 1995 and the United States) are not subject to the same rules as private plans.

Regulations related to soundness are being discussed extensively in most OECD countries. It is interesting to note that they are evolving considerably and tend to get tougher, in particular in countries where there are large private systems. This is a consequence of recent instances of bankruptcy but also of the growing financial importance of these regimes. The Employee Retirement Income Security Act (ERISA) in the United States, for instance, in spite of its shortcomings, has become one of the most comprehensive regulations governing defined benefit plans. In the

United Kingdom, the recently enacted Pension Act has raised funding standards. These trends have also been criticised by certain observers, some of whom attribute the shift from defined benefit plans to defined contribution plans in certain instances to the excessive regulation associated with defined benefit plans. Although such effects seem to have been actually observed, there is no single view as to their importance.

There are generally two ways of strengthening regulations. One consists of toughening pension regulations enacted earlier, the other of adapting regulations to those governing insurance, which essentially have the same objectives, in spite of the real differences that exist between the two systems.

Regulations related to the soundness of pension funds must be examined as a whole. All aspects of these regulations cannot be made more effective at the same time, lest the entire system become unmanageable. If the emphasis is placed on licensing, for instance, then supervisory provisions must be more flexible. Likewise, if technical reserves are under strict supervision, there is less of a need for rules on equity capital. This also concerns the scope for ongoing supervision, to the extent that a higher degree of self-regulation may reduce the need for government supervision. Lastly, regulations evolve, adapting to events and reflecting experiences. The following sections look at various ways to lay the groundwork for an appropriate regulatory and supervisory framework for private pension schemes.

A. Licensing

Given the important social, economic and financial role played by pension funds and plans, it seems obvious that they must be subject to prior approval. In a recent Green Book, the European Commission noted that, although there were differences between national pension regulations, all had in common the fact that pension funds are required to be authorised or approved by a competent authority. Authorisation or approval could be dependent on fulfilling certain criteria, such as the honourability and competence of managers of pension funds and custodians/depositories/trustees of the funds' assets and/or the legal form of the fund. It is important that licensing should involve more than simple registration and that it be subject to specific standards such as those referred to above. Other requirements could include that pension plans have disposable reserves, and that they submit an operational plan specifying the actuarial techniques to be used as well as the expected growth of the fund. Other criteria concern legal, accounting, technical and management prerequisites, which in principle could be the same as in the case of insurance companies.[6] Legal principles may include

prohibitions against certain types of pension regimes, such as pay-as-you-go, in the absence of sufficient guarantees (*e.g.* reinsurance).

Licensing can take various forms and does not necessarily correspond to administrative licensing *stricto sensu.* The key point is to assure that the objectives are reached. A distinction must be made between approval for operating and for tax purposes. A plan could be rejected by tax authorities and not qualify for tax exemption, yet be "legal" in other respects. It is very important that members of the plan be familiar with the criteria on which licensing and/or qualification are based.

Licensing must cover all retirement institutions, in particular those not otherwise regulated, but also the pension plan itself, which must in any case be approved by tax authorities as well if it is to qualify for tax exemption. Regulatory authorities ought to consider the evolution that has occurred in the (related) insurance sector, and decide whether prior approval of a plan is necessary, taking into account the specific conditions prevailing in the country concerned, or whether a more limited procedure is sufficient, or even under what conditions approval can be granted *a posteriori.* This assumes in principle the existence of strict rules concerning the regulation and ongoing supervision of institutions providing retirement services. It would seem advisable, under current circumstances, to require that licensing be based on both the fund and the plan, and perhaps of the company itself, in particular if the fund is not a separate entity.

B. Segregation of assets

One of the basic principles of sound pension systems is the requirement that a fund (pool of assets) be separate and distinct from the employer, or else that specific guarantees be provided if this is not the case. The segregation of assets should be irrevocable, meaning that rights by members on the funds (at least up to the full funding limit) should be irrevocable. The principle of separation of assets is applied in most OECD countries. The existence of independent custodian services is also very important in this respect.

However, existing private systems are not always funded in such a way that members have a guaranteed, irrevocable claim on their reserves. In certain instances funds are separate but the notion of an irrevocable claim is missing (*e.g.* German support funds); certain private systems do not have separate assets but are funded from reserves in the books of the employer "book reserve" systems in Germany, Japan, Austria, Luxembourg and Sweden). Financing pension plans by setting aside reserves in the books exposes them to a high risk of insolvency. That is why such plans are required to carry insurance against insolvency in Germany. It is surprising

to note that Japanese lump-sum retirement benefit plans, which are funded out of reserves set aside in company books, are not required to have such insolvency coverage. These systems, with lump sum payments, can result in considerable financial pressure on employers. Since 1976, Japanese employers have been required to secure guarantees for their book reserves with financial institutions. This rule is reportedly seldom complied with, if at all.[7] If financing pensions out of book reserves is authorised, it should at least require certain guarantees, such as insolvency insurance in Germany, partial deposits in Austria or certain types of reinsurance.

Other private pension systems exist which are not funded or for which no reserves are set aside. They are plans financed out of a firm's general budget, in use in Ireland and Norway.[8] In many regards, they are pay-as-you-go systems. Such plans are considered risky, in particular if not backed by sufficient guarantees, and several countries prohibit them. Some special private systems also operate on the basis of pay-as-you-go, but within strict rules and under joint management and government supervision. This is true of French complementary retirement schemes, although the rules governing them make it difficult to put them in a clear category.

Except in the specific case of pay-as-you-go systems, all current private pension systems are funded either with actual funds or in the books only. Requesting funds to be separate legal entities from companies is also a rule that is generally followed. However, neither the setting aside of reserves nor segregation from the company provides sufficient guarantees that plans have adequate resources. Both tend to lessen certain risks associated with the bankruptcy of the employer, however, and are recommended for that reason.

The risk of default by the employer can be assessed differently depending on whether a plan is operated in-house or by an outside entity. In the case of bankruptcy by the sponsor, vested rights are protected whenever the plan is a separate legal entity from the company and is adequately funded. Vested rights can also be fully protected, even in the event of insufficient funding, provided the plan has sufficient rank among the company's creditors, or if it is insured.

Whenever a pension plan is part of a group insurance contract, it is subject to the guarantees required under insurance regulations. These funds are part of the insurance company's technical reserves and are not supported by any specific guarantees, nor do they take precedence over other debts in the event of bankruptcy. On the other hand, pension plans managed by an insurance company may either be operated for the company's own account, in which case they are part of its technical reserves, or they may be *managed* on behalf of third parties, in which case separate assets exist, the role of the insurance firm being limited to the financial, administrative and actuarial management of the plan.

C. Minimum funding requirements

Approaches

A distinction is frequently made between two major approaches to funding rules. The first emphasises the notion of long-term equilibrium and considers the system as an on-going concern. This method takes into account not only past services but also future ones. The approach is sometimes referred to as a financial approach or prospective method. The second looks at a fund from the perspective of its winding up. It primarily considers past services, which may be projected to reflect changes in pay rates (the approach corresponds to the so-called legal approach or retrospective method). It is this second approach that is generally used to measure solvency and, in particular, to set regulatory minima. The development of vesting rights and the strengthening of measures related to portability and transferability are also part of this approach. The two approaches are compatible and minimum funding requirements should not be set at the expense of long-term equilibrium. Asset-liability management techniques (ALM) contribute to this equilibrium.

Funding rules based on the liquidation of vested rights concern past services and, hence, vested benefits. There are several types of them, the main ones being the following:

- ABO, or "accumulated benefit obligation", corresponding to what a defined-benefit pension plan would have to pay out, as measured by vested rights, at current pay rates in the event of immediate termination.

- PBO, or "projected benefit obligation", which corresponds to the ABO, but takes into account estimated final pay rates.

- GBO, or "Guarantee benefit obligation", which corresponds to the ABO, with a minimum benefit guarantee.

- IBO, or "indexed benefit obligation", which corresponds to the ABO, with indexed vested rights.

Opinion is divided on the relative advantages of these minimum funding rules. Some observers believe that the PBO/IBO indicators have a considerable edge over the ABO concept in that they anticipate the burden represented by the system reaching maturity, by spreading its costs (at least in part) over the entire life of the plan.[9] Other authors agree that the PBO is more relevant than the ABO, at least for

plans with benefits based on final or "final average" pay rates, because it takes into account the impact of changes in pay. On the other hand, the issue is not quite as clear-cut in the case of flat benefit plans.[10] Also, the PBO is likely to be less sensitive to changes in interest rates, since changes in the expected inflation rate should be reflected in interest rates as well as in projected pay increases.[11] Furthermore, the approach leads to higher funding standards, a fact which other writers claim makes it unpopular with managers of pension plans and public authorities.[12] Others consider that the PBO should be used only if benefits have to be indexed, as in the United Kingdom.[13]

Developments

Funding rules have changed significantly in certain countries. In the United States, for example, the 1980s saw a shift in accounting emphasis from the entry-age normal cost method (ongoing) to that of projected unit credit (winding-up). This change in accounting practices, which took place following a change in FASB principles, had repercussions for funding rules, which were also amended in practice and designed to bring the two methods into line. This type of change resulted in costs being higher at the end of an employee's working life and lower at the start of it. Subsequently, the 1987 Omnibus Budget Reconciliation Act (OBRA) called for a switch from the PBO to the ABO. This caused a number of employers to take a contribution holiday, since the change meant that plans had excess funds (the funding requested from PBO to ABO reduced the required minimum funding, at least in the beginning of the cycle; in addition to this, overfunding is fiscally limited). This could have damaging consequences in the future when, because of the "baby boom", employers will have to contribute more than they have in recent years. To the extent that this situation is likely to arise at the same time as the social security system reports a deficit, the effect on benefits would inevitably be considerable.[14]

As shown in Table 9, the weighted average funded ratio of ABO for all plans diminished between 1987 and 1993. This decrease was due in great part to the decline of overfunded plans. For their part, the changes in the ratios of underfunded plans between 1987 and 1988 and between 1989 and 1990 were linked to financial market returns. Table 10 shows the same ratios computed on a PBO basis. In this instance, it can be seen that in 1993, on average, plans were slightly underfunded, whereas the degree of underfunding of underfunded plans amounted to 63 per cent. What is especially interesting in comparing the two tables is the difference between the ratios, depending on whether they are based on ABO or PBO. PBO ratios are uniformly lower than ABO ratios, reflecting the projection of future salaries for wage-related plans. The difference is less pro-

nounced in the case of underfunded plans, many of which pay flat-rate benefits and accordingly do not require salaries to be projected, as stipulated in FAS87.[15]

Charts 1 and 2 provide a good illustration of the trends described in the previous paragraphs. The first chart traces pension costs for a 25-year-old employee, over a 40-year period. These costs are expressed as a percentage of wages. The use of PBO instead of the prospective entry-age method reduces costs at the beginning of a career but increases them at the end. The second chart illustrates the shift from PBO to ABO. It can be seen that ABO is lower than PBO until mid-career. OBRA regulations require funding equal to the lesser of 100 per cent of projected obligations or 150 per cent of ABO. For persons under 40 years of age, 150 per cent of ABO is generally less than 100 per cent of PBO. It so happens that, at the time this legislation was passed, the baby boom generation was in this first age bracket. The shift from entry age method to PBO, and then to ABO, meant that many plans became overfunded, encouraging them to suspend contributions. In contrast, the figures show the substantial ABO contributions expected in the scheme's maturation phase, which could trigger the problems referred to earlier on.

In the United Kingdom as well, there was an initial change in the use of actuarial techniques. Heretofore, methods used had been of the prospective kind, but the emphasis today is on the projected unit method.[16] As for funding rules, only those concerning the Guaranteed Minimum Pension existed until recently in the case of plans contracted out, meaning a guaranteed benefit obligation (GBO) and no minimum-funding rules in other instances. The Goode Committee[17] report also noted that certain plans funded on an on-going basis, namely most salary-linked plans, could in fact be balanced according to that approach, yet end up being insufficiently funded at winding-up, especially in the event of a major drop in the market. Among the suggestions made by the report was the implementation of a minimum funding rule based on the cash-equivalent approach (already used in the case of transfers). The government eventually approved the suggestion, as far as minimum funding is concerned, but allowed actuarial computations to use an approach close to that of ongoing. The Act does away with the GMP but maintains the principle of a minimum pension based on a reference plan.

The issue of the adequate funding of plans is particularly acute in the case of defined benefit plans. Defined contribution plans are always technically funded, in theory, although in practice they may not be, especially where there has been misappropriation. In 1995 and 1996, the United States Department of Labor reported 1 300 cases of employers who had misused the funds of "401k" plans covering their employees.[18] Funding regulations, however, primarily

address the technical risk that funds may be short of resources following the bankruptcy of the sponsoring firm, an improper estimate of reserves, or other foreseeable or unforeseeable factors. The purpose of regulation is to require a prudent approach to the funding of plans, to set limits on fluctuations caused by exogenous factors (interest rates, rate of inflation, decline in industrial output, etc.) and mostly to reduce the possibility of improper endogenous conduct.

◆ Table 9. **Ratio of assets to ABO of DB plans**
United States, weighted averages

Year	All plans	Underfunded	Overfunded
1993	1.13	0.69	1.28
1992	1.22	0.71	1.35
1991	1.28	0.69	1.40
1990	1.26	0.71	1.40
1989	1.40	0.78	1.54
1988	1.37	0.78	1.52
1987	1.39	0.73	1.51

Source: Warshawsky.[19]

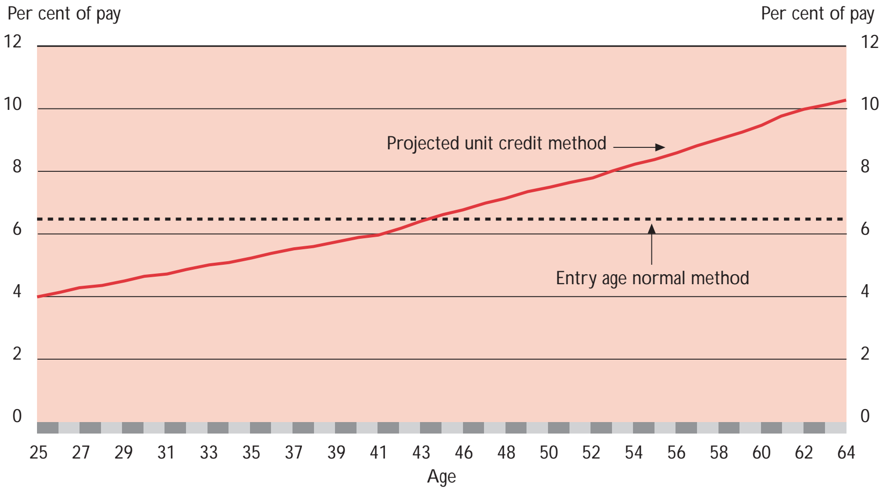
◆ Table 10. **Ratio of assets to PBO of DB plans**
United States, weighted averages

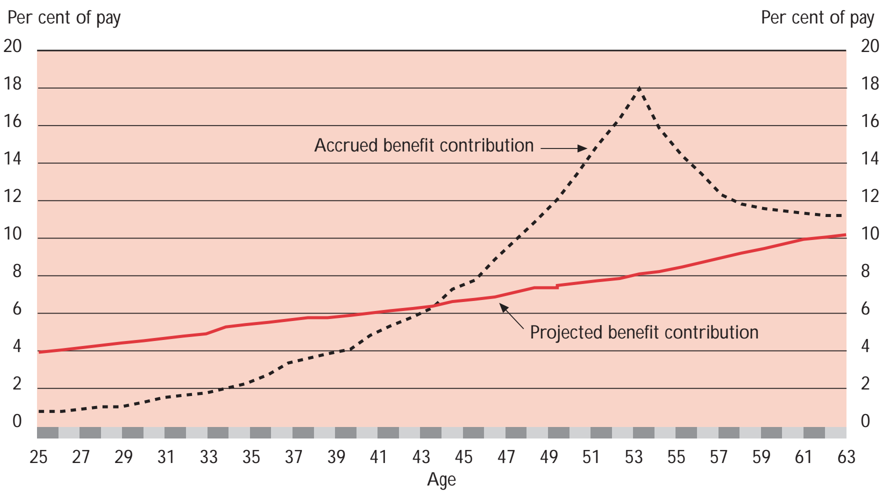
Year	All plans	Underfunded	Overfunded
1993	0.99	0.63	1.10
1992	1.05	0.65	1.14
1991	1.09	0.63	1.18
1990	1.06	0.64	1.16
1989	1.18	0.73	1.27
1988	1.14	0.73	1.24
1987	1.16	0.66	1.24

Source: Idem.

In general, minimum funding rules must be examined from the standpoint of the protection of plan members in the event of a fund being terminated. These rules are different from the methods used by fund managers as part of their long-term management policies. Managers are more likely to emphasise practices which protect the long-term health of funds. Such approaches do not remove the obligation to comply with minimum rules, however.

◆ Charts 1 and 2. ***Pension costs under alternative actuarial cost methods: 25-year-old worker over a 40-year career***





Source: Warshawsky (1997).

◆ Table 11. **Funding regulations**

	Funding requirements	Other regulatory features
Belgium	Yes: ABO based on current pay rates (7% interest rate)	
Canada	Yes	Maximum excess funding: 5% of PBO
Denmark	Not applicable (DC plans)	
Finland		
France	Not applicable	
Germany	Yes for "Pensionskassen" though only up to the PBO	Option of book-reserve funding (tax-exempt pensions taxed at normal rate)
Ireland	Yes, ABO	
Italy	Yes, for insured plans, which must be fully funded based on 15-year projections	
Japan	Optional	Tax exempt up to ABO only (reserves exempted from taxes up to 40% of liabilities)
Mexico	No	
Netherlands	Minimum funding: current ABO value discounted at 4%	Percentage of excess funding depending on the nature of investments and on the volatility of returns min. excess funding: ABO
Norway	Yes, at least equal to the difference between the PBO and the net current value of future contributions, at 3% interest	
Portugal	Yes, ABO	
Spain	Yes, PBO + 4% margin 6% interest rate (nevertheless there is a reduction planned of 1 or 2 points)	
Sweden	For ATO; IBO is funded	Contribution rate adjusted every 5 years to assure funding of IBO
Switzerland	PBO or ABO	Max. excess funding: 5% of IBO or PBO
United Kingdom	Only for the share of social security from which one may be exempted	
United States		Ceiling on excess funding of 50% of ABO higher premiums in the event of underfunding

ABO refers to the accrued benefit obligation; PBO the projected benefit obligation.
Sources: Davis (1995) and OECD.

Insured systems

Under insured systems, provisions must meet several criteria. Provisions, often referred to as "technical", reflect the difference between the discount value (taking into account the time factor) and actuarial value (taking into account the risk factor) of liabilities, for the insurer (benefits) and for the insured (future premiums). They are the product of the levelling and capitalisation of premiums, combining temporary life insurance and deferred capital. In addition, life insurance companies generally give policyholders a share of underwriting and financial profits, in other words surplus revenues. This offsets the impact of prudential rules used to set premiums,

which are generally calculated on the basis of assumptions derived from mortality tables, funding rates, management costs, etc. The method used can be retrospective or prospective.[20] Plan members have a surrender option, a type of vested right, enabling them to obtain a refund of a portion of the reserve that varies in particular according to when the application for the refund is submitted.

When financial managers (other than insurance companies) are in charge of funds, they are not bound by any specific prudential rules with respect to liabilities incurred by the plans, which is understandable, since their responsibilities are limited to pure "financial" management. On the other hand, when this financial manager is an insurance company, it may be required to set aside technical provisions and a solvency margin of one per cent of the provisions whenever the amount earmarked for management fees included in the contract is fixed for a period of more than 5 years.[21] This may be seen as contrasting with principles of fair competition as, for the same activity, two operators may be regulated with very different restrictive provisions depending of their core sector of activity.

Surplus

An important issue in connection with pension systems concerns the ownership of surplus assets, at least in defined benefit plans since, by their very nature, plans with defined contributions cannot be overfunded. Surpluses are generally considered to belong to the employers, as it is their duty to make up for deficits. This is a controversial issue, however, and some people consider that, consistent with the principle of deferred wages, employees also have a claim to this surplus (akin to profit-sharing rights under life insurance). In reality, unless regulations exist regarding sharing of excess funds, they could be shared on the basis of a negotiated agreement. Surpluses can be used in a variety of ways and make it possible for employers to suspend contributions (contributions holidays) or to recapture the assets concerned (reversion). Otherwise, they can enable employees to receive higher benefits or to reduce or even suspend their contributions, while the plan itself can use the surplus to set aside additional free reserves.

How surpluses are generated and used is generally governed by regulations, for tax reasons and to prevent abuses, in particular in connection with the voluntary termination of certain plans. In the United States, for instance, there is a 50 per cent tax on surpluses refunded to employers. If they are used, at least in part, to improve benefits or to set up a replacement fund, the tax is reduced to 20 per cent.[22] In the United kingdom, a 40 per cent tax applies to reversions to employers. The courts have also set restrictions in the case of certain take-overs which are chiefly designed to acquire pension funds at the expense of employees' interests.

Underfunding

Underfunding should be examined from a dynamic standpoint. Even though prudential principles call for a winding-up approach, a healthy fund can sometimes find itself underfunded without its viability being affected. A good example of this is provided by the case of retroactive benefit allocations, which frequently occur when flat-rate benefits are renegotiated. If regulations require that they be fully funded, without amortisation and pre-funding, (as in the United States), unless the fund has sufficient excess funds (which, as we have seen, is generally limited) it is likely to end up being underfunded, even though a measure designed to benefit members has been implemented. The same situation arises in the case of a sudden and significant fall in the value of assets, or if inflation increases (taking the PBO into account would lessen the impact, since inflation would – at least partially – be reflected indirectly in the final pay –projections).

If a plan is underfunded, the employer – and possibly the employees – will be called upon to rectify the situation. This generally takes the form of an increase in contributions, which, depending on the extent of underfunding, may be spread over a specified period of time. In the United Kingdom, for example, under the new rules of the Pension Act of 1995, underfunding of 10 per cent needs to be corrected within five years. If, however, the underfunding is greater than that, it must be rectified within one year. Otherwise, the fund may be liquidated, and the underfunding recorded as a debt of the sponsoring firm.

As a rule, supervisory authorities respond to substantial funding problems by encouraging the pension fund and the employer to take all necessary steps to find appropriate solutions, in particular by requiring a medium- and long-term recovery plan. Voluntary liquidation involves a particular risk in that it may be prompted by considerations that are contrary to the beneficiaries' best interests. In the United States, voluntary liquidation requires that an employer plan be fully funded. Voluntary liquidation of an underfunded plan is possible only in situations of genuine distress, and it requires the consent of the court having jurisdiction over bankruptcy, or that of the (PBGC) Private Benefit Guaranty Corporation.

D. Capital/own funds

In the insurance and banking sectors, business entities are required to have their own capital in order to be considered solvent. Solvency ratios are calculated based on own capital, including the Cooke ratio, the European solvency margin, the American risk-based capital ratio or Canada's Minimum Continuing Capital and Sur-

plus Requirements (MCCSR). Capital provides important protection in the event of financial setbacks, though only ***a posteriori***. Other rules governing the management of assets and liabilities have a more direct impact on the solvency of institutions. In the insurance sector, they include for instance calculation of technical provisions, ***tarification*** (which corresponds to actuarial setting of contribution for pension funds) and investment regulation.

The notion of own capital has a different meaning in private pension systems. For one thing, funds do not have actual shareholders and they are closer to mutual associations. As in the case of those institutions, capital could consist of the "borrowing" which generates the start-up funds of mutual associations. Including items which are not owned by an entity to measure its solvency may appear to conflict with the very notion of solvency. However, to the extent that insured or plan members have a senior claim in the event of liquidation, this debt can be considered as contributing to the soundness of the fund.[23] It must be remembered that the employer stands behind the pension fund and guarantees its ability to pay, at least in so far as defined benefit plans are concerned and in the absence of insurance mechanisms. This guarantee also has to be taken into account in the case of solvency. If need be, the sponsor's assets could serve as collateral, in particular in the absence of special rank in case of liquidation. As for insured funds, they can be exempted from having to guarantee their solvency, subject to certain conditions, whenever this is already covered by the insurer's own guarantees and the regulations applicable to him.

Although pension funds are seldom required to maintain solvency margins, requirements to that effect exist in certain countries. This is the case in Belgium, whenever a fund covers death and disability risks, or – following regulatory proposals – when there is an obligation for results. In this regard, it is important to distinguish between margin requirements according to the type of obligations concerned. The European Insurance Committee has issued several interesting proposals in this respect (see Part f). Whenever there is an obligation to produce specific benefits, many observers feel that the management institution, regardless of its nature, should have enough capital for solvency margins or similar safeguards (see Annex V).

Another method for generating "own capital" for pension funds has to do with the various funding rules used. Pension funds are required to set aside technical provisions corresponding to minimum funding levels, generally corresponding to their accumulated benefit obligation (ABO) or projected benefit obligation (PBO). Yet, the management of assets is based on the long-term prospects of the fund as a going concern. Hence, in practice, funds often set aside reserves for vested benefits as well as for future benefits, on top of legal reserves. Requiring that such additional reserves be set aside in the case of obligations to pay out specific benefits would

significantly improve the partial guarantee provided by minimum funding rules. These supplementary funds, as in the case of the shareholders' capital of insurance companies, should be managed freely and not be restricted in terms of the types of investments that can be made.

As discussed earlier, excess funding often causes conflicts between the objective of solvency, which favours excess funding, and taxation, which opposes it since additional allocations to reserves reduce taxable income. That is why in the United States, funding is limited to 150 per cent of ABO, and in the United Kingdom to 5 per cent of the PBO or of the indexed benefit obligation (IBO). The PBO is also used in Canada to measure the level of overfunding, which allows for a larger amount than in the case of ABO. Reconciling the two objectives seems, however, not only possible but also desirable. It could be achieved by means of a flexible schedule of tax deductibility, for instance.

Besides the creation of capital reserves of the type mentioned above, a minimum guarantee fund can be required under the same system.[24]

E. Calculation methods

The rules referred to in section c) correspond to minimum standards applicable in the event of the termination of plans. Pension funds must meet these standards, and, more importantly, strive at all times to have the financial resources needed to pay out promised benefits. In this regard, a "going concern" approach can best point out how to achieve this. In general, a plan's funding rules determine the contributions that are needed and when they are to be paid in order to yield the corresponding benefits. Several variables must be taken into account, including management fees, pay increases, the inflation rate, the indexing or possible upward adjustment of benefits, mortality tables, the expected return on investments, employee turnover, interest rates, etc. A number of actuarial methods are used for that purpose, the choice between them often depending on the level of minimum funding requirements. Accounting regulations determine how expenses are reported in financial statements.

The rules actually used in order to meet these objectives (minimum funding, long-term financing, accounting) can vary considerably. This, in turn, can hinder disclosure and sometimes cause harmful complications, as well as make it difficult to compare the financial position and performance of funds at the national and, even more, international level. It is however expected, that some major differences exist between the methods used, because each of them corresponds to a different objective. A plan could, for instance, be adequately funded from an on-going point of view, though not from a winding-up standpoint, as was noted earlier.

It would be beyond the scope of this report to provide a detailed analysis of all of these technical rules. Yet some of their features can be described here, along with their relevance for the issue of fund solvency.

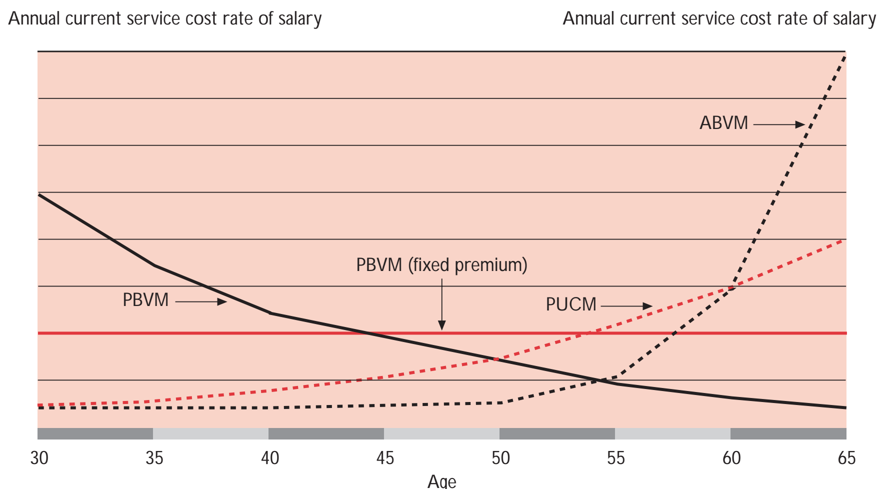
The main *accounting* standards currently in use are the American FAS87 and the British SSAP24. Both take into account possible volatility in employer contributions as a balance-sheet item rather than as an information note. A basic difference resides in the fact that SSAP24 does not seek to put restrictions on the actuarial methods used, provided that they are based on an on-going approach,[25] whereas FAS87 calls for the projected-unit method. The two accounting principles also use different approaches to deal with existing surplus funds. As for valuation rules, FAS87 calls for the use of market value (or of "fair value", which is equivalent to market value if an active market exists for the asset). Accounting standards have considerable influence on pension funds regulations.

More recently, the IASC reviewed its accounting standards calling for valuation methods based on a winding-up approach, as in the case of the new version of IAS19, currently being finalised. After noting that the old IAS19 allows accountants to use both accrual (winding-up approach) and projected (ongoing approach) methods, the IASC Board deemed that, for reasons of comparability, the accrual method should take precedence, together with the "projected unit credit method".

Actuarial methods play a key role in ensuring the soundness of pension plans, as much from the standpoint of winding up as from that of ongoing concern. Minimum funding rules are based on several pertinent actuarial methods, such as the unit credit method in the case of the ABO and the projected unit credit method in the case of the PBO. Rules based on the total duration of employment make use of the individual level premium (at current pay), entry-age or else, in a more global approach, the aggregate-cost method, which takes into consideration the estimated final pay as well as group funding factors.

Chart 3 illustrates the theoretical trend in the annual cost of an employee under a number of different actuarial methods. ABVM corresponds to the Accrued Benefit Valuation Model (Unit Credit). PUCM corresponds to the Projected Unit Credit Method. The two PBVMs correspond to the prospective methods, with or without fixed premiums. While it would be beyond the scope of this report to analyse these methods in greater depth, the chart highlights the differences between them, and their repercussions on how costs are booked. The trend for the Unit Credit Method used to calculate ABO (ABVM) is the reverse of that of the prospective method (PBVM).

◆ Chart 3. ***Trend of annual current service cost rate of salary***



Source: FEE Survey, 1995.

It can be seen that both accounting standards and minimum funding requirements tend to favour a winding-up approach. This should at least improve the comparability and compatibility of methods currently in use. It can also be expected that the PBO standard will be used increasingly if the projected unit credit method of accounting gains recognition as the new international standard.

Without going into detail, the importance of *amortisation* rules and their impact on funding regulations should also be noted. For example, the system applicable in Ontario, Canada, sets relatively stringent standards requiring that initial unfunded liabilities be amortised over 25 years, whereas subsequent unfunded liabilities resulting from changes in plans or the addition of new plans must be amortised over 15 years. Unfunded liabilities resulting from low returns on investments must be amortised over 5 years. Conversely, in the United States, amortisation rules are somewhat more flexible, as shown in the following table:

An accurate estimate of *interest rates* is an essential factor in funding rules as it strongly influences the actual effect of these rules on the funding of the funds (following the interest rates chosen, ABO can for instance have similar results than a PBO). History has shown that many underfunded plans in the United States had

◆ Table 12. **Amortisation periods for unfunded liabilities**
United States

Initial unfunded liability, plans established after 1 January 1974	30 years
Plan amendments	30 years
Actuarial gains and losses	
Single-employer plans	5 years
Multi-employer plans	15 years
Changes in actuarial assumptions	
Single-employer plans	10 years
Multi-employer plans	30 years

Source: McGill, Brown, Haley, Shieber, 1997.

used excessively high interest-rate assumptions in discounting their future obligations. The importance of interest rates becomes apparent when considering that a one per cent change in the rate of interest causes a change of 20 to 25 per cent in funding costs.[26] Thus, the 1996 PBGC report pointed out that the marked rise in the funding deficits of company plans (from $31 billion to $65 billion) was due in large part to a drop in interest rates in 1995 (from 7.15 per cent at the end of 1994 to 5.3 per cent at the end of 1995). This consideration has led several countries to adopt rules on the use of interest rates in actuarial procedures. In the Netherlands, for instance, the interest rate has been set at 4 per cent.[27] In Japan, nominal return on assets is assumed to be 5 per cent. In Belgium, the discount rate is 7 per cent, while its ceiling has been set at 6 per cent in Spain.[28] Other countries, such as the United Kingdom, do not fix pre-established rates of interest.

Principles used for the *valuation* of assets make up a key component of funding rules, since they concern the relation between assets and actuarial obligations required to adequately fund a plan. From a prudential point of view, a prudent valuation of assets is advisable. Using purchase values does not necessarily guarantee this, since it can lead to an overvaluation of assets if restatements are not taken into account (including through provisions for depreciation). This is all the more problematic when funds are not sufficiently guaranteed, as in the case of systems based on book reserves in Japan, which are however using this valuation method. As for market value, it can lead to an overestimation of either underfunding or overfunding. The value of assets must be estimated in accordance with the methods used in the case of liabilities, seeking to achieve a minimum matching. But whereas shares, for example, are frequently assessed at their market value, the liabilities of defined benefit plans are often estimated by actuarial methods that may have little to do with these values.

Rules governing the valuation of assets vary considerably from one country to another. Those most frequently used consist of evaluating pension fund assets

at their "fair" market value. They yield a clearer picture of the financial position of plans than methods based on purchase or book value. On the other hand, market values are more volatile, although the long-term management of funds can compensate for this. It can be difficult, however, to estimate market value when the assets in question are not traded on a regular basis on capital markets.

Generally applied valuation practices may be in conflict with certain regulations. For example, using market value, which takes into account unrealised as well as realised gains and losses, could, in certain countries, be contrary to the basic principle of the fourth European accounting directive, which holds that only realised gains and losses should be taken into account.[29] The approach suggested by the European directive for the accounting practices of insurance companies is interesting in this respect, since it accepts that the value of assets may be based on either their purchase or their market value, but requires that a note to the balance sheet gives their value as computed by the alternative method (and allows also for balance sheet correction through depreciation reserves). This provides maximum disclosure while allowing insurance companies a certain amount of flexibility with respect to their financial statements. Valuation rules for pension funds could be based on a similar approach. It should be noted, however, that some accounting standards call for a single method, in general that of market value.

There are other methods for estimating the value of assets, including one used until recently in the United Kingdom. It is based on an actuarial estimation of projected revenues from assets. It evens out long-term income and at the same time allows for a degree of short-term fluctuations in returns from investments. This has enabled British pension funds to own more stocks than pension funds in other countries. However, the Pension Act of 1995 introduced a minimum funding requirement based on fair market value. Combined with the requirement to index benefits, this could cause changes in the investment portfolios of British plans. In the Netherlands, the fact that stocks held are stated at their market value, and that the current value of liabilities is calculated using a fixed interest rate, seems, following some observers, to have had a strong impact on the investment policies of Dutch funds.[30]

Finally, a series of techniques has been developed for asset *management*. They evidently contribute significantly to the soundness of plans and can also provide ways of dealing with certain financial risks to which pension funds are exposed, for example by immunisation techniques or, more generally, through the implementation of asset-liability management methods (whose costs are however highlighted by some observers).[31]

F. Supervision

Today, private pension regulations are frequently contained in a special, comprehensive law (as in the case of the United States, the Netherlands, Spain, Austria, Ireland, Italy and the United Kingdom), whereas in other countries they are found in several legal provisions. Even when a special law exists, significant amendments have often been made to regulations. Private pension systems are also subject to tax, social and financial legislation. This makes private pension regulations generally appear complex, or at least more so than those governing insurance companies, which have furthermore been substantially harmonised in certain regions, such as the European Union.

Supervisory bodies

Pension funds are also under the control of various regulatory authorities. The first of these are the tax authorities. Funds often enjoy significant tax benefits, based on certain criteria which tax authorities must be able to verify. Other official agencies with regulatory and/or supervisory authority over pension funds include those in charge of financial markets and, in particular, for several countries, of the insurance sector. This is explained by at least two factors:

- In the case of supervision by financial market authorities: pension funds are major institutional investors (second only to insurance companies in OECD countries as a whole), which handle considerable amounts of money and whose activities have a significant impact on financial markets.

- In the case of supervision by insurance regulators: The manner in which pension funds are organised and operate is similar to that of insurance companies, in particular mutual associations, even though there are a number of major differences between the two; insurance companies play an important role in the pension sector either as direct financial vehicles (accounting for some 20 to 30 per cent of managed assets), through group insurance plans, or as investment and/or benefit managers, or else in connection with individual retirement plans (third pillar), where they play a leading role.

The table below provides an overview of regulatory and/or supervisory authorities for pension funds and insurance companies in OECD countries. It shows that, in a majority of Member countries, pension fund regulatory and/or supervisory authorities are the same as those of insurance companies.

Modalities of supervision

The large number and wide variety of pension plans makes their supervision problematic. In the United States, the Department of Labor reportedly examines only one per cent of all documents concerning pension funds.[32] On the other hand, the fiscal authorities conduct supervision, at least partial, of plans, in spite of their large number, in particularly those which benefit from substantial tax exemptions. Here, too, many practical problems arise.[33] Supervision can, however, be differentiated depending on exposure to risks. Many plans are very small (in Australia, for example, 85 per cent of all superannuation funds have fewer than 5 members). In any event, it is essential that the authorities in charge of supervising funds and/or pension systems be given sufficient resources and capabilities to exercise effective supervision. How adequate such supervision actually is can only be measured in terms of the government's objectives and the supervision methods selected. In consideration of the difficulties in effectively supervising funds in certain countries, the authorities have the option of relying upon the self-regulating role of fund trustees and other participants in pension plans, namely employers and employees, as well as using existing information, for instance from rating agencies. Development of self-regulation is of particular importance in the pension field since it allows for increased responsibility of the actors involved as well as a lightening of the burden of governmental control (which has to face the above mentioned problems).

Supervisory oversight, when it exists, consists primarily of a review of accounting and financial statements, though there can also be on-site audits. The role of supervisory authorities with respect to pension funds or insurance companies may focus on the following major issues:

- ensuring compliance with legal obligations, including applicable laws, company bylaws and general terms and conditions;
- financial control: equity, technical provisions, investments, monitoring of activities, auditing of interim and annual financial reports;
- actuarial examination of contributions rates and technical or mathematical provisions;
- management supervision: qualifications and reputation of managers, standing of principal shareholders and of the employer;
- economic review: market conditions, statistical data.

In the case of pension systems, supervisors must first consider pension plans, since they form the basis of pension funds. A pension plan corresponds to the contractual

◆ Table 13. **Regulatory and supervisory authorities**

	Insurance regulatory and supervision authorities	Pension funds regulatory and supervision authorities
Australia	Insurance and Superannuation Commission	Same
Austria	Federal Ministry of Finance, V/D Division	Same, V/14 Division
Belgium	R: Ministry of Economic Affairs or Insurance Supervisory Office S: Insurance Supervisory Office	Same
Canada	Office of the Superintendent of Financial Institutions	*Federal level:* Pension Benefits Standards Division, of Financial Institutions Office of the Superintendent of Financial Institutions *Provincial level:* Superintendents of Pensions, Pension Commissions, etc.
Czech Republic	R: Ministry of Finance S: Insurance Supervisory Authority	R: Same S: Dept. of Supplementary Pensions and Insurance
Denmark	Financial Supervisory Authority	Same
Finland	Ministry of Social Affairs and Health	Same
France	R: Ministry of Finance S: Insurance Control Commission	R: Ministry of Finance (Treasury Division) and Ministry of Social Affairs S: Pension Funds Control Commission (consisting of representatives of the Insurance Control Commission and of the Control Commission for Welfare and Mutual Associations)
Germany	R: Federal Ministry of Finance S: Federal Insurance Supervisory Office (BV)	Same (whenever there is a legal obligation to provide benefits)
Greece	Ministry of Development	Same
Hungary	R: Ministry of Finance S: State Insurance Supervisory Authority and Supervisory Authority of Insurance	R: Same S: Supervision of Voluntary Mutual Benefit Funds
Iceland	R: Ministry of Commerce S: Insurance Supervisory Authority	R: Ministry of Finance S: Banking Supervisory Authority
Ireland	R: Ministry of Enterprise and Employment (Insurance Division)	S: Pension Board; Irish Insurance Federation (for pension products offered by insurance companies)
Italy	R: Ministry of Industry (Insurance Division) S: ISVAP	R: Supervisory Committee for Pension Funds
Japan	R: Ministry of Finance (Insurance Dept.)	Ministry of Health and Welfare (for employee pension funds and "National pension fund") Ministry of Finance (for "Qualified Retirement Pension Plan" and for financial institutions managing the investment of funds)
Korea	R: Ministry of Finance and Economy S: Insurance Supervisory Board	Same
Luxembourg	Insurance Commissioners' Office	Same
Mexico	R: Ministry of Finance S: National Commission of Insurance and Bonding	National Commission of the Savings System for Retirement
Netherlands	R: Ministry of Finance S: Insurance Supervisory Body ("Verzekeringskamer")	R: Ministry of Social Affairs and Employment S: Same
Norway	R: Ministry of Finance, Ministry of Health and Social Affairs, Insurance and Securities Commission S: Banking, Insurance and Securities Commission	Same

◆ Table 13. **Regulatory and supervisory authorities** *(cont.)*

	Insurance regulatory and supervision authorities	Pension funds regulatory and supervision authorities
Poland	R: Ministry of Finance S: State Insurance Supervisory Authority	No private pension fund system at this time (regulations in progress)
Portugal	Insurance Institute	Same
Spain	Ministry of Finance (Insurance Division)	Same
Sweden	R: Ministry of Finance S: Financial Supervisory Authority (Finansinspektionen)	Same
Switzerland	R: Federal Ministers S: Federal Office of Supervision of Private Insurance	S: same (for independent private pension institutions) and Federal Office of Social Insurance and local social insurance authorities
Turkey	Under-secretary of the Treasury's Office (General Directorate of Insurance) (inspection by the Insurance Supervisory Board)	No private pension systems at this time (regulations in progress)
United Kingdom	R: Department of Trade and Industry	R: Dept. of Social Security, Occupational Pensions Regulatory Authority and various other institutions, including DTI S: Financial Institutions Supervisory Authority
United States	R: Dept. of Commerce National Association of Insurance Commissioners (NAIC) S: State Commissioners	R: Dept. of Labor, Pension and Welfare Benefits Administration (PBWA)

R = regulatory authority.
S = supervisory authority.

provisions covering the rights and obligations of all parties, whereas a fund is the reserve created to meet the objectives of the plan. The control of plans is mainly legal and fiscal; the examination of the funds is financial and actuarial. The supervision of plans and funds can be lightened reflecting their large number, resulting in *ex post* controls replacing prior examinations. This corresponds to a recent trend in the review of insurance products, although for entirely different reasons.

One of the decisive factors in supervising the solvency of pension systems concerns whether the system has an obligation for results or best efforts. An obligation to achieve results exists in the case of defined benefit plans and these evidently require tighter regulation than do systems where the obligation is only to make best efforts. This regulation can take various forms, such as those that require a minimum level of equity (with the related problems referred to above), minimum funding rules, specific actuarial methods or solvency insurance. Co-operation between supervisory authorities of OECD countries should be in general strengthened in order to identify the operational supervisory modalities set up within the OECD area and to draw appropriate conclusions. It appears essential that reform of pension schemes refers to the experience of other countries. This co-operation would also result in greater comparability of information and would contribute to making these schemes more transparent.

Management

Besides purely financial controls, supervision also concerns the qualifications and good standing of fund managers, as well as their independence. Qualifications are particularly important when regulations emphasise the fiduciary responsibility of trustees and limit the direct role of regulatory authorities. Fund trustees are often appointed by the employer (sometimes without in-depth professional criteria), with the risk of conflict of interest that this implies. There are conflicts not only between the interests of the employer and of employees covered by the plan, but also between those of current and retired employees. In many countries, attempts have been made to reduce the scope for conflicts between employers and employees by including employee representatives on the supervisory board of funds. Improved financial disclosure and information on the activities of funds also helps members have more control over their plans.

Substantial civil and criminal penalties may be imposed on managers who fail to comply with the rules governing independence. Restrictions on investments in the employer's own business also provide important safeguards. Thus, in the United Kingdom, the 1995 Pension Act contains several measures relating to these issues and emphasises the key role played by trustees in protecting pension funds. In general, fund managers have to obey a number of mandatory rules or general guidelines. General guidelines cover basic principles, leaving managers free to implement them with some degree of flexibility.

Existing direct or indirect rules aimed at ensuring, or at least promoting, qualified and independent management may be supplemented by requirements that the technical aspects of funds be handled by qualified professionals, such as actuaries. Their help is indispensable for the proper choice of computation methods. They can also play a valuable role in internal supervision, and that role can be further enhanced by requiring actuaries to report any serious instance of mismanagement to the authorities. The development of an actuarial profession and of actuarial qualification standards can therefore contribute to the improved protection of pension systems. The use of professional qualified bodies and custodian services can in general be recommended. In this respect, independent auditors play an especially important role in light of the operational difficulties related to the governmental control in the case of multiple and complex plans.

Different supervisory approaches

The supervision of pension funds is closely related to that of insurance companies, and in certain countries the two are similar, yet there are many differences between them. The insurance industry, especially in Europe, considers that regulations governing the insurance business are more stringent that those applicable to pensions funds.

One trade association (CEA: Comité Européen des Assurances) has recently submitted a proposal for reforms aimed at resolving what it regards as a discriminatory situation. The suggested approach is functional and argues in favour of regulations based on the nature of pension systems rather than on which institution provides them. The table below summarises the various suggestions made by the association.

The European Commission, aware of this view and of genuine regulatory differences between the two types of pension providers, has included four options for possible reforms in its 1997 Green Paper:[34]

- Option I: make funds of pillar 2 schemes subject to the rules currently applied to group life schemes.
- Option II: adapt the current rules on the solvency margin for group life schemes to the framework currently applied to pillar 2.
- Option III: define new common EU standards for both pillar 2 schemes and group life assurance.
- Option IV: accept the differences that currently exist because *de facto* they do not lead to significant distortions of competition.

A competition factor arises in addition to concerns about the protection of plan members and the solvency of pension funds. All three issues seem to point to the need for a reform of pension systems in certain countries, aimed at reinforcing regulations. The discussion could also call for the removal of certain controls applicable to insurance companies, which governments may reconsider following a comparative review.[35]

Although both types of institution are faced with similar issues in their pension business, many differences still separate them. They include, for instance, the fact that:

- insurance companies provide financial services; pension funds purchase such services;
- a pension fund has no shareholders – instead, it has an employer (with an obligation to achieve certain results, in the case of defined benefit plans, not undertaken by the fund), whereas an insurance company has shareholders, and a mutual insurance company has neither an employer nor shareholders;
- both use long-term actuarial methods with many variations, even if life insurance companies are increasingly selling short-term products (at least in the 3rd pillar);

◆ Table 14. **Summary table of prudential standards to apply to pension business**

	Risks assumed by the retirement institution		Prudential standards to apply to the retirement institution[1]				
Case	Technical risks	Financial risks	Reserving	Solvency margin	Investing assets List	Investing assets Spread	Matching
A. The retirement institution takes on a firm commitment undertaking							
A.1. Self-administration	YES	YES	Third Life directive or alternative specific standards	4 per cent or alternative specific standard	Third Life directive or alternative specific list	Third Life directive or specific alternative rules	80 per cent or specific alternative rate
A.2. External financial administration[2]							
A.2.1. Without financial guarantee	YES	YES	Third Life directive or alternative specific standards[3]	4 per cent or alternative specific standard[3]	Third Life directive or alternative specific list	Third Life directive or specific alternative rules	80 per cent or specific alternative rate
A.2.2. With financial guarantee of a duration identical to pension liabilities	YES	NO	Third Life directive or alternative specific standards[4]	Solvency margin adapted (to be determined)[5]	Third Life directive or alternative specific list	Third Life directive or specific alternative rules	80 per cent or specific alternative rate
A.3. Subscription of an insurance contract	NO	NO	No for the retirement institution; provisions are constituted by the insurer	No for the retirement institution; the insurer must have a 4 per cent margin	Third Life directive, to be complied with by the insurer	Third Life directive, to be complied with by the insurer	80 per cent to be complied with by the insurer
B. The retirement institution takes on a best effort undertaking[6]	NO	NO	Third Life directive or alternative specific standards	0 per cent?	Third Life directive or alternative specific list	No rule	No rate to be complied with
C. The group insurer							
C.1.Takes on a firm commitment undertaking	YES	YES	Idem A.1.	Idem A.1.	Idem A.1.	Idem A.1.	Idem A.1.
C.2.Takes on a best effort undertaking	NO	NO	Idem B	Idem B	Idem B	Idem B	Idem B

1. Only prudential standards relating to pension business are dealt with in this document to the exclusion of those applicable to benefit scheme business.
2. If such financial administration is done by an insurer, he must set up "technical provisions" when he guarantees total management costs for a duration of over 5 years. The other managers do not have to reserve.
3. If such financial administration is done by an insurer, he must set up a 1 per cent solvency margin when he guarantees total management costs for a duration of over 5 years. The other managers are bound by general conditions in the regulations arising out of the "Banking" or "Investment Services" directives.
4. If such financial administration with guarantee is done by an insurer, he must set up technical provisions. The other managers do not have to reserve.
5. If such financial management with guarantee is done by an insurer, he must establish a 4 per cent solvency margin. Other possible managers – who do not have to link their financial management to a long-term guarantee – have the general constraints of the regulations arising out of the "Banking" or "Investment Services" directives.
6. The type of management adopted by the pension institution (self-administration, external financial management, taking out an insurance contract) does not matter.

Source: CEA (1995).

– benefits guaranteed by a fund can be based on final pay, whereas those provided by insurance companies are often "nominal";

– a contractual relationship exists between an insurance company and a policyholder in respect of the insurance, while it is between the employer and the employee in the case of pension funds;

– pension funds are non-profit entities, which is not the case of insurance companies (except, in principle, for mutual insurance companies).

It is important to underscore that the above differences apply in the case of pension funds and insurance companies which operate as business entities. They are much less evident when a fund is compared with a mutual association, and when defined contributions plans are concerned.

As for regulations, it can be seen that, in certain countries, rules governing pension funds correspond to those applicable to insurance companies (the Netherlands, Belgium, France, Portugal, Spain). This does not hold true in some other countries, where regulations, although based on similar principles, have developed along different lines (United States, United Kingdom, Japan). Problems raised by varying degrees of regulation applicable to various service providers are similar to those in other sectors and at the international level. Based on existing principles in this regard, it would seem that efforts should not be directed at developing uniform regulations, but rather at identifying existing common regulatory principles, implemented in a different way; and at eliminating or reducing differences which are not justified from a prudential standpoint and hence unfairly discriminate against a category of providers. The Governments should consider the need to develop further the functional approach. Taking account of institutional characteristics, this approach should allow for a substantial reduction of current differences in regulations applied to the provision of similar products but by different providers.

G. Investments

i) Regulations governing investments

All Member countries regulate investments by the main operators in private pensions business, *i.e.* pension funds and insurance companies, although to different degrees. Investments by insurance companies are generally governed by more stringent regulations than those of pension funds.

Often in the latter case, a list of admitted assets is established by the authorities, and investments must also be made in compliance with rules regarding the diversification, spread, liquidity, localisation, currency matching and assets/liabilities matching. Although OECD countries no longer set floor levels, they often set ceilings on specific types of investment, in order to promote risk spreading and diversification. Some problems can arise in connection with the implementation of diversification policies, as investment categories are sometimes excessively broad in scope and include assets with widely differing degrees of risk (*e.g.* within listed stocks or bonds). Investments must frequently meet requirements in terms of matching with respect to currencies, and assets and liabilities. While no one challenges the need to take maturities into account, currency rules are more open to question concerning their principle and the level usually applied (80 per cent). Many countries find it sufficient to require application of the prudent-man rule, letting fund managers decide what this entails.

Investment regulations of insurance companies make a distinction between technical provisions and own funds. Investment of own funds, at least that in excess of minimum capital levels, is generally unregulated. Finally, regulations concern not only assets but also their valuation method. The value of assets, as noted earlier, plays a key role in determining the solvency of a firm (see also Annex VI).

Regulations governing the investment of pension funds is often based on similar principles, even though the methods used differ. A distinction must first be made between the types of plans concerned. Defined contribution plans, in the opinion of some specialists,[36] require tighter regulations than defined benefit plans, for which the prudent-man rule may be sufficient. Others claim that this rule can also be applied to defined contribution plans.[37] Even if employees bear the investment risk in these latter plans and if their exposure is greater owing to the relative lack of financial disclosure, the investments of these plans tend to be very prudently oriented and are therefore not likely to require stringent regulations. Another distinction must be made between the case where the employer has a "result" obligation and the case where he transfers it to an insurance company through group insurance.

The choice of so-called risk instruments, such as shares as opposed to bonds, does not necessarily depend on the type of plan concerned, contrary to what might be assumed on the basis of whether or not an obligation exists to produce certain results. Pension funds in the United Kingdom have invested large sums in stocks, in spite of the fact that most of them correspond to defined benefit plans. One of the factors that may explain this practice in the United Kingdom is that an "ongoing" actuarial approach is used there, which makes it possible to

◆ Table 15. **Maximum percentage that can be invested by insurance companies in a given class of investments**

	Domestic shares (quoted)		Domestic shares (unquoted)		Foreign shares		Foreign bonds and other securities		Real estate		Loans (mortage)		Loans (non-mortage)	
	Non-life	Life	Non-life	Life	Non-life	Life	Non-life	Life	Non-life	Life	Non-life	Life	Non-life	Life
Australia	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Austria	30a	30e	5	5	30a	30e	–	–	30a	30e	–	–	0	0
Belgium	–	–	10a	10e	10a2	10e2	103	103	104	104	–	–	55	55
Canada	25a	5-25e	25a	5-25e	0	5-25e	0	10	5-25e	–	–	5	5	
Denmark	40a	40e	10	10	40a,d	40d,e	–	–	–	–	–	–	10	10
Finland	50	50	10	10	25l	25l	100k	100k	40	40	70	70	50m	50m
France	65a	65e	65a	65e	65a	65e	–	–	40	40	10b	10f	10b	10f
Germany	30	30	10	10	6	6	5	5	25	25	50a	50e	50a	50e
Greece	30a	30e	30a	30e	30a	30e	–	–	40	50	10b	10f	10b	10f
Iceland	40a	40e	10b	10f	40a	40e	10b	10f	–	–	–	–	10b	10f
Ireland	50-60a	55e	20	2.5	50-60a	55e	–	–	60	25	15-30b	10	15-30b	45
Italy[7]	20	20	20	20	10	20	30	50	35	50	20	50	0	0
Japan	30a	30e	30a	30e	30b	30f	30b	30f	20	20	55c	–	55c	10
Luxembourg	10	10	5	5	5	5	10	10	40	40	10a	10e	0	0
Mexico	30	30	30	30	30	30	30	30	40	40	40	40	40	40
Netherlands	–	–	10	10	–	–	–	–	–	–	10	10	5j	8j
Norway	35a	35e	35a	35e	35a	35e	30b	30f	30b	30f	30b	30f	30b	30f
Portugal	25a	25e	10	10	25a	25e	60	60	35	45	10	25	10	25
Spain[6]	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Sweden	25a	25e	25a	25e	25a	25e	–	–	25b	25f	25b	25e	10	10
Switzerland	30a	30e	30a	30e	25b	25f	20b	20f	–	–	–	–	0	0
Turkey[8]	10	25	10	1	–	–	–	70o	10	15	20p	5	5p	–
United Kingdom	–	–	10a	10e	–	–	–	–	–	–	10a	10e	10a	10e
United States (New Jersey)	–	15e	–	15e	h	i	h	i	5	10	40	60	–	–
United States (Delaware)	40a	1	40a	1	5	5	5	5	25	25	50	50	–	–

◆ Table 15. **Maximum percentage that can be invested by insurance companies in a given class of investments** *(cont.)*

Note: Maxima in respect of foreign investments are separate from the currency matching requirements for foreign liabilities.
a. Maximum for these classes of investment combined (Non-life).
b. Maximum for these classes of investment combined (Non-life).
c. Maximum for these classes of investment combined (Non-life).
d. If unquoted then ten per cent.
e. Maximum for these classes of investment combined (Life)which would constitute one single investment.
f. Maximum for these classes of investment combined (Life).
g. Maximum for these classes of investment combined (Life); only for unqualified non-mortgage loans.
h. Investment must not exceed the value of outstanding policies in the foreign country.
i. Five per cent in the aggregate; two per cent in foreign countries, except for "qualified foreign investment" defined in the statute.
j. Unsecured loans.
k. From OECD countries?
l. From non-OECD countries.
m. Secured loans.
o. Percentage of technical provisions.
p. Other securities.
1. 250 per cent (at market value) of the capital and surplus.
2. Unquoted shares only.
3. Only State and enterprise bonds outside of area A (see the Directive 89/647/EEC).
4. Investments in a single real estate or in several real estates close to one another.
5. Five per cent with a maximum of one per cent for one single loan.
6. The investments in securities (unquoted) and loans (non mortgage) may not exceed 10% as maximum.
7. Columns 1, 2 and 3, shares and other assimilable securities are admitted up to maximum ceiling of 25 per cent of technical provisions of non life business and 35 per cent of life business. Column 4: Bond and assimilable securities are admitted up to a ceiling of 85 per cent in non-life business and without any ceiling in life business. Column 5: Real estate assets are admitted up to a maximum ceiling of 40 per cent of technical provisions, both in non-life and life business. Columns 6, 7: Mortage loans with interest or loans with banking or insurance guarantees, or other adequate guarantees provided by territorial local communities are admitted up to 20 per cent of technical provisions, both in non-life and life business.
   N.B. It is important to underline, from these remarks, that in the Italian regulation, the investment ceiling applies only to broad categories of assets (bonds, shares, real estate, etc.) but not (with some exceptions) to specific classes of assets. This objective is to avoid undue limitations of the strategic investment choices of insurance companies. In addition to ceilings, spread limits exist for certain investment categories as for instance shares/bonds issued by one issuing company.
8. For non life, percentage of net worth; for life percentage of total technical reserves.

Source: OECD Policy Issues in Insurance, Paris 1996.

◆ Table 16. **Regulation governing pension funds investments**
Summary of pension asset regulations

	Portfolio regulations
Belgium	No more than 15 per cent in sponsor, 40 per cent limit on real estate, 10 per cent in sight deposits, advance notice deposits and one month time deposits.[1]
Denmark	Max. 40 per cent in "non-gilt edged" assets, for example shares. "Gilt-edged" assets are for example government and mortgage credit bonds.
France	50 per cent minimum of ARCCO and AGIRC assets have to be invested in EU public bonds, and 33 per cent max. in loans to initiators. Insured funds to be at least 34 per cent state bonds, maximum 40 per cent property and 15 per cent Treasury deposits. No foreign assets.
Germany	Guidelines: 30 per cent max. in EU shares, 25 per cent in EU real estate, 6 per cent in non-EU bonds, 20 per cent in foreign assets, 10 per cent self-investment.
Ireland	Schemes must diversify prudently, any self investment to be declared.
Italy	The Decree of the Ministry of Finance No.703 of 21 November 1996 on investments of pension funds grants in general an important autonomy for these funds to implement their investment strategies. There are ceilings for investment in some categories, as: investment in liquid assets, admitted up to 20 per cent of the funds; shares in closed funds up to 20 per cent of the funds; shares and bonds non quoted on regulated stock markets in EU countries, in the United States, in Canada or in Japan up to ceiling of 50 per cent, if they are issued by OECD Member countries.
Japan	50 per cent minimum in bonds, 30 per cent max. in shares, 20 per cent max. in real estate, 30 per cent max. in foreign assets, and 10 per cent max. in the assets of one single company.
Netherlands	5 per cent max. self-investment, whereby free reserves can be added up to a total limit of 10 per cent; "prudent man rule"
Norway	Maximum 35 per cent in shares; maximum 30 per cent in loans that are not issued or guaranteed by: the government or municipalities; financial institutions or EU credit institutions; and investment in real estate other than negotiable property.
Portugal	30 per cent to be invested in government bonds, maxima of 50 per cent real estate, 15 per cent self investment, 40 per cent equities and bonds not listed in Portugal.
Spain	10 per cent of the financial assets of Fund may not exceed 5 per cent of the issuer; 90 per cent in listed securities, deposits, real estate or mortgage loans; 1 per cent in shareholder's account or on the money market.
Sweden	The majority of investments should be made in bonds, loans, and retroverse loans to contributors.
United Kingdom	5 per cent max. self-investment; "prudent man rule"concentration limit for defined contribution plans.
United States	"prudent man rule".

1. To be revised.
Source: Davis (1995), EFRP, OECD, Commission Européenne, Retraites complémentaires dans l'Union Européenne, 1994.

offset fluctuations in stock prices more easily. On the other hand, the fact that British insurance companies have large share investments is primarily accounted for by the absence of a guaranteed minimum surrender value of policies. The analysis of investment portfolio of major United States pension funds does not seem either to indicate clear distinction of investments according to types of plans.[38]

One principle found in most investment regulations governing pension funds concerns restrictions on investing in the sponsor's business. Limits on such

investments seem to exist in most countries. In the United States, defined benefit plans may not invest more than 10 per cent of their funds in this way; in the United Kingdom, the ceiling is 5 per cent; it is 15 per cent in Belgium and 10 per cent in Switzerland. Some countries appear to prohibit this type of investment (Denmark). The rule does not apply to all plans. For example, an amendment to ERISA concerning 401(k) plans exempts them from the 10 per cent ceiling, so that they may retain their profit-sharing features designed to promote productivity. In the case of book reserves, self-investment is in some sense the rule and it constitutes one of the main reasons why these plans became popular in Germany and Japan after the Second World War. Both pension funds and insurance companies are subject to restrictions insofar as long-term borrowing is concerned.

The debate on investment regulations focuses today on such major issues as the respective advantages of the prudent-man rule versus a "quantitative" approach, as well as on the matter of foreign investments.[39] It is difficult to establish which approach rule is best, as this depends on a number of variables. For instance, the prudent-man rule can be more readily implemented in countries where effective internal controls already exist. In general, this principle is in use mainly in Anglo-Saxon countries (United States, Canada, Australia, United Kingdom, Ireland), as well as in the Netherlands, whereas most Continental European countries and Japan set quantitative limits on investments. The enclosed tables provide additional information on this issue. Principles currently under consideration would tend to give more responsibilities to managers, while allowing them greater flexibility. On the other side, actual investments almost never attain regulatory ceilings, although this observation must be qualified, as it only pertains to composite averages.

ii) Foreign investments

Provisions of investment regulations for pension funds and insurance companies concern also portfolio investments in foreign securities. Although most OECD countries have relaxed those rules in recent years, a whole range of measures still restricts foreign investments, either directly or indirectly. There are three types of regulations of this kind, *i.e.*[40]

- the imposition of a maximum limit to the shares of foreign assets in the institutionís portfolios (including technical provisions), which is lower than the limit applied to comparable national assets;

- the obligation to hold a minimum percentage of national assets (*e.g.* governmental bonds), in the global asset portfolio of the institution (including

technical provisions), that would be higher than the percentage applied to comparable foreign assets;

– a requirement that there should be a degree of currency matching, namely that a given portion of the assets and the corresponding liabilities be in the same currency. This provision is designed to reduce currency risks but it also means that institutions have to hold assets in their own home currency, at least up to a given percentage of their liabilities. This can create an obstacle to the diversification of international portfolios, depending on the portion of assets concerned, the relative weight of local-currency obligations in the institution's overall liabilities and the availability of foreign investment instruments in the local currency of the institutions concerned.

Although many OECD countries have already removed most of the direct restrictions referred to above, a great number are still applicable in the case of currency matching. The implementation of the "Euro" currency within the European Union should however allow for a substantial withdrawal of limitations existing within this geographical area.[41] In addition, various forms of incentives to invest domestically as well as localisation requirements related to documents of title to foreign assets are still on the books in several countries. The requirement that securities be held in paper form is becoming obsolete, with the growing practice of holding them in electronic book-entry form gaining wide acceptance. Continued implementation of this rule could constitute a serious problem for fund managers.

Initially, all of these provisions were justified – or at least motivated – by considerations of prudence. Of these, the two most important considerations were:

– the need to shield pension plan members from foreign-exchange risks (assuming that there is agreement that the credit risk of foreign investments is comparable to that of domestic investments);

– the possibility of a system-wide risk, in the event of default by institutional investors, which would cause a domino effect throughout the financial system.

There are several arguments in favour of a lowering of controls on foreign investment, at least within the OECD.[42] For one thing, returns on internationally diversified portfolios, with a better balance between country and currency risks, have proved more stable than non-diversified portfolios; in addition, institutional investors now have access to effective instruments for hedging their foreign-currency positions. For another, institutional investors tend to be relatively conservative

precisely in those countries where no restrictions exist on international portfolio investments and where only prudent-man rules apply.

Lastly, potential system-wide risks are probably lower, all other things being equal, in the event of the bankruptcy of an institutional investor rather than that of a financial intermediary – a bank or a brokerage house – with a more extensive business, for a given level of assets. The supervision of financial intermediaries does not generally require that their business be examined in detail, but rather that the combined risks to which their business is exposed be analysed to ensure that they are able to handle such risks and have sufficient capital.

Progress has been achieved in the past ten years or so within the OECD in terms of information on foreign investments and, more generally, on the capital markets, their regulations and supervision, of other Member countries, which have become more sophisticated in many countries. This is the perspective from which choices should now be made between prudential considerations and requirements to diversify and optimise investment portfolios, meaning between prudence and return on investments.

H. Insolvency insurance

Insolvency insurance is designed to shield pension plans and their members from the risk of bankruptcy by the sponsor in the event that a plan is insufficiently funded. Such insurance is generally provided by a government agency, as it is assumed that the market cannot provide it, at least not at an affordable price. Not all observers agree on this point.[43] It should also be noted that, in Germany, the PSVaG is a mutual insurance company that purchases annuities from a consortium of private-sector insurance companies.

Thus far, however, the market has not really been tested, since premiums have not been set to reflect the actual risk of insolvency by employers. The system creates cross-subsidies between financially sound firms and those in difficulty, causing a reduction in economic efficiency and a redistribution effect, which could be lessened if underfunded plans were made to pay higher premiums (as has been the practice in the United States since 1987). The practice also has shortcomings in terms of moral hazard: a fund may make rash decisions because it knows it is insured, or fail unnecessarily – considerations which have led the United States authorities to put strict limitations on the voluntary liquidation of funds and to set a ceiling on coverage, forcing plan members to act as co-insurers. It can also cause an adverse selection process to occur: if premiums were to rise significantly, sound businesses would tend to leave the system, for instance by switching to defined contributions,

◆ Table 17. **Restrictions on portfolio investment abroad**

	Insurance companies	Private pension funds
Australia	None. With respect to non-life insurance, assets the value of which exceeds Australian liabilities by A$ 2 billion (or to the level of the statutory solvency margin if this is higher) must be held within Australian jurisdiction. New standards are being developed with respect to life insurance.	None
Austria	Assets covering technical reserves for contracts denominated in Austrian currency must normally be located in Austria.	None
Belgium[1]	Assets constituting the technical provisions must be located in Belgium or in EC countries.	Asset representatives of the funds liabilities must be located in Belgium and, upon several conditions, abroad.
Canada	None.	Employer-sponsored pension plans and other retirement saving plans are generally subject to a 20 per cent limit on foreign property.
Czech Republic	Assets constituting the technical reserves must be invested in the country.	All assets must be invested in the country.
Denmark	None	None
Finland	Technical reserves must be composed of real estate situated in Finland, securities issued by residents or assets guaranteed by residents.	Existing decree: No more than 5% can be invested in assets denominated in foreign currency. Up to 20% of funds may be invested in assets in EU states (exception: 10% in real estate and 30% in debts by or guaranteed by EU states, deposit banks or insurance companies)
France	None *vis-à-vis* OECD countries. Documents of title to capital assets must normally be located in France.	At least 50% of assets must be invested in securities guaranteed by the French state (AGIRC/ARRCO regimes).
Germany	Up to 5% of the premium reserve stock and 20% of the remaining restricted assets may be invested abroad. In addition, specific ceilings range from 5% to 20% depending on the foreign assets concerned.	6% limit on foreign asset holding.
Greece	EC legislation applies	Pension funds are allowed to place up to 20% of their assets with domestic unit trusts, with those trusts being allowed to invest in foreign assets.
Iceland	Life: full prohibition for assets issued by non-residents.	(Civil servants'), nurses', farmers' and seamen's funds: full prohibition for assets issued by non-residents.
Ireland	None	None
Italy[2]	EC legislation applies	None
Japan	30% limit on investments in assets denominated in foreign currency.	Private funds: 30% limit on investments in assets denominated in foreign currency. (Public-sector employees funds: depends on the fund agreement of association).
Luxembourg		

1. To be revised.
2. For contracts included in the Italian portfolio, insurance companies may localise the assets corresponding to technical provisions in one or several EU Member states. Upon request from companies, ISVAP may authorise the localisation of a part of the assets in a non EU Member state. Criteria vary according to assets and countries: quotes on non quoted securities may be located in any of the EU country, although more strict restrictions apply for non OECD countries.

◆ Table 17. **Restrictions on portfolio investment abroad** *(cont.)*

	Insurance companies	Private pension funds
Mexico	Only investment in securities registered in the Registro Nacional de Valores e Intermediaros is permitted.	Only investment in securities registered in the Registro Nacional de Valores e Intermediaros is permitted. Private pension plans must invest 30% minimum in securities issued by the Federal Government and the rest in securities approved by the National banking and Securities Commission, in accordance with the insurance tax law.
Netherlands	None	None
New Zealand	None	None
Norway	None	None
Portugal	Assets must be located in EC countries.	Up to 40% of total assets may be invested in EC securities.
Spain	None *vis-à-vis* OECD countries. Documents of title to capital assets must be located in Spain.	None vis-à-vis OECD countries. Documents of title to capital assets must be located in Spain.
Sweden	No more than 20% of technical reserves may be invested in foreign securities and foreign-currency denominated securities (unless necessary to cover liabilities in the same currency). Assets constituting the technical reserves must be localised in Sweden.	Limitations range from 5% to 10% depending on the pension funds and the assets concerned.
Switzerland	Technical reserves only Assets in foreign currency: 20% Debt instruments issued abroad: 30% Shares issued abroad: 25% Real property abroad: 5% Global limit: 30%.	Assets in foreign currency: 20% of total assets Debt instruments issued abroad: 30% of total assets Shares issued abroad: 25% of total assets Real property abroad: 5% of total assets Global limit: 30%.
Turkey	Technical reserves: – cannot be invested in foreign assets, – can be invested in domestic financial assets, which are specified by the Undersecretariat of Treasury, denominated in foreign currency. Other than technical reserves: no ceiling or restriction.	Private pension funds are not regulated.
United Kingdom	None. Documents of title to capital assets must be held in the United Kingdom or, if they cover liabilities in foreign currencies, in the countries of those currencies. (The localisation rules will be amended with the entry into force of the EC Third Directives.)	None
United States	No federal legislation. State level regulations: – Aggregate limits on investment in foreign securities are within a range from 0 to 10% (the median point being 5%), depending on the state and the quality of the asset concerned. – Investment in Canada is treated more favourably.	Funds under ERISA: none. The indices of ownership of plan assets must normally not be maintained outside the jurisdiction of the district courts of the United States.

◆ Table 18. **Regulations on investment: currency matching**

	Insurance companies	Pension funds
Australia	None for the time being.	None
Austria	For technical reserves, at least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets.	None
Belgium	At least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets.	Representative assets must be denominated in the currency of denomination of the liabilities or in a convertible currency.
Canada	None	None. The "prudent person" approach applies.
Denmark	At least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets. For EU currencies, up to 50 per cent of liabilities can be covered by assets in ECUs.	Same provisions as regards insurance companies.
Finland	None	No more than 20 per cent of assets may be in other currencies than FIM or not protected against exchange rate risks.
France	At least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets.	None
Germany	A minimum of 80 per cent of assets must be invested in matching currency in case the premium reserve stock concerns no more than 5 per cent and the remaining restricted assets no more than 20 per cent of the obligations in a certain foreign currency.	A minimum of 80 per cent of assets must be invested in matching currency in case the premium reserve stock concerns no more than 5 per cent and the remaining restricted assets no more than 20 per cent of the obligations in a certain foreign currency.
Greece	EC legislation applies.	None
Iceland	None	None
Ireland	At least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets.	None
Italy	80 per cent of liabilities in a given currency must be covered by assets in the same currency, except when assets in such currency do not exceed 7 per cent of those in other currencies, or liabilities are related to third country currency, or investments in that currency are regulated by *ad hoc* provisions, or there are restrictions to transfer of this currency or if this currency is, for other reasons, not considered as adequate for coverage of provisions.	33 per cent.
Japan	Only for reserves of foreign-controlled insurers for outstanding claims in respect to contracts in yen concluded outside of Japan.	30%
Luxembourg	At least 80 per cent of liabilities in any currency must be matched by assets in the same currency.	None
Mexico	n.d.	n.d.
Netherlands	At least 80 per cent of liabilities in any currency must be matched by assets in the same currency.	None

◆ Table 18. **Regulations on investment: currency matching** *(cont.)*

	Insurance companies	Pension funds
New Zealand	None	None
Norway	At least 80 per cent of liabilities in any currency must be matched by assets in the same currency.	At least 80 per cent of liabilities in any currency must be matched by assets in the same currency.
Portugal	At least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets.	None
Spain	At least 80 per cent of liabilities in any currency must be matched with assets in the same currency, except if the assets to be held in that currency do not exceed 7 per cent of total assets.	None
Sweden	None.	None
Switzerland	At least 80 per cent of liabilities in any currency must be matched by assets in the same currency.	None
Turkey	In life insurance, at least 50 and no more than 150 per cent of the liabilities in each currency can be matched with assets in the same currency or with assets indexed to the same currency.	Private pension funds are not regulated.
United Kingdom	At least 80 per cent of liabilities in any currency, when exceeding 5 per cent of total obligations, must be matched with assets in the same currency. With the entry into force of the EC Third Directives, the matching rules will also apply to business carried out outside the United Kingdom and reinsurance.	None.
United States	No federal legislation. State-level regulation: at least 10 states prevent foreign investment in excess of what is needed to match liabilities vis-à-vis foreign countries.	None

Source: OECD, EU *Green Book.*

and the insurance system would end up with a higher proportion of bad risks. A massive increase in premiums could also contribute to further destabilising firms in difficult positions and cause some of them to fail.

These insurance schemes exist in certain countries, such as the United States, Germany, Japan, the United Kingdom (only recently, and in case of fraud only), Sweden, Finland,[44] Canada (Province of Ontario) and Switzerland. The systems have generally been set in place to face crisis situations (in the United States and Canada, and recently in the United Kingdom in connection with the Maxwell affair).

Any examination of insolvency insurance must take place within the overall context of pension fund regulations. This "insurance of last-resort" could turn out to be superfluous and counterproductive if effective preventive safeguards exist, in

particular to the extent that it may instil the wrong incentives. Yet it can be very useful whenever the risk of insolvency is not curtailed by regulatory limits. The system of book reserves provides a good example of this and would seem to call for insolvency insurance. Increasing the degree of insurance against a risk because it is quantitatively and qualitatively prevalent does not prevent the risk of being realised, however, and only shifts the burden of coverage, adding a moral hazard factor. It would seem advisable, therefore, to set a priority on the implementation of preventive regulations. If this proved not to be practical, then consideration could be given to insolvency insurance, with the hazards it entails, and only under certain conditions. Thus, the setting of a ceiling, or even of a deductible amount, may reduce the moral hazard and promote better prevention by implicitly creating a situation of coinsurance.

I. *Disclosure to members*

A recent study by the European Federation of Accountants (FEE) has concluded that, in most European countries examined,[45] the employer is not required to disclose information either regarding the valuation method used for a pension fund's assets, or on whether the plan is adequately funded, even though that information can be obtained directly from the funds.[46] However, in Ireland and the United Kingdom, the SSAP24 standard makes it mandatory to include this information in company financial statements. The lack of disclosure requirements in other countries may seem surprising, since employers are responsible for funding the pension funds, even though they are separate entities from the company (and except insurance schemes).

That same study has found that only in some countries does the law require that copies of the annual financial statements of pension funds be distributed to their members. Considered together, the preceding two observations would seem to indicate that there are situations where plan members may not have detailed access to information about the management and performance of funds. The greater a fund's exposure to risks, the more important it is to share information with its members. Plan members should as a matter of course be provided with information on eligibility requirements, portability, vesting, the plan's financial position and its funding, as well as be able to obtain other information on request. The Goode report suggests, for instance, that employees ought to have access to the following data prior to joining a plan and while they are members of it:

- a statement of whether the scheme is registered with the Regulator and its registration number;
- a full statement of the nature of the pension promise, detailing contributions payable, scheme benefits and how those benefits are secured;

◆ Table 19. **Solvency insurance**

Creation	Germany 1974	Canada 1974	United States 1989	Japan 1961	United Kingdom	Sweden
Insolvency of the sponsor and under funding	Yes, in the case of book reserves	Yes	Yes	Yes, for employee protection funds.	Yes, but only in cases of fraud	In case of book reserves
Voluntary liquidation	No	No	No, but it was so in the past	No	No	
Market premiums or prices (with insolvency risk)	No	No	No	No	Fees collected after a bankruptcy	
Ceiling	Yes, three times the social security ceiling	Yes (CN$ 9 000)	Yes (US$29 000 per year)			
Exclusions	– Unearned benefits – Some benefits earned the previous year	– Certain early retirement benefits. Supplementary benefits granted in last three years.	– Unearned benefits – Special supplement for early retirement. – Part of recent supplementary benefits			
Prudential feature:						
– Minimum funding rules	No (for book reserves)	Yes	Yes		Yes	
– Asset valuation methods	Market/ historical value	Market value	Market value	Book value	Actuarial/market values	
Issues under discussion	Increase ranking in winding-up	Consideration being given to dropping this insurance	– Solvency – Privatisation – Amendments			
Form	Mutual insurance		Public sector			Mutual insurance

– a statement of the scheme's past policy with respect to pension increases, which should be contained in the annual report;

– details of trustee arrangements;

– a general statement of the powers to make scheme amendments, the use of surplus, the application of funds in the event of winding-up and the steps to be taken if the scheme has a deficiency;

– a statement of the members' rights to further information and how this can be obtained.

The issue of disclosure to members raises the broader one of "pension contracts" and of the nature of information given to members joining a pension system. It is particularly important that members receive ample information whenever funds are not closely monitored by supervisory authorities and fiduciary responsibility for the operation of the fund rests with its managers. Any loosening of direct government controls over plans must be contingent upon members having access to adequate information about their plan.

J. Tax issues

Tax regulations applicable to private pension systems are of key importance. Retirement policies advocated by governments have often provided grounds for granting tax advantages designed to create incentives for employers and employees to join private plans. But exemptions only apply within the scope of such policy objectives, so that there are ceilings on tax-deductible contributions as well as limits on excess funding, notwithstanding the fact that overfunding is beneficial from a prudential standpoint.

Tax regulations affect all three main financial stages of pension plans – namely contributions, funding and benefits. Major differences exist between national tax laws, in particular with respect to the taxing of contributions and benefits. In general, employer contributions are tax deductible provided that a plan qualifies under existing regulations. Also, in general, the tax burden does not shift to the employees, meaning that contributions are not treated as indirect income on which employees must pay taxes. Employee contributions are also generally tax deductible. Certain ceilings apply to deductions, either at the level of the contributions themselves or else indirectly on the amount of benefits towards which contributions are made.

As far as benefits are concerned, however, they are in principle taxed as regular income, in any case when paid out as an annuity. Lump sum payments are treated

differently according to such considerations as the purpose for which they are used and the government's policies in the area. The rule on income from investments and capital gains is that they are not taxable as long as the fund complies with applicable regulations.

As far as pension fund operators are concerned, there are sometimes differences in their tax status in respect to contributions (taxes on insurance policies) as well as to income from investments (operators taxed differently) and to benefits (although more rarely), depending on whether the operator is a pension fund or an insurance company. These differences raise certain issues, even though they may be justified by such considerations as the profit-making nature of insurance companies.

Tax benefits granted to pension systems can be very costly. The expected growth of private pensions could substantially raise this cost and hence offset the positive impact that pension plans may have on budget deficits. In any event, tax treatment has a decisive impact on the types of plan that are chosen, as well as on fund management.[47] In this regard, it is important to reconcile regulatory objectives, and to get a comprehensive grasp of all of the various provisions that might be applicable to pension plans and pension funds, in order to minimise potential conflicts.

◆ Table 20. **Details on requirements to provide information to beneficiaries (situation in Europe)**

	Details on requirements to provide information to beneficiaries
Austria	Information about the notified claims for old age and surviving dependants' and disability benefits has to be given to the beneficiary, and to members of pension funds and supervisory board and to the sponsoring employer, information on the respective investment and risk pools. Financial statements of the fund have to be available six months after the end of the fiscal year.
Belgium	The annual accounts are provided to the members of the general meeting of the legal entity, who are not necessarily the beneficiaries. Accounts of ASBL/VZW have to be deposited to the national Bank of Belgium.
	The requirements vary depending on the rules of each fund.
Denmark	Statement of present value of pension obligation is annually sent to policyholders' pension beneficiaries.
France and Switzerland	Financial statements are available to members.
Germany	Information is not considered necessary, because support funds are secured against insolvency by the pension benefit guarantee corporation and "Pensionskassen" cannot go bankrupt, because they have to obey strict rules of the Supervisory Board for Insurance Companies. However, members of pension funds and support funds are normally given information about the financial status of the fund as well as the pension plan document outlining the benefits.
Ireland	Schemes must diversify prudently, any self investment to be declared.
Italy	It is not required by law and the supervisory body has yet to issue rules for this purpose.
Luxembourg	Members are only informed if the employer voluntarily provides them with a copy of the annual accounts of the pension scheme.
Netherlands	The statements are provided on request of the beneficiaries and are available at the Insurance Control Board after October 1 of the Year following the reporting year. A Bill was presented to Parliament aimed at giving all those in active employment an annual summary and the balance of accrued pension rights.
Norway	No requirements regarding beneficiaries in an occupational scheme. Private scheme : annual statement for the insurance policy.
Spain	Certification of contributions during each calendar year, and the value of the "consolidated right" (vested right) at the end of the year. On the other hand, the members or beneficiaries have access to the accounts by application to the Control Commission.
Sweden	It is not required by law. The beneficiaries can apply to the board of the pension fund, as this is made up of half employees and half employers. In addition, it is always possible to apply to the county administrative board, which receives all annual reports within six months.
Switzerland	Required by the law. The members/beneficiaries can consult the annual financial statements and have to be informed on their own personal insurance situation.
United Kingdom and Ireland	In Ireland and the United Kingdom, requirements provide for disclosure to the members of a comprehensive range of information such as eligibility, conditions of membership, calculation of contributions, type and level of benefits and conditions for entitlement, the trust deed and rules and an annual report. The time limit in Ireland is nine months, and in the United Kingdom one year, after the year end of the scheme for accounts to be available to the members or beneficiaries. In the report, trustees must account for matters such as the collection of the contributions due, the investment of the scheme's resources, payment of benefits and the actuarial valuation of the assets and liabilities. They must as well disclose whether more than 5 per cent of the scheme's assets are invested in the employer's business or in any one shareholding or property.

Source: FEE (1995).

◆ Table 21. **Taxation**

	Employee's contribution	Employer's contributions	Interest and capital gains	Tax treatment of benefits Lump sum and annuities
Australia	Tax deductible only within certain limits			
Austria	Tax deductible only within certain limits		Taxable at a rate of 15%	Flat taxation of capital; margin
Belgium	Tax deductible	Tax deductible	Annual tax of 0.17% on assets of self-administered funds and withholding tax of 15% or 25% on realised income; for insured funds, 9.25% tax on allocated profits, which is not tax-deductible for insurers.	Rate taxation of annuities
Canada	Tax deductible (up to a certain ceiling)	deductibles(up to a certain ceiling)	Non taxable	Benefits taxable under income tax
Denmark	Tax deductible	Tax deductible	Interest and capital gains on bonds aretaxable, dividends and capital gains on shares are exempted	Lump sum taxed 40%; annuities taxed as personnel income
Finland	Employee's and employer's contributions to supplementary pensions schemes are tax deductible up to a certain ceiling.			Benefits taxable under income tax
France	Tax deductible	Tax deductible		Benefits taxable under income tax
Germany	Tax deductible only within certain limits	Employer contributions to book reserves are tax deductible for employers; however, employer-paid insurance premiums are considered as an indirect salary and thus constitute taxable income for employees (the employer can assume this tax liability on a flat-rate basis, which is currently set at 22.9%)	Non taxable	Benefits partially taxable, at a low rate, depending on funding methods
Greece	Tax deductible	Tax deductible		Benefits taxable under income tax
Ireland	Tax deductible	Tax deductible		Lump sums not taxed pension benefits taxable under income tax
Italy	Tax deductible	Tax deductible		Benefits taxable under income tax
Japan	Tax deductible	Tax deductible	Pension assets taxed	Benefits taxable under income tax, except for the capital which is not taxable
Luxembourg	Tax deductible up to a certain ceiling	Comparable with provisions in effect in Germany		Benefits taxable under income tax

◆ Table 21. **Taxation** *(cont.)*

	Employee's contribution	Employer's contributions	Interest and capital gains	Tax treatment of benefits Lump sum and annuities
Netherlands	Tax deductible	Tax deductible	Non taxable	Benefits taxed
New Zealand	Taxed	Tax deductible but subject to a 33% withholding tax, which is paid by the employer		Lump sums not taxable pension benefits deductible
Norway	Tax deductible for schemes that comply with fiscal regulation	Tax deductible	Exempted for schemes that comply with fiscal regulation	Benefits taxable under income tax
Portugal	Taxed	Taxable for the employee, except if they have no vested rights in the event they leave their employer early		Partially or fully deductible up to a set ceiling
Spain	Tax deductible (up to a certain ceiling)	Tax deductible	Pension assets non taxable	Benefits taxable under income tax
Sweden	Tax deductible	Tax deductible	Taxable	Taxed at low rate
Switzerland	Tax deductible	Tax deductible	Non taxable	Taxed
United Kingdom	Tax deductible	Tax deductible	Non taxable	Benefits taxed, except for the capital that is not taxable
United States	Tax deductible for 401(k) schemes and defined contributions schemes such as IRAs	Tax deductible		Benefits taxable under income tax

Source: OECD and different authors (Turner, Davis, Gollier, Pestieau).

Annex I

Remarks on the organigramme[48]

The following remarks are related to the organigramme mentioned in paragraph 61 of the report.[49] Annex II provides other details related to this issue. The organigramme is illustrative and does not pretend to cover the pension systems existing in all OECD countries. Several systems exist in OECD countries which do not fit within this structure. Other systems are at the boundary between second and third pillar, for instance systems with mandatory contributions by the employees to independent pension administration bodies. The objective is rather to highlight the diversity of second pillar schemes. The organigramme is based on an institutional approach. The alternative functional approach is based on pension plans, *i.e.* defined benefits plans, defined contributions plans and hybrid plans, which all have multiple sub-categories. Both are relevant for the establishment of an adequate regulatory framework and should be used in a complementary way, even if the institutional approach seems to get some priority in consideration of the current regulatory structure of OECD countries in the field of private pensions.

Basically, the main private regimes of the second pillar can be split between the funded regimes (the most common) and pay-as-you-go regimes. The latter which are quite rare, in the private field, include the overheads systems, retirement indemnities and several "quasi-public" schemes. The overheads systems allow for benefit payments directly from the overheads of the company. They are quite risky in a private framework and are, for this reason, often prohibited. Retirement indemnities are also paid from the general overheads of the company. They have a less systematic nature and are still commonly used in several countries. Finally some systems are at the boundary between private and public schemes, as the French system, and are enshrined in a specific regulatory framework. These quasi-public systems could be considered more as an extension of the public schemes than an independent substitute or complement to them.

Some other regimes are noted here for reference. They are the public funded schemes, which have several common characteristics with private schemes but which are generally covered by special regulation. These regimes are generally civil ser-

vants schemes. Some of them manage very huge amount of assets and behave as private funds. Other schemes with a special nature correspond to schemes set up at a sectoral level through an agreement between trade unions and employers of the sector. They also have special features. Finally, the regimes grouping the self-employed often also comply with special regulatory provisions.

In the funded regimes, the funds are usually legally separated. This is not however always the case. For instance, book reserves are generally considered as funded regimes, where the funds are not separated legally from the assets of the employer who keeps the control on these funds. In some cases, parts of the funds may be deposited into bank accounts or guaranteed through insurance (which will be treated as an asset by the employer in the balance sheet). In such cases, the employer keeps control but the related assets are identified/designated.

The main category of second pillar regimes groups the funded regimes with funds legally separated. Usually the beneficiaries have irrevocable rights on these funds. This may not be the case, as in the case of support funds in Germany. The funded and separated regimes are usually managed outside the employer. Sometimes, the externalisation is not clear-cut, for instance when the employer is represented in the management board or can influence directly or indirectly the decision taken by the managers of the fund.

The external regime can take the form of a pension fund, which can be self-administered or managed by specialised institutions, such as insurance companies, banks or investment companies. The management by these institutions will generally concern the assets portfolio of the fund; it may also be related to the provision of the benefits, which can be administrated by an insurance company. It can also concern specific administrative services. Pension schemes can also be based on group annuities contracts or group deposit administration contracts (possibly with constitution of secured assets, as in the separate account system) with a insurance company. Such insured funds account for about 30 per cent of pension funds.

Annex II

Private pension systems and their financing typology[50]

Once a decision has been made as to the "design" of a private pension system, a financing support has to be selected for it. As part of the financial package which the system requires, who is going to handle the process from point A where plan members contribute, to point R where they receive the benefits guaranteed by the system? Hereafter we shall limit our discussion to those systems – the most common ones – set up by companies on behalf of their employees. A distinction must be made here between internal and external supports.

In the case of internal supports, the company makes no payment outside its accounts prior to the time when benefits are to be paid pursuant to the plan. It is often said, in such cases, that these supplementary pensions are not funded. Then there are external supports for which amounts required for funding are paid out by the company to an entity which subsequently pays the benefits called for under the plan.

First internal support: overhead expenses budget

The first internal support is the payment of pension benefits directly out of the company's budget for overhead expenses (the so-called "pay-as-you-go" practice). In this instance, a company pays benefits directly from the time of an employee's retirement or death, to that employee or to his or her beneficiaries. Payment can be made on the basis of internal company rules, either known to employees or not, or else on a case-by-case basis depending on merit or needs. Operating in this manner is considered very hazardous:

- for the company which does not set aside any reserves for the future, even though the cost of the system is expected to increase with time and could pose a threat to the future financial soundness of the business;
- for shareholders, as the profit and loss account does not reflect the accrued cost of supplementary pension benefits; dividends paid out today are there-

fore artificially high and biased in favour of current shareholders, at the expense of future ones;

– for retired as well as current employees, who could lose everything if the company went bankrupt. Most countries have prohibitions against such pay-as-you-go systems.

Second internal support: book reserves

The company and its shareholders can reduce the risks from pension costs being charged to overhead expenses by setting aside reserves in the books. The amount of such provision is computed by actuarial methods that are often the subject of detailed regulations. The properties of such a system are as follows:

– For the company, the setting aside of reserves against pension benefits payable in the future makes it possible to absorb increases in costs, while the corresponding funds are available to the company and can be invested in its operations. Everything proceeds as if the long-term provisions were added to the company's equity, enabling it to fund its pension commitments. The interest paid on those provisions is equal only to the technical interest that serves as an underlying basis for the provisions and is generally below the long-term rate on money markets. In most cases, the provisions are in fact invested in the company, the return on them being that on the company, which usually makes it possible to cancel out the consequences of inflation, especially in countries where it is rising rapidly.

– For the shareholders, fairness is restored between the generations.

– For retired and current employees, on the other hand, the situation remains unchanged in terms of the risk that the company could go bankrupt; they have no special privileged claims on assets and are considered to rank equally with other creditors, after the tax authorities and social security administration, etc., meaning that they stand little chance of recovering a significant share of their pension benefits in the event of bankruptcy.

It is possible to reinsure commitments entered into by a company under this kind of system. If an employer chooses to do so, it can secure a group policy from an insurer, providing coverage for the commitments made with respect to employees, either in whole or in part. The company, rather than its employees, is the beneficiary of such a policy. Normally, the company thereby will book in its assets a claim against the insurer equal to the amount of the actuarial reserve set aside by the

latter. This approach enables the company to cut down on liquidity problems caused by the payment of benefits, although it does not seem, on the other hand, to provide employees with improved guarantees in the event of bankruptcy. Yet the safeguarding of vested pension rights, as that of the benefits themselves, has been the subject of a European directive (80/987 EEC).

In order to reconcile the interests of employers and employees and the requirements of the European provisions, some countries have introduced a reinsurance system covering companies' solvency in the event of bankruptcy, for those setting aside pension provisions in their balance sheet. Under that system, employers pay annual premiums to an insolvency reinsurance pool, based on reserves that are or should be set aside in order to pay future pension benefits to current and future retired employees, whenever no such provisions have been made outside the company.

Individual pension guarantees

A company may wish to provide special pension benefits to some of its employees or officers, on a purely individual basis. This is sometimes handled through a personal pension guarantee in the form of an agreement between the company and the employee or officer in question. Under that guarantee, the company promises to pay benefits upon retirement or in case of death prior to retirement and, in some instances, of disability. Normally the company should set aside a reserve in its books. It can avoid having to do so, however, by taking out an individual insurance policy on its own behalf, as in the case of the reinsurance of provisions, for the same benefits as those promised under the pension agreement.

Self-administered pension funds (first external support)

The first external support is the self-administered pension fund. It is a legal entity distinct from the employer itself, generally a non-profit company or a similar legal entity, or trust on the Anglo-Saxon model. The employer calculates – or has an actuary calculate – what reserves are required to provide for future benefits, and allocates to the pension fund, which is independent of the company, the corresponding amounts, taking into account interest income by the fund and benefits payable.

Because self-administered pension funds exist independently of the company, the employees of the latter are protected in the event of it going bankrupt, with the only effect being that no more money is paid into the fund, while amounts already in the fund cannot be reclaimed by the company.

It is evident that this type of organisation necessarily involves both fixed and variable administrative expenses. Among fixed expenses are those incurred for starting up the fund, preparing legal documents, accounting, etc. and they may account for a major share of total expenses. It is therefore obvious that such a structure can generally be used only if contributions to the private pension fund are substantial. It must be recognised that savings can be realised only if the sums managed are substantial and if competition among insurance companies would not make it possible to obtain equally advantageous conditions, with the added advantage of limiting the investment risks.

The question may be asked whether the main advantage of self-administered pension funds is not precisely that they give employers the opportunity to choose on their own the financial risk to which they agree to be exposed. All the available statistics show that properly managed higher-risk investments have a medium-to-long-term yield that is significantly higher than risk-free investments. However, in that event, it is extremely important that the employer limits that risk as much possible, with due regard to the exposure of the company itself, for it would definitely run counter to interest of the fund for it to incur investment losses at a time when the company is having problems, a factor that underscores the need to properly manage fund assets. It is obviously an easier matter in the case of self-administered funds than in that of funds handled by outside insurers, unless more sophisticated methods of investment allocation are used.

Lastly, it should be noted that pension funds do not have performance obligations to their members. They collect contributions paid to them by employers so as to live up to the commitments resulting from the pension plan bylaws. Any financial shortfall would therefore be covered by the employer.

Group insurance (second external support)

The second external support consists of group insurance. Under this system, employers turn to an insurance company. The employer and the insurer jointly draft a group insurance contract specifying the respective rights and obligations of the parties, namely the insurer, the employer, policyholders and their beneficiaries. Based on that contract, the insurer computes the premium that needs to be paid, in the form of contributions either by employees or by their employer. Individual contributions are always individually funded and therefore pay for individual insurance policies guaranteeing the payment of benefits upon retirement or in the event of death prior to retirement.

Under a system of defined contributions, contributions by employers are always individually funded and hence also pay for individual insurance policies.

On the other hand, under systems of defined benefits, two approaches are available. If the method used is that of individual funding, employer contributions are paid on individual policies, whereas if employer contributions are part of a group funding, no such individual policies exist.

The individual funding part determines the ratio of premiums to benefits, based on a life insurance rate schedule. That schedule in turn depends on interest rates, technical interest rates, mortality tables and administrative expenses incurred by the insurance company in connection with its operation as well as, in certain instances, commissions paid to intermediaries.

The fact that life insurance rates are used evidently implies that the insurer has performance obligations, since specific benefits are guaranteed in consideration for the payment of premiums. It should be noted, in addition, that whenever employer contributions are – at least in part – allocated to collective funding, a certain interest rate can also be guaranteed, so that here again the insurer makes a commitment insofar as performance is concerned. From the point of view of the insurer, the obligation to achieve a specific result is in fact always limited to the level of compensation established at the time of computing the premium. The performance obligation – with benefits expressed as a percentage of the final income, in case of defined benefits – implies that the necessary premiums are recomputed every year and thus always hinges on the employer being willing and able to pay the required premiums.

The case may also arise where the insurer funds all or part of the employer contributions on a group basis without making a commitment as to the rate of interest or the nominal value. This is the situation when assets are managed as mutual funds or as allocated investments, with a “best efforts” obligation.

The management of group pension funds

The notion of collective funding in group insurance is akin in fact to another concept, that of the management by insurance companies of group pension funds. The technique was developed several decades ago, at the same time as group insurance. It is sometimes referred to as “deposit administration” or “separate account”. As pointed out earlier, this is a special form of group insurance, where the insurance company manages a joint account into which an employer pays contributions, and from which the insurer pays out the benefits specified by the policies

when they come due, hence the term “deposit administration” reflecting the idea of an account that is set aside for a specific purpose, which constitutes a collective provision on the liability side of the insurer’s balance sheet.

One can go even further by covering this liability with an allocated investment, which is then called a “separate account”. The insurer, or an actuary working for the employer, calculates – using recognised actuarial methods – the amount of contributions required by the group pension fund in order to enable it to pay out the benefits promised by the employer to the fund members, pursuant to the fund’s bylaws.

It can therefore be noted that, except where the insurer guarantees a minimum rate of return, it makes a commitment only to use its best efforts, just as in the case of self-administered pension funds. This shows how close a group pension fund is to the notion of a pension fund. The major difference is that group pension funds are offered by insurance companies.

It should be noted, in addition, that insurance companies are in a position to offer a choice of two separate methods, one where the assets are considered by the insurance company to be part of its own technical provisions and are managed as such, the other where they are managed on behalf of a third party which actually owns a self-administered pension fund, the role of the insurance company being merely to perform financial management and actuarial duties on the fund’s behalf. In that instance, technical provisions are the property of the pension fund rather than of the insurance company, with all the legal, tax and other differences which that implies.

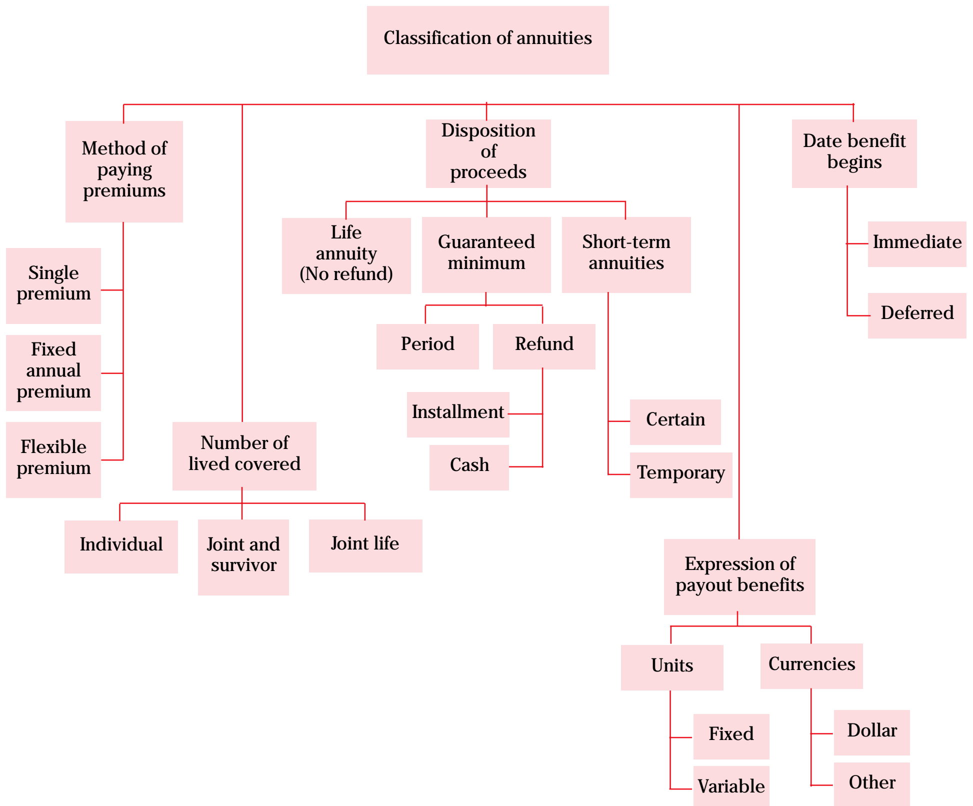
Annex III

Plan feature	Defined benefit	Defined contribution
Benefit accrual pattern	Higher in later years	Higher in earlier years
Cashouts for early leavers	Not usually	Lump sum
Retirement benefit payment	Annuity	Lump sum (with possibility of conversion to annuity)
Early retirement subsidy possible	Yes	Not usually
Post-retirement benefit increases	Often	Not usually
Investment risk	Borne by employer	Borne by employee (often)
Benefits fully funded	Not necessarily	Yes
PBGC benefit guarantee	Yes	No
Employee makes asset allocation decision	No	Often

Source: Mitchell and Rappaport (1993).

Annex IV

Illustrative classification of annuities



Source: Black and Skipper, 1994.

Annex V

Further considerations on own funds requirements

The most recent developments show a convergence between insured pension funds and self-administered ones as far as prudential principles in general are concerned, although differences – sometimes considerable – do subsist in certain countries. The question must therefore be asked whether it is logical for prudential rules to hinge on the method of financing or whether, on the contrary, they should be based exclusively on the legal and financial structure of the commitments involved.

In cases involving a performance obligation, it seems logical that the managing entity be endowed with capital from which it could offset any losses in respect of its commitments; such is the purpose of the solvency margins prescribed in European legislation. This implies, *inter alia*, that for defined-contribution schemes there are two possible solutions:

– Application of a tariff with a guaranteed technical rate of interest, which entails a performance commitment. In this case, there must be an adequate solvency margin, and the most appropriate legal structure is probably incorporation as an insurance company or a mutual insurance association – since a non-profit organisation does not normally possess any equity capital – unless the initiating employer provides the necessary guarantee, backed up by a bank or insolvency insurance.

– Application of a tariff but with no guaranteed technical rate of interest, all contributions and benefits being linked to the value of a unit of account representative of the performance of fund assets (or any other comparable actuarial technique). In this case, there would be nothing to preclude incorporation as a non-profit organisation (as well as an insurance company or a mutual insurance association) since the proposed guarantee is extremely limited, covering no more than mortality differentials or variance in respect of management overheads.

If a system involves defined benefits, however, it is necessary to make the following distinction:

- If the technique used is that of individual capitalisation with a performance obligation, the situation is the same as described above for a defined-contribution scheme having the same obligation: there must be a solvency margin, meaning that the employer setting up the fund should provide a performance guarantee or that the managing entity should be an insurance company or a mutual insurance association.

- If the technique used is that of collective capitalisation, which can only be applied to employer contributions, there is normally only a best-effort obligation, no solvency margin need be required, and prudential rules must focus primarily on asset-liability management (ALM), *i.e.* a correlation should be established between existing assets and the necessary mathematical provisions. With regard to these provisions, a legitimate question is whether minimum provisions or individual rights calculated on the basis of actual years of service and current (in some countries, projected) earnings are really reasonable and whether the concept of aggregate equilibrium between reserves plus future contributions and total commitments should not be given top priority.

Annex VI

Valuation bases used in applying quantitative investment restrictions

	Shares (quoted)	Shares (unquoted)	Government and high quality fixed rate bonds	Lower quality fixed rate bonds	Loans mortage	Loans non-mortage	Real estate
Australia	d	d	d	d	d	d	d
Austria	a	a	a	a	a	a	a
Belgium	d	d	a, d, f	a, d	g	g	d
Canada	e	a	c	c	c	c	e
Denmark	a, d	a, d	c	c	c	c	a, d
Finland	e	e	c	e	c	e	e
France	a	a	c	c	a	a	c
Germany	b	b	b	b	a	a	a
Greece	b	b	a	a	b	b	b
Iceland	d	a	d	a	a	a	a
Ireland	d	d	d	d	d	d	d
Italy	a	a	a	a	a	a	a
Japan	a	a	a	a	a	a	a
Luxembourg	d	d	g	d	d	d	d
Mexico	e	e	d	d	d	d	d
Netherlands	a, d	a	a, c, d	a, c, d	a, c	a, c	d
Norway	a	a	a	a	a	a	a
Portugal	d	d	c, d	d	d	d	d
Spain	d	a	d	d	a	a	d
Sweden	a	a	a	a	a	a	a
Switzerland	e	e	c	c	d	d	–
Turkey	b	a	b	b	a	a	a
United Kingdom	d	e	d	d	d	d	d
United States (New Jersey)	d	d	c	a	a	a	a
United States (Delaware)	d	d	c	a	a	a	a

a. Lower of purchase price or market value for quoted investments; or purchase price (or written down book value) for unquoted investments.
b. Lower value ever
c. Amortised value
d. Market value
e. Adjusted market value
f. Repayment value for securities issued or guaranteed by State authority or a regional or local authority.
g. Balance outstanding.

Source: OECD (1996), *Policy Issues in Insurance: Investment, Taxation, Insolvency*, OECD, Paris.

Selected Bibliography

Ahrend Peter, (1996), Pension Financial Security in Germany, Securing Employer-Based Pensions: *An International Perspective*, (ed. Bodie *et al.*) University of Pennsylvania Press, Philadelphia.

Aida IXe Congrès Mondial (1994), *L'Assurance sur la vie en relation avec les pensions d'État et privées*, AIDA, Sydney.

Altman, Nancy J.(1992), *L'action réglementaire de l'État : pour des retraites de régime privé équitables, décentes et assurées*, *Les régimes de retraite privés et la politique gouvernementale*, OCDE, Paris.

ApRoberts, Lucy et Emmanuel Reynaud (1992), *Les systèmes de retraite à l'étranger : États-Unis, Allemagne, Royaume-Uni*, IRES, Paris.

Bellando, Jean-Louis, (1992), *Les règles de gestion technique et financière, Traité de droit des assurances* (ed. Jean Bigot) LGDJ Paris.

Bellando, Jean-Louis, Hervé Bouchaert, et Armand-Denis Schor (1994), *L'assurance dans le Marché unique*, La Documentation Française, Paris.

Black, Kenneth, Jr. and Harold D. Skipper, Jr. (1994), *Life Insurance* (twelfth edition), Prentice Hall, Englewood Cliffs, NJ.

Blake, David (1992), *Issues in Pension Funding*, Routledge, London.

Blake, David (1995), *Pension Schemes and Pension Funds in the United Kingdom*, Oxford University Press, Oxford.

Blommestein, Hans (1998), *Ageing Populations and the Role of the Financial System in the Provision of Retirement Income*, OECD. Forthcoming.

Bodie, Zvi, Olivia S. Mitchell, and John A. Turner (ed.) (1996), *Securing Employer-Based Pensions: An International Perspective*, University of Pennsylvania Press, Philadelphia.

Booth, Philip, and Gerry Dickinson (1997), *The Insurance Solution*, *European Policy Forum*, London.

Cardon, Patrice (1992), *Comptabilisation des charges de retraite*, XVIIe Congrès FEAAF, FEAAF, Paris.

Centre for Co-operation with the Economies in Transition (1997), *Insurance Guidelines for Economies in Transition*, OECD, Paris.

Charpentier, François (1997), *Retraites et fonds de pension : L'état de la question en France et à l'étranger*, Economica, Paris.

Chisholm, Patrick (1997), "Savings Savings", *National Review*, April 21, 1997, pp. 34-40.

Comité Européen des Assurances (1996), *Les actes de la "Rencontre du CEA" sur les retraites*, Euro Publishing System, Paris.

Comité Européen des Assurances (1995), *Schéma de normes prudentielles.*

Comité Européen des Assurances (1996), *Pensions in Europe 1995*, Euro Publishing System, Paris.

Commission Européenne, Direction Générale XV (1997), Livre vert sur *Les retraites complémentaires dans le marché unique pour les opérations de retraite*, Commission Européenne, Bruxelles.

Davis, E.P. (1997), *Private pensions in OECD Countries: the United Kingdom*, OECD Working Papers, No. 54, 1997.

Davis, E.P. (1997), "Regulation of Pension Fund Assets", *International Investors in the New Financial Landscape*, OECD, Forthcoming.

Davis, E. Philip (1995), *Pension Funds: Retirement-Income Security, and Capital Markets, an International Perspective*, Oxford University Press, Oxford.

Daykin, Christopher D, (1996), *Occupational Pension Provision in the United Kingdom, Securing Employer-Based Pensions:An International Perspective*, (ed. Bodie *et al.*) University of Pennsylvania Press, Philadelphia.

De Rick, Koen (1996), *European Pension Funds: the impact on European capital markets and competitiveness*, EFRP, Brussels.

Dickinson, Pr. G.M. and Denenis (1996), *Investment Regulations of Insurance Companies Across the OECD*, Policy Issues in Insurance; Investment, Taxation, Insolvency, OECD, Paris.

European Commission (1994), Direction générale de l'emploi, des relations industrielles et des affaires sociales, *Les régimes complémentaires de retraite dans l'Union européenne* (Supplément 3/94), Rapport d'experts coordonné par Mr. Tamburi, Giovanni, Commission Européenne, Bruxelles.

European Commission (1997), Green Paper on *Supplementary pensions in the simple market*, European Commission, Brussels.

Fédération des Experts Comptables Européens (1995), *FEE Survey of Pensions and other Retirement Benefits in EU and Non-EU Countries*, Routledge, London.

Feldstein, Martin (1997), "The Case for Privatisation", *Foreign Affairs*, July/August 1997, pp. 24-53.

Férone, Geneviève (1997), *Le système de retraite américain*, Association d'économie financière, Paris.

Foster, Howard (ed.) (1994), *Employee Benefits in Europe and USA*, Longman Group Ltd., London.

Frijn Jean et Carel Petersen (1992), *Financement, administration et gestion du portefeuille : la pension promise est-elle sûre? Les régimes de retraite privés et la politique gouvernementale*, OCDE, Paris.

Gollier, J.-J. (1997), *Les systèmes de pensions privées*, internal OECD document DAFFE/AS(97)4.

Gollier, J.-J. (1995), *Les Pensions complémentaires en pratique*, Kluwer Editions Juridiques Belgique, Diegem.

Gordon, Michael S., Olivia S. Mitchell, and Marc M. Twinney (ed.) (1997) *Positioning Pensions for the Twenty-First Century*, University of Pennsylvania Press, Philadelphia.

Groupe des Experts auprès de la Commission Européenne (presenté à la Commission le 18 mars 1997), *Rapport du Groupe de Haut Niveau sur la libre circulation des personnes présidé par Mme Simone Veil.*

HMSO (1995), *Pensions Act 1995*, HMSO, London.

International Accounting Standards Committee (1997), *International Accounting Standards 1997*, International Accounting Standards Committee, London.

McGill, Dan M., Kyle N. Brown, John J. Haley, Sylvester J. Schieber, (1996), *Fundamentals of Private Pensions* (seventh edition), University of Pennsylvania Press, Philadelphia.

Mitchell, Olivia S. and Anna M. Rappaport (1993), I*nnovations and Trends in Pension Plan Coverage, Type, and Design*, *The Future of Pensions in the United States*, University of Pennsylvania Press, Philadelphia.

Nobles, Richard (1997), *Pension Rights after the Pensions Act 1995*, The Institute of Employment Rights, London.

Office of Fair Trading (1997), *Report of the Director General's inquiry into Pensions*, Volume I, II, III.

OECD (1992), *Private pensions and public policy*, OECD, Paris.

OECD (1996), *Ageing in OECD countries: A critical policy challenge*. Social policy studies, No. 20, Paris.

OECD (1993), *Private Pensions in OECD Countries: The United States*, OECD, Paris.

Pension Law Review Committee (1993), *Pension Law Reform: The report of the Pension Law Review Committee*, Vol. 1, HMSO, London.

Pesando, James E., (1996), *The Government's Role in Insuring Pensions*, *Securing Employer-Based Pensions: An International Perspective*, (ed. Bodie et al.) University of Pennsylvania Press, Philadelphia.

Pestieau, Pierre (1992), *Les prestations de pensions privées : leur répartition est-elle juste? Les régimes de retraite privés et la politique gouvernmental*, OCDE, Paris.

Queisser, Monika (1998), *Regulation and Supervision of Pension Funds: Principles and Practices*, International Social Security Review, 2/98.

Reynaud, Emmanuel (1994), *Les retraites en France: Le rôle des régimes complémentaires*, La Documentation Française, Paris.

Sass, Steven (1996), *Les Gages du temps : Une histoire des fonds de pension américains*, Association d'économie financière, Paris.

Schmitt, Ray (ed.) (1993), *The Future of Pensions in the United States*, University of Pennsylvania Press, Philadelphia.

Scientific Colloquium (1991), *Various Responses of "Prevoyance" to Economic and Social Challenges*, Maulte et Renou, Paris.

Smalhout, James H. (1996), *The Uncertain Retirement: Securing Pension Promises in a World of Risk*, Irwin Professional Publishing, Chicago.

Turner, John A., and Noriyasu Watanabe (1995), *Private Pension Policies in Industrialized Countries: A Comparative Analysis*, W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.

Valdés-Prieto, Salvador (ed.) (1997), *The Economies of Pensions: Principles, Policies, and International Experience*, Cambridge University Press, Cambridge.

Vittas, Dimitri (1997), *Regulatory Controversies of Private Pension Funds*, *International Investors in the New Financial Landscape*, OECD, Forthcoming.

Warshawsky, Mark J., (1997), *Funding of Defined Benefit Pension Plans*, *Positioning Pensions for the Twenty-First Century*, University of Pennsylvania Press, Philadelphia.

Watanabe, Noriyasu, (1996), *Private Pension Plans in Japan*, *Securing Employer-Based Pensions: An International Perspective*, (ed. Bodie et al.) University of Pennsylvania Press, Philadelphia.

World Bank (1994), *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, Oxford University Press, New York.

Notes

1. This article was prepared by André Laboul, a Senior Economist in the Financial Affairs Division, Directorate for Financial, Fiscal and Enterprise Affairs. Part I of this article was published in the previous issue of *Financial Market Trends*.

2. *Institutional Investors Statistical Yearbook* 1997.

3. ApRoberts and Reynaud (1992) report that, in the United States, the Department of Labour has ruled that an employer was ultimately responsible for funding pensions in the event of the bankruptcy of an insurance company from which it had purchased annuities.

4. Black and Skipper, 1994.

5. Meierholzner, 1997.

6. These criteria are:

   – legal requirements, *i.e.* in particular, conformity of the form of business organisation adopted by the company, filing of bylaws and general terms and conditions of policies, insurance specialisation;

   – accounting requirements, *i.e.* filing of opening balance sheet, budget and income statement, proof that the company has the required minimum capital, etc.;

   – technical requirements, *i.e.* filing of premium rates for information or, if applicable, for approval, as well as of the technical bases used in *tarification* and planned technical provisions, and of reinsurance contracts;

   – managerial requirements, *i.e.* demonstration that officers are fit and proper, and that the shareholders are reputable (Centre for Co-operation with Economies in Transition, OECD, 1997).

7. Watanabe, 1996.

8. Altman, 1992.

9. Davis, 1997.

10. Warshawsky, 1997.

11. Pesando, 1996.

12. Frijns et Petersen, 1992.

13. Bodie, 1993.

14. McGill, Brown, Haley, Shieber, 1997.

15. Warshawsky, 1997.

16. Foster, 1994.

17. See Pension Law Review Committee, 1993.

18. Parkinson, 1997.

19. Author's computations from Compustat data, only include those United States-Domiciled corporations (subsidiaries excluded) reporting under FAS No. 87 the sponsorship of at least one defined benefit plan. See Warshawsky (1997) for further methodological details.

20. Bellando, 1992.

21. Comité Européen des Assurances, 1996.

22. Davis, 1997.

23. Bellando, 1992.

24. In the Czech Republic, the minimum equity requirement is CK 20 million. In Chile, AFPs are required to possess equity of at least $160 000, which increases with the number of members.

25. Foster, 1994.

26. McGill, Brown, Halez and Schieber, 1997.

27. This rate applies to the normal situation that indexing of accrued benefits is at the discretion of the board of managers. When a scheme offers an irrecoverable right to indexation, the supervisory body takes the view that the rate should be fixed at one or two per cent.

28. Davis, 1997.

29. FEE, 1995.

30. Queisser, 1997.

31. Blommestein, 1998.

32. Carpentier, 1997.

33. *Idem.*

34. The position taken by the CEA at the end of 1997 on the Green Paper was as follows: The Green Paper raises the question of the general prudential framework to be applied to pension funds and refers to the proposals in the CEA's Prudential outline for pension business as a reference in the field of applicable schemes: for an identical level of liabilities and risks, supplementary pension business must be subject to equivalent prudential standards in terms of reserving and solvency (liabilities) and investment of assets and matching (assets), whatever financing vehicle or methods of management are adopted for these operations. For each specific case, it is suggested either to refer to the corpus of existing prudential standards (in this instance, the rules in the life insurance directives) – option I proposed by the European Commission – or, a more viable solution, to envisage an alternative scheme of specific norms applicable to all second pillar schemes – option III envisaged by the Commission – which would be sufficiently balanced between the protection requirements for final beneficiaries and the concern that operators should not have to bear a disproportionate financial burden. The other two options envisaged in the Green

Paper would not guarantee equality of competition between pension operators and cannot therefore be approved by European insurers. CEA is formally in favour of the – eventual – adoption of a legally binding system (Commission option III) comprising basic principles relating to elements of the liabilities and the assets associated with supplementary pension business.

35. Aiming to protect competition in the pension market can lead to highly diverse regulatory positions. For example, some countries may consider that the market should be segmented, and that any differences in the characteristics of the various operators mean that separate markets should be defined, depending on the institutions involved; other countries may decide, while recognising that such differences exist, to limit all regulatory distortion and to aim, inter alia, for functional regulation based on operations rather than institutions, distinguishing or not between operations (*e.g.* second *vs.* third pillar, obligation of result *vs.* best effort, etc.).

36. Vittas, 1997.

37. Davis, 1997.

38. Ferone, 1997.

39. The CEA (Comité Européen des Assurances) favours a controlled liberalisation of investments by retirement operators. They are against minima ceilings and wish that current quantitative restrictions be abolished but they promote at the same time the existence of some regulation to protect beneficiariesí interest (instead of orientating investment strategies).

40. Which, for insurance companies, apply mainly to technical provisions.

41. The CEA underlines the beneficial effects of the Euro on matching as well as on restrictions on investment abroad. They consider that the Euro will allow for withdrawal of numerous current investment restrictions.

42. The CEA considers a too large international diversification of investments as being an imprudent policy.

43. Smalhout (1996) for example, suggests a total privatisation of PCBG and insurance through private insurers.

44. Gollier, 1995.

45. FEE, 1995.

46. According to Cardon (1992), analysis of the accounts of French companies also shows that few of them disclose information on: the schemes in place or the contribution burden they represent; actuarial methods; main actuarial assumptions; reconciliation of obligations, financing and provisions; breakdown of annual costs; or timing.

47. The risks associated with the deterioration of the fiscal environment are often highlighted in this respect.

48. See Part I, *Financial Market Trends*, No. 70.

49. *Idem.*

50. Gollier 1997.

The Development of Capital Markets in Central Asia[1]

Introduction

This report examines the development of capital markets in Central Asia. It has two key aims: to describe the current state of the capital markets in Azerbaijan and Uzbekistan, and to analyse what lessons can be learnt from the experiences of these countries for the development of other countries in the region. A relatively broad notion of capital markets is used in the report to include trading in government securities, vouchers and privatisation coupons, as well as the standard forms of equities. Given that the main source of assets to trade in capital markets in transition economies are privatised enterprises, the roles and effects of privatisation programs in such economies are also examined in some detail.

There are several important topics related to the development of capital markets that the report does not address. Although price movements are critical to the success of markets, no attempt is made to explain historical and recent movements in prices. Instead, attention is focused primarily on the development of the relevant capital market institutions. This report also does not present a model for how capital markets should be developed in the various countries in the region. Not only would an attempt to do so require more time than available for writing this report, but it is also believed that there is no single right conception for how to proceed. Different circumstances demand different responses. Notwithstanding this, the analysis presented here may prove useful in such a context.

Many difficulties were faced in writing the report. First, the shortness of the time spent within the relevant countries meant it was impossible to understand fully the nature of the relevant environments. The information on which the report is primarily based was obtained from trips to Baku, Azerbaijan, from 20 June 1998 to 27 June 1998 (dates are quoted in UK format), and to Tashkent, Uzbekistan, from 5 September 1998 to 12 September 1998. Second, the brevity of the time available to write the report together with communication difficulties meant that independent verification of the facts presented in the report proved impossible. Third, the language barrier (both Azerbaijan and Uzbekistan employ two languages apart from English) meant that the author was unable to read many of the relevant documents. Fourth, the environ-

ments in Central Asia are complex and opaque, even to nationals of the relevant countries. Finally, the sensitivity of some of the issues examined meant that it was not always easy to discover the truth about them. Notwithstanding these difficulties, it is believed that most of the key issues necessary for understanding the development of capital markets in Azerbaijan and Uzbekistan are described here.

The report is composed of four sections in addition to the introduction. In sections two and three, the current state of development of the capital markets in Azerbaijan and Uzbekistan are described in turn. These descriptions combine a presentation of factual aspects of the respective markets, together with local perceptions of how the markets actually operate. In the fourth section, an analysis of some of the lessons that can be learned from these countries' experiences for other countries in the region is provided. A brief conclusion is presented in the final section.

Azerbaijan

The capital markets in Azerbaijan are just beginning to be created. There is thus a great deal of fluidity in the perceived and actual functions of the various participants in the market, and such fluidity can be, and is, quite reasonably exploited by market participants to further their own interests. Sometimes, however, this appears to have lead to outcomes that are both inefficient and unfair. Five aspects relating to the development the markets are described here: the Treasury Bill market and other debt securities, privatisation and the role of the State Property Committee, the Baku International Currency Exchange (BICEX), some elements of the law and regulation governing the capital markets, and finally a set of issues which may be characterised together as ignorance, confusion, and perceptions of corruption.

Treasury Bill market and other debt securities

The only market for debt securities currently operating in Azerbaijan is the Treasury-Bills (T-Bill) market.[2] This was launched in September 1996.[3] The T-Bills are of the standard form, namely par value securities with no coupons that are sold at a discount. The National Bank of Azerbaijan (NBA) acts as the agent for the Ministry of Finance in the market.

T-Bills are sold in the primary market via auctions held on BICEX. Only primary dealers can submit bids in the auctions, and only banks can be primary dealers. Bids are ranked from highest to lowest, and the Minister of Finance chooses a cut-off point below which he does not accept bids. All bids above this point are awarded

bills at the prices at which they bid. Two types of bids may be submitted: competitive and non-competitive. Competitive bids are accepted at the price the banks bid, and may or may not get filled. Non-competitive bids are filled at the average price accepted. Each primary dealer may submit a non-competitive bid for 0.5 per cent of the total volume of bills offered, plus 10 per cent of the difference between the amount for which it bid competitively and 0.5 per cent of the auction, if this amount is greater than 0.5 per cent of the volume of the auction. One or two days before each auction, the Ministry of Finance gives details about the intended issue to the NBA, which in turn gives them to BICEX, and it in turn gives this information to its members and the media. If any securities are unsold at an auction, the NBA may advertise these securities for sale in the secondary market in the days following the primary auction. The NBA is trying to set up a computer trading system for all the primary dealers.

Currently BICEX holds the depository for T-Bills, and it also effects settlement for T-Bills. BICEX has an account at the NBA with a sub-account for each of the primary dealers. Each primary dealer also has an account at the NBA. Before dealing at the beginning of a day, a bank will transfer as much money as it needs from its account at the NBA to its BICEX sub-account. The money in a BICEX sub-account can only be used for trading on BICEX. The auction system checks whether a participant has sufficient funds to pay for any orders it submits, and if it does not it rejects the orders as being invalid. In the depository, BICEX has an account for each member (called a “sub-depository”) which consists of two parts – the main section, and the trading section. Before the trading day, banks must block any securities they wish to trade by transferring them to the trading section. After trading, the depository informs dealers about their positions. BICEX forbids the short-sale of securities. It is planned to moved the depository for T-Bills from BICEX to the Central Bank. BICEX makes no charge for the use of its depository for T-Bills.

The first test auction was conducted on 20 September 1996. The first regular schedule of auctions was published in mid-1998, indicating a schedule of 10 auctions, one every 10 days or so. Details of the amount the Government intended to sell in these auctions were not provided. The total amount of T-Bills outstanding is about 35-40 billion manat (approximately US$10-12 million at the exchange rate of 3 500 manat = US$1). Net sales are of the order of US$25-30 million. As of 20 June 1998 there had been eleven 1-month auctions, and nine 3-month auctions. The auctions held between 5 April 1997 and 26 June 1997 were unsuccessful, in that the bids (yields) the primary dealers submitted were lower (higher) than the level the Ministry of Finance was prepared to accept. There has been little issuance of T-Bills given the low need for deficit financing as a result of the revenues the government has been receiving from oil-production sharing contracts it has with foreign oil companies. The low oil price may change this.

Initially there were 28 primary dealers, but as of mid-1998 there were fewer than 10. These are the banks least willing to lose their dealing licenses, and most able to afford keeping them. If a bank proves inactive in the market, the NBA may retract its license, so if a bank is not going to be active it is better not to ask for a license in the first place. Many banks do not find it worthwhile being a primary dealer for several reasons: the market is small; the secondary market is illiquid; yields are unattractive; the number of auctions is small and irregular; and lastly, even for those auctions that do exist, the likelihood that a bid will be filled is uncertain, given the Ministry of Finance's previous desire to cap prices. In the past, yields were frequently set at 11.98 per cent or 12.02 per cent by the Ministry of Finance, because it was unwilling to pay more than the NBA's refinancing rate of 12 per cent. The Ministry argued that that banks could merely borrow at this rate, invest in T-Bills and make an arbitrage profit. Whether this is true was debatable, given that strong collateral was required to borrow at the refinance rate from the Central Bank. Only those institutions with a natural deposit base, and thus liquidity in manat, have tended to find being a primary dealer worthwhile.

For every transaction there is a stamp duty of 0.1 per cent that the buyer pays, and also a commission of 0.03 per cent paid to BICEX by both the buyer and the seller. This gives a total tax cost of 0.16 per cent of the value of a transaction. BICEX originally had a commission rate of 0.3 per cent, but this was reduced in early 1997 to 0.1 per cent, and then again in August 1997 to 0.03 per cent. Although it is tax-free for Azeri residents to invest in T-Bills, foreigners have to pay a 15 per cent repatriation tax. The major purchasers of T-Bills have been the Savings Bank (Amanat Bank), which has purchased up to 95 per cent of certain issues, followed by International Bank, which has bought up to 40 per cent of some issues.

There have been several problems with the functioning of the market. The first concerns access to the market. In particular, non-residents were not allowed to hold the securities, although apparently they did. In addition, any institution wishing to be a primary dealer had to have more than 50 per cent of its capital owned by Azeris. Since 4 January 1998, however, non-residents have been allowed to purchase T-Bills (Decree No. 136), and any bank licensed to operate in Azerbaijan has been allowed to become a primary dealer. The British Bank of the Middle East, a subsidiary of HSBC, has signalled its desire to become a primary dealer. Previously there was apparently official concern that its huge size might allow it to determine market prices, and also that a foreign bank might swamp all domestic institutions.

In addition to T-Bills, several other types of debt securities have been discussed, though not actually issued, in Azerbaijan. The first was an issue of commercial paper offered on 25 November 1997. This was called "The bonds of Seven", and was a zero-coupon discount bond backed up by the credit of seven local banks. It was

managed by a broker based in Baku, called AJG. The issue was for 7 billion manat (roughly US$1.8 million), with each bank guaranteeing one seventh of the principal. There was to have been no mutual guarantee of losses. The banks initially agreed to issue the paper for three reasons: to be part of Azeri history, because the National Bank suggested that they should participate in it, and because the possibility of obtaining $250 000 at the intended rates was not unattractive. The seven banks initially wanted to borrow at 15 per cent or 16 per cent, but subsequently raised the maximum rate at which they were willing to pay to 18 per cent. Only one bid was received at the time of the issue of the securities, however, and this was at a rate of 25 per cent. The securities were therefore not issued. There has also been official discussion about whether the country should issue a Eurobond, but to date there has been no political support for this. In addition, there has been talk about municipal debt, but again none has yet been issued.

Privatisation and the State Property Committee

Although privatisation was first considered at the end of the Soviet era in 1991, the first program to implement the concept was drawn up in 1995.[4] This proposed a privatisation plan for 1995-1998, and established the State Property Committee (SPC) as being the entity officially responsible for privatising the state's assets.

A mass privatisation voucher program was initiated in March 1997. The aim was to distribute to every person in the country a book of four vouchers (sometimes referred to as coupons or cheques) which could be used to purchase assets being privatised. Voucher books were distributed primarily through the Savings Bank. A total of 8 million voucher books were issued, of which 7.2 million were claimed. The balance went into the so-called President's fund. Of these, apparently 150 000 are to be given to people who have the right to obtain an additional book, or to people who did not claim their vouchers on time. There were apparently several difficulties in the privatisation process. There were only two locations from which vouchers could be collected, both in Baku. There was little preliminary information released to the public about the process, and no mass program of publicity or advertisements. People were only allowed to claim their vouchers between 1 March 1997 to 15 August 1997, a timeframe that was believed to be too short. The vouchers expire on August 2000. The mechanisms of privatisation, the manner in which vouchers can be traded, and the nature of the companies being privatised, are described below in turn.

As of June 1998, a new privatisation law was apparently in draft form, and was being circulated for comments. There is official concern to stop an oligarchy owning substantial elements of the entire economy. The law is therefore likely to state that

in the primary market, no single organisation can take more than 30 per cent of the shares of a particular offering, and in any secondary offering, no institution will be allowed to take more than 20 per cent of the secondary offering.

Sale mechanisms

There are three elements to the privatisation of a corporate enterprise: a sealed bid or closed subscription which is open only to the enterprise's management and employees, a voucher auction open to anybody, and a cash auction again open to anybody. All auctions are operated by the SPC. A maximum of 15 per cent of the shares of each company to be privatised is offered via closed subscription to the company's management and employees. At least 55 per cent of a company's shares are sold via a voucher auction, and the balance (typically 30 per cent) is sold at a cash auction. Any shares that remain unsold from the sealed bid auctions are sold in voucher auctions. The SPC has the option to divide the number of shares in a particular company and sell them in more than one voucher auction.

The auction mechanism for sealed bids by a company's management and employees for its shares works as follows. Management and employees submit bids of coupons to the auction. The maximum number of shares a bidder can receive equals the total amount of shares available through the sealed bid, divided by the number of people allowed to participate. The highest bidder receives this amount. The amount of shares that other participants receive is the number of coupons each submits divided by the number of coupons submitted by the highest bidder, then multiplied by the number of shares received by the highest bidder. The only way that employees will receive their entire allocation of shares is if they all submit the same number of coupons. If they submit different amounts of coupons, they will lose some of the shares that could potentially be allocated to them, and these shares will be included in the subsequent voucher auctions.

For the public voucher auctions, the SPC publishes information about the identities and natures of companies to be sold. This information is obtained from the companies themselves, and includes details of book value, production records, and physical assets. Both competitive and non-competitive bids may be submitted to voucher auctions. In non-competitive bids, bidders simply submit whatever amount of coupons they wish to acquire to the auctions. In competitive bids, the number of shares the purchaser wishes to obtain for every coupon submitted must also be specified. Legal entities may submit both types of bids, but individuals can only submit non-competitive bids. Once all bids have been submitted, the SPC determines the price at which non-competitive bids are satisfied. This price is the total number of shares offered divided by the total number of coupons submitted. Competitive bids

that are higher than this price, namely which specify a coupon/share ratio higher than the average ratio, receive their full demand for shares. Competitive bids with prices lower than the average price are not filled, and the coupons submitted are returned to bidders. Apparently few competitive bids have been received. The first voucher auction took place on 18 May 1997. Bidders have to submit a non-refundable advance payment of 10 per cent of the estimated value of the shares to be sold, an estimate prepared by the SPC based on the enterprise's book value.

Foreigners are allowed to participate in the privatisation process, but need to purchase a so-called "option" for every coupon they wish to submit. The SPC fixes the price of such options on the first day of a month, and sells the options on demand. Foreign participants must also submit a specified number of options for each share purchased via the cash auctions, that is dependent on the maximum ratio of coupons to shares obtained in the voucher auctions for the company's shares. The highest bids win in the cash auctions. The first price of the option was 8 000 manat (US$2.05). In October 1997, this was increased to manat 16 000 (US$4.10), and in November 1997 it was further increased to 100 000 manat (US$25.63).[5] In the black market they are available for about $75. The SPC has limited the total number of options a single purchaser can buy to 100 000.

Voucher trading

Vouchers may be sold and traded as well as being presented to the auctions. There are three ways to deal: through licensed broker-dealers, through the voucher shops, of which only one reportedly was in existence, and it never sold vouchers, or on the black market. There are four major brokers in the voucher market. They all act on an agency basis and do not make markets. It is estimated that as of mid-1998 approximately US$300 million had been invested in vouchers from outside Azerbaijan. About 5-5.5 million books had been bought by institutional clients. About 16 million options had been sold, and with 4 options per book, this implies that about 4 million books had gone to foreigners, with the balance of the 1.5 million books going to locals. There were approximately 1.5 million books still available for trading in the market, and 500 000 in the President's fund. The float in the voucher market is apparently getting smaller as the current holders are waiting for the major privatisations to take place.

At the start of the privatisation program, the SPC said that the aggregate value of all the assets to be privatised was worth about $6.5 billion. With an issuance of 8 million books of vouchers, the SPC therefore valued each book at about $800 (*i.e.* $6.5 \times 10^9/8 \times 10^6$). The first traded price was $100 in March 1997, they then traded down to $10 by July 1997, went up to $100 by November 1997, and down to a range of $60-$70 by mid-1998. Full cash payment is required before trading.

To date only one company, called Sigma, has attempted to operate as a cheque (or voucher) Investment Company. It was licensed, after more than 50 per cent of the companies had already been privatised, in May 1998. It collected 4 000 cheques from 400 investors, and was going to invest in companies via the privatisation auctions. The general manager obtained a license from the Ministry of Finance to act as a professional person in the securities market, and the company also received a license from the Ministry to issue shares. Subsequently the Ministry retracted this licence. There has been debate between the general manager of the fund and the Ministry about the justification for retracting Sigma's licence.

In January 1998 registries of joint stock companies were introduced, and the registration of share transactions began in March 1998. The National Depository System was established by the SPC to facilitate clearing and settlement in the market. Currently the SPC also licenses depository activities. To date the only element of the National Depository System that has been created is the National Depository Centre (NDC). The NDC is a joint stock company, and 100 per cent of its shares are owned by the SPC. It acts as the registrar and custodian for all shares that the SPC has privatised. There has been a small amount of trading in privatised shares through the NDC, reportedly 500 transactions between November 1997 and May 1998. In the charter of the NDC, it says that 49 per cent of it can be privatised, while 51 per cent must remain held by the public. There is some concern about the quality of the NDC's software. Nikoil, a Russian investment company, partially owned by Lukoil and reportedly some Chechen interests, apparently approached the SPC to buy 49 per cent of the NDC, but was rebuffed. There is little other infrastructure for clearing and settling trades in shares.

Companies to be privatised

As of mid-1998, apparently 17,700 enterprises had been privatised in Azerbaijan, about 90 per cent of which were small with fewer than 50 employees. 750 medium enterprises had been privatised by 18 May 1998. The largest capitalisation of these companies has been about $10 million, with the average being about $1 million. The major Azeri companies require a specialised presidential decree before they can be privatised, and to date have not been sold. Amongst these big firms are Aztelecom (the telecommunications company), the State Oil Company (SOCAR), Azeri Gas (the distributor of gas), Azer Energy, the International Bank (which should be privatised by the end of the year), the Aluminium Plant in Ganja, some industrial and chemical plants in Sumgait, and some pipe manufacturing and other accessory plants for the oil industry. Investors are waiting for these so-called "crown-jewels" to be privatised, but nobody knows when this will occur, how they will be privatised, and whether indeed it will be done via the voucher process.

50.2 per cent of the International Bank is currently owned by the government. It needs to raise an extra 8 billion manat capital, and the preliminary plan for its privatisation is that the EBRD will take 4 billion worth of shares, with the rest possibly to be realised from an equity sale. It is currently intended to sell the shares for cash, rather than vouchers, both to raise capital for the bank, and also for national budgetary reasons.

Many of the major companies appear to have serious problems: they use too much energy because they did not have to pay world prices before the end of the Soviet period; their products are not of good quality; and many of their markets which previously were determined by Soviet say-so, are now shrinking.

Baku interbank currency exchange

BICEX is the only exchange currently operating in Azerbaijan.[6] It was established on 21 June 1993 by the five largest state banks in Azerbaijan, including the NBA. Although some stock exchanges were established before this, including the Baku Securities Exchange in 1991 and the Baku Goods and Stock Exchange in 1992,[7] it is unclear whether any trading was conducted on these systems, and they are not currently operating. Apparently the Mayor of Baku recently also created an exchange called the Baku Stock Market, on which it is intended to trade municipal debt.

BICEX is a non-profit institution, and is composed of a currency section, a credit section, and a securities department. The currency section started operating in 1993, with regular auctions for US dollars starting on 26 August 1994. There are two parts of the currency section: the voice trading session (with a auctioneer called a "makler") and the Organised Interbank Currency Market (OICM). The voice trading session starts at 9.00 a.m. and finishes by 11.00 a.m. It is mostly for the trading of dollars. The trading algorithm on any particular day is that the day-before's exchange rate is suggested as the initial clearing rate. If there is excess demand at this exchange rate, the rate is raised until supply equals demand, and equilibrium occurs. Conversely if there is excess supply, the rate is lowered until supply equals demand, and equilibrium occurs.

The OICM starts after 11.00 a.m. Banks put in bids and offers to deal with each other in the relevant currencies. If any bids and offers match, a trade occurs. The NBA has stipulated that prices on the OICM can vary by no more than 5 per cent from the BICEX clearing price in the morning. BICEX is not currently responsible for the clearing and settlement of such trades, and each bank therefore takes the risk of its counter-parties. BICEX is, however, developing a clearing house that is intended both to guarantee trades and to provide anonymity on the OICM. Trading on the OICM began to be conducted via a computer network on 25 September 1997.

The NBA uses the credit section of BICEX to provide liquidity to the banking sector. It has an automated trading and settlement system with 28 terminals at the exchange. The best 3 bids and offers are relayed on the screen, and prices and volumes of executed trades are also relayed. Orders are matched, and partial executions are possible. The credit section started operating in March 1995.

The securities department at BICEX was founded in April 1996. It operates the primary and secondary market for T-Bills, and also the markets for both listed and so-called "pre-listed" securities. The Exchange Council has produced a series of regulations on exchange membership, securities trading, listing, and settlement procedures. In order not to restrict trading on the exchange, the exchange allows the shares of companies to be traded on the exchange without satisfying the listing requirements (the pre-listed firms). Membership of the securities department has been open since October 1996, and as of 1 October 1997 it had 28 members.

Up until April 1998 BICEX operated a simple auction where participants submitted bids and offers physically to the exchange. Since then, BICEX has installed an information system whereby banks can input prices directly onto screens in their offices. There are approximately 10-15 remote terminals in banks from which it is possible to deal in all the markets operated by BICEX.

Since December 1997, only two shares have been listed on BICEX: Azeri Gas Bank, and Respublica Bank. As of June 1998, there had been only three trades in these shares: one in Azeri Gas Bank, and two in Respublica Bank. Each bank acts as the depository for its own shares, and both banks put offers of their shares for sale on the screens. The one trade in Azeri Gas bank was for 90 million manat at a nominal price per share of 10 000 manat. It was reported in the press that Rabita Bank bought these shares. Of the two trades in Respublica Bank, one was for 480 million manat, and the other was for 38 million manat, again both at a nominal price per share of 10 000 manat. Most of the members of the BICEX stock department are banks, and they do not wish to buy shares of their competitors. All shares are dematerialised. AJG publishes bids and offers in privatised shares which are relayed on BICEX screens, and on the BICEX website. The depository BICEX uses for T-Bills is not used for shares. BICEX has a different depository and clearing chamber for listed shares. There is effectively no market, as there are only two listed shares to trade, and very little trading in privatised shares.

The Istanbul Stock Exchange has apparently signed a memorandum of understanding with BICEX to give US$1.5 million in the form of equipment and training to establish a stock exchange. It is reported likely to take 2-3 years to establish such an institution.

Law and regulation

All three of the Ministry of Finance, the National Bank of Azerbaijan, and the State Property Committee promulgate different rules and regulations concerning the capital markets. The old securities law, which apparently draws heavily on the old Russian securities law, reportedly stipulates that the Ministry of Finance should protect investors, should ensure that all securities are appropriately registered, should license professional participants of the securities markets including brokers and dealers, and should supervise the markets. At one time, the Ministry of Finance apparently indicated that vouchers are securities, and therefore trading in them should be restricted to participants which had been licensed by the Ministry.

A decree of the President also states, however, that the SPC is in charge of privatisation, and amongst the activities it should control are the trading of vouchers. The SPC believes that it is in charge of issuing licenses to voucher-trading firms, and maintains that no license is needed from the Ministry of Finance in order to trade vouchers. The Prime Minister has apparently said that one entity cannot be licensed by two institutions, and gave the SPC the responsibility for this activity. There is a dispute about whether trading in vouchers on the street is legal. The SPC is aware of the trading in vouchers by unlicensed participants, but for the most part ignores it, arguing that it would be difficult to stop, and viewing such participants as gaining useful experience in how markets work. There is uncertainty about institutions called “stock shops”. If vouchers are not to be traded in the street, they should apparently be traded in specific locations, namely at these “stock shops”, but the nature of these stock shops has reportedly not been specified. Banks are not allowed to trade vouchers according to the privatisation program.

The regulation of investment funds is similarly confusing. Investment funds apparently need a license both from the Ministry of Finance and the SPC. The President has put out a general decree on investment funds, and the Cabinet of Ministers has put out a statement regulating investment funds, as approved under the President’s decree.

The IMF has reportedly stipulated that there must be a new securities law in the near future, and apparently a final draft of this law was signed by the President and submitted to Parliament in mid-1998. There was reportedly, however, some concern in parliament that the draft contained so many shortcomings that it needed to be revised. The new law appears to be a framework law containing just the bare elements of how the markets should be regulated. One key element of it is the establishment of a securities commission to regulate the markets. Apparently the new law states that the securities commission should be an “executive” body, meaning that it falls under the authority of the President, given it is the President

who holds the executive power. The President is likely to establish the commission as a independent body from the Ministry of Finance, the State Property Committee, the National Bank, and BICEX. The functions of the securities commission are still to be decided, and it is not clear whether it will just issue guidelines, or institute active control and regulation of the markets.

There is disagreement between various private and official participants in the market about who should operate the stock exchange and the depository. The draft securities law apparently forbids currency exchanges from trading in stocks. If there is to be a stock exchange, therefore, it will have to be separate from BICEX. BICEX argues, however, that it already has an appropriate infrastructure, and should therefore be allowed to form the exchange. The SPC also wishes to operate the stock exchange, and to continue operating the National Depository Centre. There is concern, however, both that the depository should be operated by an organisation separate from a major participant in the market, and that a single entity should not both regulate depositories and operate one itself.

Ignorance, confusion, and the perception of corruption

There is much ignorance and confusion about both the privatisation process and financial markets in Azerbaijan. These contribute to a widespread perception that corruption is endemic. Six instances of ignorance or confusion can be mentioned:

- Conflicting laws and policies from the Ministry of Finance, the National Bank of Azerbaijan, and the State Property Committee mean that there is confusion about which authority supervises which markets, and who is allowed to deal. It has been reported that different officials exploit this by demanding fees for licences.
- There is uncertainty about how and to whom the vouchers allocated to the President's fund will be disbursed.
- There is a popular belief that auctions at the SPC are conducted with inside information. Information released by the SPC about companies that it is going to privatise is sometimes thought to be incomplete, irrelevant, or misleading. If a person wants to buy a company that is being privatised, it is widely believed necessary to approach the SPC, which for appropriate cash will release information about what other bids have been submitted. It is suggested that the real transactions are concluded before the auctions are conducted, and then simply ratified by the auctions. For example, it is commonplace that for one enterprise that was reportedly sold for US$1.2 million, the SPC only received vouchers worth $100 000 at the auction.

The balance was paid in some other manner. It is another blunt commonplace that if you don't already have a deal, don't bid.

There are a range of ways in which the SPC has attempted to stop corruption. In order to limit the possibility of inside information about bids leaking out, information about what companies are going to be sold at each auction is only released two weeks before the auction, the bids submitted to a single auction are split between several operators at the SPC, and information about bids is only kept for three hours. The SPC appreciates that people are suspicious about the auction mechanism, but asks what can it do if only a few vouchers are submitted as bids for a particular company. The SPC cannot ask actual or potential bidders to put up more.

- Given widespread ignorance about the role of shares, and given also the poverty and dependence of employees, there is a common belief that the management of enterprises have often persuaded employees to part with their shares in unfair ways.
- There is a common perception that the privatisation process brought about a more unequal distribution of assets than existed before. The purchases of the prime assets were reportedly concentrated amongst government officials or clans.
- Minority shareholder rights are reportedly widely abused. Current law apparently states that if a shareholder owns over 75 per cent of the shares of the capital of a company, it can effectively ignore the rights of the other 25 per cent of shareholders.

Uzbekistan

The state of development of the capital markets in Uzbekistan is paradoxical. On the one hand, in a relatively short period of time Uzbekistan has succeeded in creating most of the institutions typically thought of as necessary for the functioning of a capital market. In addition, some of the political rhetoric about the capital markets emphasises the benefits that they can deliver to the economy.[8] On the other hand, the manner in which the Uzbek capital markets actually operate is so different from normal perceptions of how they should operate, that it is questionable whether it is useful to consider that they are actually functioning in any real sense. Furthermore, the government's explicit desire to follow a gradualist approach to reforming the economy, has meant that in many contexts it has shown little willingness either to cede control of enterprises, or to allow prices and volumes to be determined by markets.[9] One critical instance of this that severely restricts the development of the capital markets, is the government's decision not to allow convertibility of the currency.[10] An examination of these broad economic issues is, however, beyond the scope of this report.

Four aspects of the development of the Uzbek capital markets are described here: the T-Bill market, the functions and operations of the key institutions in the capital markets, the privatisation process, and finally a set of issues which may be characterised together as ignorance, confusion, and perceptions of corruption. No analysis of the various laws and regulations governing the securities markets in Uzbekistan is presented, both because there a large number of them – in 1997 over 34 main "normative" acts were issued concerning the regulation of the stock market for example – and because for the most part they were not available to the author in English.[11] As discussed below, the extent to which they are enforced is also questionable.

Treasury Bill market

There is a T-Bill market in Uzbekistan, that at first sight appears to operate in the standard manner.[12] As in Azerbaijan, T-Bills are par value securities with no coupons, and are sold in the primary market via auction at a discount. Primary dealers buy them from the Central Bank, which acts on behalf of the Ministry of Finance. All the auctions, trading, clearing, and settlement, take place on the Republican Currency Exchange (RCE). The Central Bank is the co-owner of the RCE. There is one 3-month auction every month, and one 6-month auction every month. The first 3-month bill auction was held in March 1996, and the first 6-month bill was sold a year later. It is intended to issue bills of longer maturities of up to a year by mid-1999. Only domestic residents can buy T-Bills.

Normally the Ministry of Finance offers about 5.5 billion soum worth of T-Bills at each auction (at the official rate of 210 soum = US$1 this equals US$26 million). Typically, however, the Ministry only accepts bids for an amount of securities significantly less than the total amount of securities either on offer, or bid for. The Ministry may standardly accept bids for 3.5 billion soums worth of Bills. The balance of unsold securities are then normally sold in the secondary market the following day at prices higher than those at which bids in the primary market are accepted. Reportedly domestic primary dealers are told the volumes and prices of the bids that they should submit to the auctions. The auction process is thus essentially not used to determine yields. These are pre-specified by the Ministry of Finance.

The lack of alternative investment opportunities make T-Bills attractive, even though they currently have a negative rate of return of 23 per cent, with a yield of 17 per cent in an environment with an inflation rate of 30 per cent. Yields have come down relatively recently for what appear to be two reasons. On the demand side, enterprises do not have the foreign currency to buy necessary supplies, and thus have excess capacity, together with a large amount of spare soums.

On the supply side, there has apparently been an increase in direct credits to enterprises, which in turn has then been recycled through tax collection to the Ministry of Finance, thus reducing the fiscal deficit, and the need for raising money through T-Bill sales.

The secondary market is illiquid. There is an automated trading system on the RCE on which dealers can put bids or offers, but the amounts are frequently small – 5 or 10 million soums. Sometimes it is not possible to sell at all. Non-bank participation in the market is apparently small. As of June 1998, only 25 per cent of the outstanding securities were held by the public or institutions other than banks. This is due to three factors: *i)* low yields compared to inflation and the high return on holding dollar bank notes; *ii)* the lack of permission for banks to sell bonds to the public outside the auction; and *iii)* the non existence of repurchase agreement operations between banks and the public, based on T-Bills in banks' portfolios.

Market institutions

There are four main institutions central to the operations of the securities market in Uzbekistan: the Goskomimushestvo (GKI – the State Property Committee), the Centre for the Control and Coordination of the Securities Markets (CSM), the "Toshkent" Republic Stock Exchange (TRSE), and the National Depository "VAKT" (ND). The nature of each is described in turn here. Further information about the GKI is provided below in the section on privatisation.

Goskomimushestvo and the Centre for the Coordination and Control of the Securities Markets

The GKI is the government's agency for privatisation, and as such is the most important share owner in the market, and the biggest seller of shares in the market via the privatisation process. It also effectively controls all the other major institutions in the market, including the CSM, the TRSE, and the ND.

The CSM was founded in late 1995, and formally created by Presidential Decree on 26 March 1996. It is a department of the GKI, and replaced the State Commission on Securities which was under the jurisdiction of the Ministry of Finance. The chairman of the CSM is Deputy Chairman of the GKI. The director of the CSM is appointed by the cabinet which is chaired by the President of the Republic, and not simply by the President or by the chairman of the GKI, and is thus notionally independent of the GKI. In practice, however, it appears that the chairman of the GKI holds considerable, if not absolute, influence over the CSM.

The CSM has a wide array of powers and undertakes many functions. It proposes all the relevant laws, regulations, and other legal instructions concerning the operations of the securities markets. It undertakes all the licensing and registration of market participants, of which there are currently about 360, including broker-dealers, registrars, investment companies, management companies, depositories, and custodians. It registers all the securities issued in the market, of which there have been more than 5 000. It undertakes a broad range of control activities, including many types of inspections. It is supposed to protect investors and shareholders. In addition, and as discussed below, the CSM is the chief co-ordinator of the Privatisation Investment Funds program.[13]

The CSM maintains firm control over all elements of the market's structure – including the stock exchange, the national depository, and the proposed new clearing chamber, Elsis Clearing. Formally it devises a general strategy for all these institutions, and allows them to operate within this overall framework. In practice, however, it appears that all important decisions are taken by the CSM, and behind the CSM by the GKI. The stock exchange, the national depository, and Elsis Clearing, are all based within the same building as the CSM.

One key issue under debate has been the independence of the CSM from the GKI. It is widely recognised that the CSM faces a conflict of interest because it acts both as the regulator of the market, and also as the underwriting agent of the GKI in selling its shares. Reportedly the President of the Republic ruled in May 1997, however, that it was not yet time for the CSM to be granted independence, following which there has been no further discussion of the issue. The CSM is directly funded from the national budget, and receives no additional revenues.

"Toshkent" Republican stock exchange

The stock department of the "Toshkent" Stock Exchange was founded in 1991.[14] In April 1994 it was transformed into the "Toshkent" Republican Stock Exchange (TRSE) – a closed joint-stock company, and in 1998 it became an "open stock company", which means that it is now allowed to have more than 50 shareholders. Until 1996, trading was conducted using an open outcry system. The exchange then moved to a new building and began using a fully automated trading system with remote access, via satellite connections, to all the regions of Uzbekistan. The exchange currently operates auctions four days a week, apart from Mondays, between 10.00 a.m. and 12.30 p.m. Transactions are cleared in the afternoons. GKI owns 8 per cent of the shares of the TRSE, and completely funds its operations. There are currently 270 brokers who are members of the TRSE. Only licensed brokers with a seat at the exchange are allowed to trade directly on the exchange. Some commercial banks have a broker license and a seat at the exchange.

Reportedly, the trading system used is modelled on a classical auction system.[15] A seller inputs an offer, specifying a volume and a price, and then buyers can enter orders at lower prices, or execute transactions against the seller's order. If demand exceeds supply, the system is meant to raise the price by increments until demand equals supply. An examination of the current algorithm used by the exchange's computer system did not, however, confirm that such an algorithm was being used at the exchange. In order for an investor to trade on the exchange he must give an order to a broker. The broker then inputs the order onto the automated trading system and attempts to find a counterpart. It is not, however, possible to use the computer system to search for all the bids and offers in a particular security as would be the case in a typical auction mechanism. Orders can only be listed by the name of the broker who submitted the order. If a broker wants to know what are the bids and offers in a particular security, therefore, he has to search through the bids and offers of all the other brokers in the market. In practice, although there are very few brokers interested in any particular stock, a key part of a broker's job, therefore, is knowing which broker is interested in trading which stocks.

Available data about trading on the exchange are difficult to interpret. In 1997 apparently more than 5.4 million shares of 1 034 joint stock companies with a value of 2.3 billion soums were traded on the exchange. Over 664 000 investors have reportedly become owners of shares. To date, only shares of privatised companies have been traded on the exchange. In the second quarter of 1998, there were 50 trading sessions, with 547 transactions to give a total trading volume of 352.8 million soum ($3.3 million).[16] On average there were 10 trades a day with an average value of 650 000 soum ($6 000). In the first quarter of the year, only 4.6 per cent of the activity on the exchange was in the secondary market with the balance being sales by the GKI of new issues. In the second quarter, 32.7 per cent of trading was in the secondary market. OTC volume is higher than on-exchange trading, but there are no available data on the amount of such trading.

It is relatively expensive to trade on the exchange compared to OTC trading. There is a 1.5 per cent commission payable to the National Depository, a fee to the exchange of 1 per cent, and a broker's fee of up to 2.5 per cent. Apparently between 1992-1994, all transactions were free of tax following a Presidential decree.

The exchange has recently established a series of what are perceived to be stringent listing criteria, which specify trading activity, accumulated capital, paid-up capital, number of shareholders, and period of existence. It has identified 38 companies that it believes could satisfy these criteria. The exchange is used as the vehicle whereby shares in state-owned enterprises are sold via auctions. New issues of privatised shares from the GKI have significantly lower prospectus requirements than other listings on the exchange. Apparently brokers bid

for the right to act as an agent for the GKI in primary auctions at the stock exchange, with the highest bidder winning. Brokers are paid a 1 per cent commission by the GKI for all shares they sell.

A new electronic system for trading shares off the exchange has been established called Elsis Savdo. The intention is to allow small trades to be undertaken at relatively cheap prices, and without the need for any financial intermediation. 5 per cent of this company is owned by the exchange, 5 per cent by the National Depository, and the balance is owned by two other reportedly private investors. In order to stimulate trading on this system, GKI has apparently promised to sell up to 5 per cent of the total amount of shares for free sale through it, thereby reducing the amount of shares to be sold through free sale via the TRSE. Settlement will be effected through Promstroi Bank, and there will be no fees for using the bank for clearing. Most people do not yet know about the existence of Elsis Savdo.

Most stocks are dematerialised. At present 100 per cent advance payment is required for all OTC and on-exchange transactions, and 30 per cent pre-payment is made for on-exchange trading when purchasing shares from the GKI. There are currently no arrangements to effect delivery-versus-payment. A new company called Elsis Clearing Centre has been established to provide clearing and settlement.

There are reportedly a range of problems with the operations of the market. Trading is based totally on strategic interests, which means that once a block has been collected by an interested buyer, liquidity in the market disappears. There is no disclosure of relevant information or financial statements from traded companies. There is very little liquidity in the secondary market.

National depository "VACT"

The National Depository (ND) was founded in 1994. It maintains the registry for the roughly 5 000 joint stock companies that have been privatised, handles the transfers of securities, and also manages 725 000 client accounts, for legal entities, individual persons, and investment companies. 58 per cent of the shares of the ND are owned by the GKI, 30 per cent by investment institutions, and the balance by physical persons. Currently the ND administers 98 per cent of all client share accounts. The ND receives paper input from buyers, sellers and brokers shortly after the end of a trading session, and processes the input either immediately or overnight.

Once a trade is executed on the exchange, the ND moves the relevant shares from a blocked account in the seller's name to a sales account. The buyer then transfers the value of the proceeds to the bank account of the seller. The trans-

fer of cash takes place outside the system based on individual agreements. Securities transfers are conducted on a gross basis at the request of the seller. On payment, the securities are transferred to the account of the buyer. There is a problem with this process, however, as noted by Berg, in that "the process of transaction to transfer of funds is supposed to take five days, while the process from transfer of funds to final transfer of securities is supposed to take three days. In practice, the process takes longer as it is in the interest of each party to prolong the transfer of his part of the deal, and there is no penalty for causing delays."[17]

In the future it is planned that there will be a two-tier structure for depositories. The ND will continue to act as the depository of all shares held by the GKI before they have been sold, and will also service trading on the stock exchange. Client accounts will, however, be required to be held by commercial depositories, of which there are currently 18 (some of which are banks). If two clients deal with each, and they have accounts at different commercial depositories, their shares will have to be transferred between their accounts via the ND. In contrast, if both clients have accounts at the same commercial depository, any transfers between them will not need to pass through the ND.

The ND will also undertake other activities. If a commercial depository becomes bankrupt, the ND will take over the client accounts held by the failed commercial depository. All shares held by PIFs will continue to have to be held in the ND, as discussed below. Any health or pension funds that are established will also be obliged to maintain their accounts at the ND.

Privatisation

Four aspects of the privatisation process in Uzbekistan are described here: the three "stages" into which privatisation has been divided, the desired ratios of ownership promoted by the government, the Privatisation Investment Funds (PIF) program, and finally some problems with the PIF program.

i) The three stages

The privatisation program in Uzbekistan has been divided into three stages. In the first, which started in 1992, the government focused on the sale of small-scale businesses, shops and houses. Various incentives were apparently established to promote this privatisation – any salary invested in shares was tax-free, all transactions in shares were tax-free, and non-cash money could be used to purchase shares.

In the second stage, which started in 1994, the government concentrated on the "corporatisation" and "privatisation" of medium and some large-scale enterprises. Corporatisation meant modifying the legal form of an enterprise from that of a state-owned enterprise, into a more standard corporate form, typically that of an open joint stock company. 11 800 enterprises were corporatised, 20 per cent of which were then "privatised". The word privatised in the Uzbek context is used to mean something different from what it normally means. In particular, privatisation is used to mean that the GKI keeps 30 per cent or less of the shares of a company. The balance was sold or otherwise distributed through the TRSE, to investment funds, and to various governmental entities including ministries and their affiliated or controlled associations and commercial organisations, such as government-owned banks. Some shares were also distributed to employees.

The GKI is apparently obliged first to try to sell its shares through the stock exchange, and only if this is unsuccessful to sell its shares in the OTC market. Foreigners wishing to buy shares have to pay in hard currency, but the Exchange has no facilities for accepting such payments. Foreigners therefore have to deal directly with the GKI.

Up to 1998 all proceeds from privatisation went directly to the national budget. A Presidential Decree issued on 4 July 1998 changed this, however, and allows proceeds from privatisations to go towards restructuring the enterprises being sold, rather than being passed to the government for budgetary purposes. This is valid until the beginning of 1999, and provides a strong incentive for companies to be privatised before the end of the year.

The third stage of privatisation is for the major state enterprises, and was meant to have started in 1996. The plan was to proceed on a case-by-case basis and to develop a unique privatisation plan for each large enterprise. To date, however, the government has been slow to move on the program and none of the relevant companies have been sold. Although the government has agreed in principle to appoint international advisers, and go through a tender process for some of the major companies, in practice it has not done so. A further problem has been that the prices at which the government wishes to sell these companies are too high. Reportedly, for Almalyk Mining, a major mining concern and the first of the case-by-case companies, GKI requested that investors pay $400 million dollars for a 40 per cent stake, and also invest another $400 million into the company. When told that investors would not be happy to invest such an amount without having control of the company, the percentage of the company that was offered for sale was increased to 46 per cent, still below a controlling stake. The figure for purchasing the company was also seen as too high by foreign investors, given declining prices for the key metals the company produces, and also the backlog of hazardous waste it had accumulated.

ii) Desired ownership ratios

The privatisation process has not been simply a sale of corporate assets by the government to whoever wished to buy them. Apparently, since 1995 the government has desired to maintain some control over who owned the corporate assets of the country. In order to do so, it identified four groups of owners – namely the "collective" (management and workers), the GKI, foreigners, and others – and informally specified the percentage of privatised companies that each category should own.

The government's concern over the desired ownership ratios reportedly came to a head on 26 February 1997, when the Council of Ministers issued a report criticising the GKI for irregularities in the privatisation process, particularly concerning the specified ownership ratios.[18] In March 1997 the Ministry of Finance did some research on the companies that had been privatised. There were apparently several hundred enterprises whose shareholdings were not allocated according to the officially specified ratios. Reportedly, the managers (and other "insiders") of more than 75.1 per cent of all the privatised companies examined held more than 75 per cent of their shares. In only 6.5 per cent of the companies examined, did outsiders hold more than 51 per cent of the shares. Apparently many of the shares held by insiders had been bought from employees, or had been paid for using either working capital, retained profits, or direct credits obtained from the government. These were sources of finance that belonged to the company as a whole, and not just to the insiders.

In response, the President issued a resolution on 31 March 1997 stating that whatever shares had been lost by the state to other state companies should be "reconstructed" as before, meaning that the proportion of shares owned by the state should be brought back into line with certain specified proportions.[19] The President declared that no more than 25 per cent of a privatised joint stock company's shares should be owned by the state (maintained through the GKI), that no more than 26 per cent of its shares should be allocated to management and employees, that no less than 25 per cent of its shares should be allocated to foreign investors, and that the balance should be available for free sale through the securities markets. Several actions were proposed to effect these desired share-ownership ratios. The first was to see whether any person or organisation held a greater percentage of shares than that specified for his or its shareholder class. If any such people or organisations were found, their purchases were to be invalidated. A second route was to dilute shareholdings until the state once more retained the minimum specified shareholding.

When the GKI implemented the President's resolution in April 1997, it applied the decree to all privatised companies, required offending companies to issue new

shares which were then taken up by the state. This diluted the shareholdings of the managers and insiders, and also those of all other shareholders. Whatever the abuses done by insiders to obtain their shareholdings, the government therefore effectively re-nationalised many of these companies. The official reason given for the government's policy was to prevent criminal elements building up controlling interests.[20] There have reportedly been a series of legal actions challenging the implementation of this rule.

iii) Privatisation investment funds

A mass privatisation program was started in June 1996 through the establishment of the Privatisation Investment Funds.[21] The PIF program had a series of goals: to accelerate the de-nationalisation of small and large industrial enterprises, to involve all sections of the population in the privatisation process using a process other than vouchers, to educate the public about the nature of markets, to facilitate the process of restructuring privatised companies via external pressure on corporate governance by the PIFs, to allow people to make capital gains, and to develop the securities market with a view to attracting foreign investors.[22] Although the proportion of the value of the companies sold through the PIF program compared to the total value of companies privatised has been small, the program is important, not least because of its high political exposure.

A PIF is a fund that may raise money by selling its shares (called Public Participation Shares) to the public, and then use this money to invest in privatised companies. Only individuals were initially allowed to buy the shares of PIFs. The investment strategy of each PIF must be publicly disclosed, and each PIF is required to obtain a company to manage their investments, that is separate from the PIF. Management companies are supposed to be founded by private interests. The average price of the Public Participation Shares was 100 soums a share, and individuals were restricted from buying more than 100 shares per PIF. After being established, PIFs were allowed to sell as many shares as they were able to over a period of six months. Following this initial subscription period, however, no further issues of shares were allowed. PIFs have also not been allowed to borrow from sources other than the government, as described below.

The PIFs bid for companies via a multi-stage auction process operated by the GKI. In the first auction, shares were distributed to the PIFs proportionally to the relative amount of shares for which they bid. They were sold at the nominal price (or face value) of the shares. If there were no buyers for the company, the shares were returned to the GKI, and a normal cash auction was held. The minimum price at this auction was 5 per cent below the nominal value. If there were again no bids, the lowest acceptable price could drop by another 5 per cent.

The state supported the bidding process by providing subsidised loans for bidding. In particular, for each soum bid by a PIF, the state allocated the PIF an extra amount of shares worth five more soum. No money, however, was actually given to the PIFs. For the first four years, no interest was to accrue on these soft loans, and for the last three years payments of the principal plus interest were required, with the interest rate being set at 2/3 of the refinancing rate set by the Central Bank. The grace period was intended to give the PIFs some time to restructure the enterprises which they had acquired. The cost to the Government was the foregone cash it would have obtained had it sold the extra shares the PIFs received for cash.

Two government departments apparently regulate PIFs. One is a special department in the CSM, funded by the World Bank, and the other is in the GKI funded through the state budgetary process. The CSM initiated their creation, controls the safety of shareholders' money, and guarantees the repayment of the credits given to PIFs from the government. The financial assets of a PIF are transferred to the PIF's settlement account, and only the management company is given the right to operate this account.[23] The management company is only allowed to use the money in the account for the management of the assets, and is required to organise accounting and reporting, and act only within its mandate as specified by the general meeting of the PIF shareholders.

All money received by a PIF should be kept on a deposit account. To withdraw money from such an account, three signatures are required: from the management company, from the PIF's supervisory board, and from the National Depository "VAKT". This triple signature requirement apparently meant that fraud in the operations of PIFs has been small. A PIF may invest any money it receives only in the shares of privatised enterprises and state securities. The securities that a PIF owns are registered in the National Depository. PIFs are not allowed to buy their own shares. The National Depository is required to check the balances of shares and funds.

The PIF shares appear to be valuable for two key reasons. The first was that the nominal price of the companies' shares at which PIFs were able to buy was in many cases much lower than their actual value. Many joint stock companies sold in the PIF program were able to issue dividends equal or greater in value to the nominal value at which their shares were sold. The second reason was the soft loans given by the government to encourage people to buy them.

The GKI initially identified in September 1996 a list of 310 companies, the shares of which it wanted to sell. As before, the government specified some ownership percentages that different categories of market participants should own: 26 per cent for the GKI, 23 per cent for employees, 21 per cent for sale through the TRSE, and 30 per cent for sale to PIFs. The GKI's original list of companies was subsequently

reduced by about 30 companies in the fruit, construction materials, and fat, oil and tobacco industries. No bids were received for over 100 companies, and apparently the government was unwilling to lower prices for the companies which it was not able to sell. A total of 187 companies were actually sold for a total sum of 1.3 billion soum, 1.1 billion of which was financed through the soft loans given by the government. The first PIF auction took place on 6 December 1996, and after a total 16 auctions, the company auctions for PIFs were stopped in spring 1998.

Official distribution of the shares in PIFs was conducted through Narodny Bank and Turon Bank, and some so-called share-shops. In reality, it has been reported that at the peak selling period only about 8 branches of Narodny Bank, and only 5 branches of Turon Bank actively sold shares. Most of these were in Tashkent. Subsequently both banks stopped selling PIF shares because the GKI did not pay their fees for doing so.[24] As of the end of 1997, 30-40 per cent of the sales of PIF shares had been effected through Narodny Bank, less than 1 per cent through Turon Bank, and the balance made directly by the PIFs themselves. About 70 PIFs and 50 management companies were established. It has been estimated that there are about 80 000-100 000 PIF holders. This figure is only an estimate, however, as the National Depository which manages the accounts for all PIF-holders cannot distinguish between a situation where one person holds two PIFs and where two people hold individual PIFs. Furthermore, this estimate was the initial number of people who bought PIFs, and some people may have sold them after this estimate was made. A second program of companies to be privatised to PIFs is reportedly now under way, with the GKI selecting another group of companies to be sold via auctions.

iv) PIF problems

A range of difficulties and problems have arisen with the operations of PIFs:

- The government's commitment to the program apparently diminished for two reasons. First, there was concern that some of the scandals that occurred in other CIS states, such as financial pyramids, might be repeated in Uzbekistan through the PIFs. Probably more important, however, was the disenchantment by the managers of privatised enterprises concerning the activities of PIFs. Some people view PIFs as having a positive effect on corporate governance, in that they have no hidden agendas. Their goal is believed simply to be the maximisation of shareholder wealth, they do not encourage state control, and sometimes they even urge the management of the companies to ignore state directives if these did not further shareholder wealth. PIFs are also not seen as being interested in maintaining control of the companies, or in ensuring conti-

nuity of supplies from the companies. These very strengths of PIFs, however, have been found unappealing by many corporate management groups, who wished to retain control of the companies they managed, and resented the interference of PIFs in corporate governance. Given the strong ties between management and various parts of the government, management succeeded in tainting the official perception of the PIFs, not least by implying in some quarters that they were controlled by the Mafia.

Government concern about the power of PIFs has meant that no association of PIFs has yet been sanctioned officially. The reason for this is probably because government is concerned that such an association might gain an important economic power that was not sufficiently subject to direct government oversight.

- There has been a loss of confidence in PIFs by the public. This has occurred for several reasons. The first is a difference between the rate of returns earned by PIFs and the rates of return expected by investors. The rules governing the initial distribution of corporate shares via auctions to the PIFs meant that many small PIFs were able to obtain almost the same absolute size of shareholdings as the large PIFs. The large PIFs were thus only able to obtain much smaller proportional holdings of shares relative to the amount of funds they had collected, compared to the small PIFs. This implied that the large PIFs had much higher cash holdings than the small PIFs, and given the high rates of dividends paid by some of the privatised companies, were thus only able to pay out significantly lower rates of return than the small funds. Even if these dividends were relatively high, for example at a level of 30 per cent of the nominal value of the shares held by a fund, the dividend rates of some of the larger funds were low compared to some of the small PIFs which paid out more than 100 per cent in dividends.

- A further factor contributing to the loss of public confidence in PIFs has been that the liquidity of their shares has been minimal. As of December 1997, the CSM had disallowed any secondary trading of PIF shares, as well as any trading in any enterprise shares in PIF portfolios – although this was reportedly going to change following a new rule by the CSM. Only OTC trading was thus available. The population who had invested in PIFs, had, however, done so using cash, and they want some form of redeemability in the form of cash. To date this has not been possible, because it is not legal to make a cash transfer between a legal entity on the one hand, such as a broker, and a physical person on the other. This arises because of the difference between so-called "cash" and "non-cash" money.[25] Most of the population also do not have a bank account, and therefore cannot receive a bank transfer from a broker. One of the donor organisations has attempted to

establish a trading system that allows individuals to trade small lots of PIF shares, and then receive cash directly from these sales, however, apparently a special regulation allowing this is required from the Central Bank which has been slow in forthcoming.[26]

- The procedure for paying dividends to PIF shareholders is reportedly complex, and the commissions charged by banks for servicing PIF shareholders is high.
- Apparently, the names of PIFs are frequently not included in registries in time, they are not invited to annual general meetings, and sometimes they are not paid dividends while managers are.
- A problem arising from the widely dispersed shareholdings that PIFs were able to obtain, was that their shareholdings were only in relatively small blocks. A typical holding by a PIF in a company privatised through the auction process is 3 per cent (this would occur when 10 PIFs bid equally for the available 30 per cent of the company). The possibility of PIFs playing a major role in corporate governance has therefore been small. As importantly, the total amount of shares offered through the PIF program was relatively small compared to the total amount of shares sold by the GKI. 53 billion soum worth of assets have reportedly been privatised, of which 1.3 billion soum worth of shares has been sold to PIFs. These figures, implying that PIFs hold about 2.5 per cent of the total market capitalisation, confirm that it will be difficult for them to influence corporate management with such a relatively small holding of the whole market.[27]
- For the large PIFs it became impossible to hold a general meeting for all their shareholders – the largest PIF, Kamalak, obtained about 40 000 shareholders.
- There have apparently been problems at some privatised companies where the workers and management have been angry that they are working at the companies, while dividends are being paid to the PIFs investing in them, who merely own shares in the companies and do not work there.
- The time when the PIFs have to pay back the soft loans granted them by government is approaching. It is questionable whether they will be able to do this, and uncertain what will happen if they do not.

Ignorance, confusion, and the perception of corruption

As in Azerbaijan, there is much ignorance and confusion about both the privatisation process and financial markets in Uzbekistan. These contribute to a widespread perception that corruption is endemic. Several instances of ignorance or confusion can be mentioned.

- People do not understand what role the state plays in the financial markets, and are particularly ignorant about the functions of the GKI and the CSM. People do not know how it is decided which enterprises are sold, where, to whom and at what price. There is a widespread belief that the sales of some of the most valuable enterprises are made over the counter in a non-transparent manner for political purposes or vested interests, rather than being sold in an open and public manner on the exchange.
- As discussed above, the notion of privatisation in Uzbekistan is not what is commonly accepted elsewhere as privatisation. Prices and volumes in markets appear to be determined by the government. The purchasers of securities are in large part determined by the government, through formal or informal mechanisms. In addition, even for those companies that have been "privatised", many of their input and output prices are apparently determined by the government, as are most big commercial decisions. The rights normally accruing to shareholders are therefore not present.
- It is widely accepted that several individuals or groups of individuals, be they at government ministries or more informal organisations, are allocated power over different sectors of the economy. All interest in a particular sector must therefore pass through the relevant group or individual, and this clearly influences the manner in which any particular privatisation can be effected.

Policy issues, questions, and some answers

Capital markets perform a wide range of functions. They provide vehicles for raising finance for companies; they serve as mechanisms for price discovery and information dissemination; they offer fora for trading, investment, speculation, hedging, and arbitrage; they are used to implement privatisation programs; they play an important role in the development of emerging economies; and they may be pivotal elements in the success of financial centres. The effective delivery of all these functions depends upon the sound operation and regulation of the exchanges and trading systems organising the relevant markets. The way in which capital markets have developed in Azerbaijan and Uzbekistan shed much light on the extent to which these functions can be realised in transition economies.

A series of issues believed important for the development of capital markets in Central Asia are identified in this section, and some brief comments on these issues are then provided. Some of the questions raised are believed relatively easy to answer conceptually. The fact that they are believed easy to answer, however, does not diminish their importance, nor does it mean that the answers are easy to implement in practice. On the contrary, many of the simplest conceptual responses are

extremely difficult to accomplish. In contrast, some of the questions raised are believed extremely difficult to answer. While some of these difficulties are independent of the state of development of a capital market about which the questions are posed, the difficulties nevertheless raise particularly hard problems for the developers of capital markets in transition economies.

Nine issues are identified here, covering the topics, respectively, of: 1) privatisation; 2) profitability; 3) tax; 4) uncertainty and jurisdictional conflicts; 5) the independence of a clearing bank; 6) the balance between regulation and market promotion; 7) the speed, sequencing and sustainability of market development; 8) corruption; and finally, 9) the reasonableness of expectations concerning the development of financial markets.

Privatisation

Two aspects of the process of privatisation in transition economies have particularly important implications for the development of capital markets. The first concerns the creation of new enterprises, which is always a slow process, particularly in transition economies. The main source of assets to trade on a capital market in such environments, is therefore the shares of those state-owned companies that already exist. In addition to the adverse effects that delays in privatisation frequently have on the restructuring of these enterprises, such delays also have a direct impact on the development of capital markets. Bluntly put, without privatisation there will be few assets to trade on a capital market.

The second aspect of privatisation that directly influences the functioning of capital markets is the precise nature of the privatisation that a government pursues. If, as in Uzbekistan, the transfer of corporate assets from government to the private sector is hindered by many factors, the development of the capital markets is similarly likely to be hindered. The sale of state-owned companies from one governmental institution to another, continued governmental interference in market prices and volumes, continued state determination of both supply prices and finished product and service prices, and the maintenance of strong links between government and corporate management, all mean that a capital market will be unable to determine prices and allocate resources efficiently.

Profitability

Many transition economies face what they perceive to be a serious problem that directly impacts on the capital markets. On the one hand they desperately

need foreign investment and expertise to revitalise their economies, but on the other hand there is frequently intense political concern both about allowing foreign investors to take control of domestic industry, and about letting them repatriate profits that are perceived to belong to the domestic country itself. Though it may be politically unpalatable, there is a simple lesson governments must appreciate in this context. To obtain foreign investment, foreign investors are needed, and foreign investors demand reasonable profits. If such investors are not allowed to earn them, they will not come.

Tax

The taxation of transactions in financial markets in Central Asia frequently leads to one of two situations, neither of which are desirable. On the one hand, taxation is often viewed by the private sector as theft by the state. Brokers and investors provide no exception to this rule. They frequently feel no compunction to pay tax, and will often seek to find any way they can to avoid paying it. This may have several undesirable consequences for the market. Given their desire to hide transactions from the tax authorities, brokers often choose not to trade on an organised exchange or via a central depository. To do so would require them to publish details about their trades, and open up their accounts to the scrutiny of the tax authorities, something they expressly wish to avoid.

On the other hand, the taxation of securities transactions is frequently viewed by the tax authorities as an easy route to obtain large revenues. As a result, they may impose taxes that are simply inappropriate or have undesirable outcomes. In Uzbekistan, for example, it is reported that market participants have to pay value-added tax on share sales – not simply on the value of the services provided to them, but also on the value of the transactions as well. In many contexts, tax authorities do not allow market participants to off-set capital gains against capital losses. There are often also problems with the taxation of international investors. Suppose non-residents are required to pay a tax, say 20 per cent, on capital gains. The tax authorities may interpret this to mean that 20 per cent of the total proceeds, and not just the capital gains, from any sales are to be deducted at source. If a foreign institution sells shares to a domestic entity, the domestic entity is normally therefore required to deduct 20 per cent of the sale proceeds and give them to the tax authorities. This tax structure means that even if foreign investors appreciate the merits of a dealing with a local counterpart, for example via central depository, they may prefer not to use it. If they did, the local market participant or the central depository would be the counterparty to any sales they made, and such a local counter-party would then be required to deduct the 20 per cent of sales proceeds.

Uncertainty and jurisdictional conflicts

The ambiguity of many laws concerning the financial markets in Central Asia, the laxity with which they are enforced, and the fluidity of many of the new institutional arrangements, frequently means there is uncertainty about who is allowed to what in a financial market, and what sorts of permissions are needed to undertake different activities. These difficulties are normally exacerbated if there is more than one official authority in charge of regulating the markets. Such official agencies may seek to obtain rents for granting licenses, they may issue conflicting regulations, and they frequently seek to exploit legal and functional uncertainties to their own advantage in ways that can be detrimental to market development.

The independence of a clearing bank

The appointment of a commercial bank to be a clearing bank in a transition economy often has two big potential benefits.[28] It may provide a relatively fast solution for the implementation of the cash clearing side of securities transactions, and it may also allow the institution with the greatest management expertise and most sophisticated technological infrastructure in an emerging market, to take on what is often a difficult technical role. Several risks, however, may arise specifically because of the fact that the clearing bank is operated by a single commercial bank.

First, given that the commercial bank is likely to be providing other services, such as making loans, at the same as acting as the clearing bank, securities market account holders in the bank will be exposed to the risk of the bank becoming insolvent as a result of these other activities. Second, if the clearing bank is affiliated with other participants in the market, or if it itself is a participant in the markets, it may take actions to further its own or other market participants' advantage, at the expense of the public interest. Third, the clearing bank may act in an anti-competitive manner. Finally, the commercial bank may choose to discontinue acting as the clearing bank, if it finds the activity unprofitable after a period, thus potentially jeopardising the operations of the whole market.

The creation of an independent public clearing bank may mitigate some of these risks. If the clearing bank were to operate under a "limited charter", according to which it agreed only to undertake activities necessary for the clearing and settlement of securities transactions, the risk of insolvency of the bank arising from undertaking activities not related to clearing would be eliminated. If the limited charter option is infeasible or legally difficult, it is then critical to establish alternative safeguards to protect the accounts of market participants. Such

safeguards may include segregating trading accounts from other accounts, and ensuring that the money deposited in them is only invested in the highest quality instruments such as T-Bills or repurchase agreements. It may also be possible to establish some legal requirements in the bankruptcy regime, so that if the clearing bank does go bankrupt, the accounts of market participants can legally be kept apart from those of other creditors.

If the clearing bank is truly independent, and therefore does not have any affiliations with other market participants, the risk of conflicts of interests would be diminished. If the bank were a non-profit organisation, the risk of it acting anti-competitively would be reduced, though not eliminated – even non-profit organisations can act anti-competitively. Given that the clearing bank's sole role would be to act as clearing bank, it would have a strong incentive to maintain a commitment to that role. If the bank were truly independent, and thus independent of the central depository, however, it might face technical and logistical difficulties in combining its activities with those of the central depository.

There are several standard ways of enhancing the independence and public nature of a clearing bank. These are: *i)* requiring that its board, or the body with ultimate power at the bank, fairly represent all the different groups in the financial community; *ii)* requiring that the public be fairly represented on its board; *iii)* requiring the bank to discuss thoroughly in public any major rule or operational changes it proposes, through a process of public consultation, comment, and justification; *iv)* requiring its fees to be both reasonable, and reasonably allocated to the different groups in the market; *v)* requiring the elimination or minimisation of conflicts of interest on the bank's board and among its management; *vi)* allowing market participants a forum for appeal against the bank's decisions; and *vii)* allowing a regulator to scrutinise closely the bank's activities. In a market with a small number of participants, it is unavoidable that conflicts of interest and personal associations abound, and the practicality of creating a truly independent and public clearing bank is therefore often unrealistic. The question of whether an exchange should undertake the role of clearing bank then becomes an important issue.

The typical structure of an exchange is that of a membership organisation, whose members are broker/dealers. The exchange is run by these members, and furthermore in a transition economy is often dominated by a small number of people. If the exchange were to undertake the role of clearing bank with this organisational structure, the wider financial and regulatory community, together with the public, could reasonably argue that too much power would be concentrated in the hands of too few people. They might be concerned that the clearing bank would take decisions that were likely to further the interests of the broker/dealers, possibly at the expense of the public interest.

The exchange might also face a significant operational risk by entering, with limited resources, into an area with which it was unfamiliar. Furthermore, if the exchange were to attempt to simulate the activities of a commercial bank while acting as the clearing bank, namely if it were to seek to make a profit, possibly by undertaking activities not related to clearing securities transactions, the risks to market participants of insolvency and anti-competitive conduct, as in the commercial clearing bank option, would once again be present. Market participants would then have no incentive to choose the exchange over another commercial supplier of clearing services. While it is feasible in the long run that an exchange might be able to establish a clearing bank, it should only do so under very tight conditions, and essentially only if it is both willing and able to turn itself into a truly publicly accountable institution.

Regulation versus market promotion

Although the determination of the appropriate balance between regulating a market and promoting a market is never easy, it is particularly difficult in an emerging economy. On the one hand, the ignorance and the lack of experience of most participants in such markets means that they are unlikely to be able to make reasonable assessments of the risks and opportunities offered by markets. The possibility of fraud and deception in the capital markets of transition economies is therefore high. On the hand, a central aim of the developers of markets in transition economies is to enhance trading. The imposition of tight regulatory requirements on market participants can severely restrict such trading. Furthermore, the regulators in such markets themselves are prone to the same weaknesses of other market participants. They too may be unlikely to be able to make reasonable assessments of the risks and opportunities offered by markets, they too may further their own personal interests, and they too may undertake fraudulent activity.

One instance of the difficulty of deciding how tight a regulatory structure should be established, concerns the requirements necessary to ensure delivery-versus-payment in a market. To achieve this, depositories frequently operate a system of blocking or freezing securities for trading. Consider, for example, an environment with a trading system that only allows a market participant to enter a sell order, if the central depository can confirm that the participant has sufficient shares in its account to cover the order. Suppose also that short-selling is forbidden, and that no repurchase market for securities exists. Now suppose a trader purchases some shares on day T, for settlement on day T+3. The trader will only receive the shares in his account at the depository on day T+3, so until then he will not be allowed to enter a sell order for the securities he purchased on day T. The trader will therefore face 3 days of market risk before being able to trade out of his initial position. The very requirements

necessary to ensure delivery versus payment, therefore make it impossible to execute back-to-back transactions, and can reduce the liquidity in a market.

Speed, sequencing and sustainability

A constellation of many requirements are necessary to make a capital market work. At a minimum, these include a functioning trading system, a clearing and settlement system, an efficient payments system, an appropriate legal and regulatory basis for trading, reasonable legal procedures to enforce these laws and regulations, an independent regulator, profitable enterprises which wish to have their shares traded, functioning brokers and investors, appropriate accounting procedures, and equitable bankruptcy procedures. It is self-evident that the development of all these criteria takes time. Given the ever-present lack of resources in transition economies, the fact that so many factors are necessary for developing a capital market raises two critically important questions: Which requirements should be given priority? and, How should the development of these requirements be financed?

There are no easy answers to either question. Given the time taken to develop each of the necessary factors, the question of which takes priority may be moot. It is simply very difficult to co-ordinate a long-term program with many different aspects being marshalled in a pre-specified sequence. Political and economic environments are just too complex to predict. On that basis, the Nike strategy for market development is probably the best – Just Do It. Push ahead on all those fronts that can reasonably be afforded and if hurdles arise to slow development in one area, re-focus efforts on other areas.

Financing development is also a difficult question. The investment needed to create the various elements of a market's infrastructure may be significant. Yet premature over-investment is easy to make – without an adequate level of trading all the various elements of market will not be sustainable. Although no easy answers are available, the simplest options are again probably the best. A common mistake is to attempt to build institutions that are directly modelled on those that exist in the major developed markets. Such attempts have frequently failed.

Corruption

This report does not prove the presence of corruption in either the Azeri or the Uzbek capital markets. What it does, however, is confirm that ignorance and confusion contribute to the perception in both countries that many different types of corruption may exist in both capital markets. Theft and larceny are thought to exist

on a grand scale. Given that there is no easy distinction between many public and private interests in both countries, the personnel at many official authorities are perceived as acting primarily to further their personal advantage. Whatever the reality of corruption, the perception of its widespread presence is by itself sufficient to stop capital markets from working efficiently.

Most of the strategies to limit corruption are relatively simple in concept and widely advocated, yet extremely difficult to implement, and frequently liable to be manipulated in unpredictable and subtle ways. Such strategies include transparency – in process and in substance; independent auditing; fair representation of interested parties; due process with the possibility of appeal; public consultation, scrutiny, and justification of legal and regulatory instruments; the minimisation of conflicts of interests; and finally the independence of regulatory agencies.

With a small number of participants in a market the independence of regulatory institutions is all the more important. The situation in Uzbekistan where the Centre for the Coordination of Functioning of the Securities Markets comes under the authority of the GKI is an instance in point. As previously noted, the GKI is the major owner and seller of securities in the market, has a major if not determinative role in the key infrastructure organisations in the market, and at the same time is in charge of the regulator of the market. This is an area where government could take a relatively simple step that would dramatically enhance the perceived fairness of the market. In a market where the private sector is still small and recently formed, it is all the more important to establish centres of power that are independent from the government. The question of which organisation should run the depository in Azerbaijan is similar. Given the impossibility of any form of true independence currently in Azerbaijan, it will probably be a state-managed organisation.

As in developed markets, the presence of conflicts of interest in the private sector may often be difficult to resolve. Where there are a relatively small number of significant participants in the market, as is frequently the case in emerging markets, where these participants are amongst the most dynamic in the market, and pay the most fees to the market, it is frequently they who control and dominate the management of the private sector institutions such as the exchange. To demand independence in the governance of the relevant market institutions in such circumstances, may be to expect the impossible.

Reasonable expectations

Until the fall of the Soviet Union in the early 1990s, all the countries in Central Asia were the subject of a command and control economy for an extended period.

To judge the development of capital markets in Central Asia by Western standards, where the period of existence of capital markets in many countries may be measured not just in tens, but in hundreds of years, is therefore in one sense ridiculous. The nature and wealth of the underlying Western economies are different by several orders of magnitude from those in Central Asia, the sophistication of market participants is much more advanced, and the regulatory and legal frameworks governing these markets have had time to work through many difficult issues, scandals, and much development.

In another sense, however, it is futile not to judge the development of the Central Asian capital markets by anything other than Western standards. There is little point in a country developing its capital markets unless they can deliver precisely the functions that capital markets in Western economies do deliver. In order to effect these functions, all the various prerequisites present in Western economies are necessary. These include not only the constellation of requirements noted above, but also the political freedoms necessary to make the basic economic choices of where and when to invest your money, and the political rights necessary to enforce any contracts made in the commercial sphere of the financial markets. Yet to expect the presence of these political freedoms and rights so soon after the fall of the Soviet Union is unreasonable. There is no easy answer to balancing on the one hand an acceptance of the difficulties of developing a capital market, with the demand on the other that unless a range of minimal criteria are met a capital market will not succeed in delivering the objectives desired by its developers.

Conclusion

The development of the capital markets in two countries in Central Asia, Azerbaijan and Uzbekistan, is examined in this report. In Azerbaijan the capital markets are just beginning to be created. There is thus a great deal of fluidity in the perceived and actual functions of the various participants in the market, and such fluidity can be, and is, quite reasonably exploited by market participants to further their own interests. Sometimes, however, this appears to have lead to outcomes that are both inefficient and unfair.

The state of development of the capital markets in Uzbekistan is paradoxical. On the one hand, in a relatively short period of time Uzbekistan has succeeded in creating most of the institutions typically thought of as necessary for the functioning of a capital market. In addition, some of the political rhetoric about the capital markets emphasises the benefits that they can deliver to the economy. On the other hand, the manner in which the Uzbek capital markets actually operate is so different from normal perceptions of how they should operate, that it is questionable

whether it is useful to consider that they are actually functioning in any real sense. Furthermore, the government's explicit desire to follow a gradualist approach to reforming the economy, has meant that in many contexts it has shown little willingness either to cede control of enterprises, or to allow prices and volumes to be determined by markets.

A range of lessons from the experiences of Azerbaijan and Uzbekistan for the development of capital markets in other countries in the region are analysed in the report. Comments are made on nine issues deemed important in this context. These include, privatisation, profitability, tax, uncertainty and jurisdictional conflicts, the independence of a clearing bank, the balance between regulation and market promotion, the speed, sequencing and sustainability of market development, corruption, and finally, the reasonableness of expectations concerning the development of financial markets.

Capital markets in Azerbaijan and Uzbekistan

Azerbaijan

	Treasury bills	Stocks
Organised exchange	Baku Interbank Currency Exchange (BICEX)	
Listing	1 month, 3 month	2 Joint Stock Companies ("Azerigasbank" and bank "Respublika")
Volume of trading	Approx. US$47 million in 1997 Approx. US$43 million per 10 months, 1998	Only 6 transactions totaling approx. US$182 000
Capitalisation	$14 241 000	$2 694 000
Membership	29 (mostly banks)	
Clearing and settlement	BICEX and National Bank	National Depository Centre[1]
Supervisory body	Ministry of Finance, National Bank of Azerbaijan, State Property Committee	
Legal framework	"Law of securities" was approved in 10/98	

Uzbekistan

	Treasury bills	Stocks
Organised exchange	Uzbek Republican Currency Exchange (URCE).	"Toshkent" Republic Stock Exchange (TRSE).
Listing	3 month, 6 month.	674 Joint Stock Companies[2]
Volume of trading	Approx. US$314 million[3]	Approx. US$22 million[4]
Capitalisation	Approx. US$178 million[5]	US$77 895 850
Membership	n/a	
Clearing and settlement depository	URCE	"Elis-Cliring" Company National Depository "VAKT"
Supervisory body	Center for Control and Coordination of Securities Markets (CSM)	
Intermediaries	268 agents and 26 consultants[6]	
Legal framework	8 Laws,[7] 20 President Decrees, etc.	

1. However, there are no shares of privatised companies in BICEX listing. The past transactions were cleared and settled through BICEX and the respective companies.
2. The number of the companies whose shares were traded in the TRSE as of September 30, 1998.
3. The turnover of the primary market in 1997 (rate, 1US$ = 80.17 soum of December 1997).
4. In 1997.
5. The oustanding balance of T-Bills as of December 1997 (rate, same as note 3).
6. As of October 1998.
7. Laws of the Republic of Uzbekistan, *1)* "On Exchanges and Exchange Activity" dated 2 July 1992; *2)*"On Securities and Stock Exchange" dated 2 September 1993; *3)*"On Joint-Stock Companies and Protecting of the Shareholders' Rights" dated 26 April 1996; *4)* "On Mechanism of Functioning of the Securities Market" dated 25 April 1996; *5)* "On Foreign Investments in the Republic of Uzbekistan" dated 30 April 1998; *6)* "On Guarantees and Measures for Protecting Foreign Investor' Rights" dated 30 April 1998; *7)* "On Currency Regulation" dated 7 June 1993; *8)* "On Activity of Depository in the Market of Securities" dated 28 August 1998.

Source: OECD Secretariat (data from BICEX, Azerbaijan and CSM, Uzbekistan).

Notes

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2. See "Fixed Income Securities" The Minaret Group, May 1998.
3. "On the Issuance of State Short-Term Bonds" Decree of the Cabinet of Ministers, 17 September 1996.
4. See "Voucher Privatisation Process" The Minaret Group, April 1998.
5. The author is unsure whether this latest price of the option is the equivalent of US$25.63, or in fact US$100.
6. See "Baku Interbank Currency Exchange" Baku Interbank Currency Exchange, 1997.
7. The Baku Exchange was first established on 18 July 1886. "Baku Interbank Currency Exchange" Baku Interbank Currency Exchange, 1997.
8. For example, the President recently stressed the importance of PIFs, discussed below, in restructuring enterprises.
9. See, for example, p. 9, "Uzbekinvest: Yesterday, Today, and Tomorrow" Uzbekinvest, 1998.
10. A description is likely to be provided in "Republic of Uzbekistan – Recent Economic Developments" Report to the Board of the IMF, forthcoming 1998. The government has apparently agreed with the IMF to allow convertibility of the currency by the year 2000.
11. pp. 15-16, "Review Financial Market of Uzbekistan" Economic Study Centre and Statistics of the Central Bank of the Republic of Uzbekistan, and Nongovernmental Agency on Rendering Consultation-Auditor and Information Services to Participants in Bond Market, No. 1, 1998.
12. There has also been a market for Certificates of Deposit. No information about this market was available, however, to the author.

13. Cabinet of Ministers, Resolution No. 405-f, 27 September 1996. See also "Press Release Commenting on 19 November Auction's Results" (14th auction) TACIS, PIF Project – Uzbekistan, Credit Commercial de France, Arthur Andersen, Omnium, Denton Hall, 20 November 1997.

14. p. 99, "1997 Year Book" Federation of Euro Asian Stock Exchanges, 1998.

15. p. 1, "The Securities Settlement System in Uzbekistan" Jesper Berg, Danmarks Nationalbank, October 1997.

16. p. 21, "Bulletin" "Toshkent" Republican Stock Exchange, No. 3(26), April-June 1998.

17. p. 5, "The Securities Settlement System in Uzbekistan" Jesper Berg, Danmarks Nationalbank, October 1997.

18. "Trip Summary, 9 March 1998-19 March 1998 – Tashkent Uzbekistan" Hugh Kennedy, Oakweald Limited.

19. Decree 1740.

20. "Trip Summary, 17 November 1997-29 November 1997 – Tashkent Uzbekistan" Hugh Kennedy, Oakweald Limited.

21. These are regulated by a Resolution of the Cabinet of Ministers, No. 220, issued in June 1996 "On Measures for Organisation of the Activities of Investment Funds", and Resolution No. 405-f of 27 September 1996, also a draft law "On Non-deposit Financial Institutions". p. 23, "Uzbekistan: 1998 Country Profile" European Bank for Reconstruction and Development, and National Bank of Uzbekistan, Strategic Research Department, 1998.

22. See "Press Release Commenting on 19 November Auction's Results" (14th auction) TACIS, PIF Project – Uzbekistan, Credit Commercial de France, Arthur Andersen, Omnium, Denton Hall, 20 November 1997.

23. "Report on Progress of Implementation of the Program of Privatisation Investment Funds" A. Abdukadirov, First Deputy Chairman, GKI, Director General, Centre for the Coordination and Control of the Securities Markets, April 1997.

24. This problem may have been resolved.

25. A description of the difference between "cash" and "non-cash" money, is likely to be provided in "Republic of Uzbekistan – Recent Economic Developments" Report to the Board of the IMF, forthcoming 1998.

26. Following a request sent by the CSM to the Central Bank on 27 January 1997 No. 13/40.

27. "Conclusions: Mission to Uzbekistan on National Depository system and the privatisation program" Jesper Berg, Danmarks Nationalbank, October 1997.

28. See "Clearing at the Kyrgyz Stock Exchange" Ruben Lee, A Report prepared for TACIS, 3 June 1998.

Foreign Direct Investment: Survey of Implementation of Methodological Standards[1]

Introduction

Two international organisations, the IMF and the OECD, have recently conducted a survey on foreign direct investment (FDI) statistics: *Survey of Implementation of Methodological Standards for Direct Investment* (SIMSDI). This work was carried out under the auspices of the IMF Committee on Balance of Payments Statistics (IMF Committee) and the OECD Working Party on Financial Statistics (WFS).[2] The survey is a comprehensive study of data sources, collection methods, and dissemination and methodological practices for foreign direct investment statistics.

Similar surveys were conducted in 1983 by the OECD for its Member countries, and in 1991 by the IMF's Working Party on Measurement of International Capital Flows which included 38 of the largest reporters of FDI statistics as described in the *Godeaux Report.*[3]

The OECD Council Recommendation, renewed in July 1995, had mandated the WFS to continue the collection of information on FDI statistics, accompanied by notes describing the areas where the methodology used by Member countries differed from the third edition of the OECD's *Benchmark Definition of Foreign Direct Investment* (*Benchmark*).[4] The OECD has a well-established and detailed database on FDI statistics for all its Member countries. Statistics are disseminated in the *International Direct Investment Statistics Yearbook.*[5]

At its October 1995 meeting, the IMF Committee decided to review the progress countries were making in implementing the FDI standards set out in the fifth edition of the *Balance of Payments Manual* (*BPM5).*[6] Consequently, the IMF and the OECD agreed to conduct a joint survey with a view to determining the extent to which countries have adopted the international standards for FDI statistics.

More than a hundred countries replied to the 1997 survey. This response rate is clearly indicative of the importance national compilers attach to FDI statistics. The present article is based on the results of a joint IMF-OECD report which analyses

the survey responses on FDI data collection and dissemination.[7] In addition, the report focuses on methodological issues and major weaknesses in national FDI compilation systems. This article summarises the major conclusions of the report.

The scope of the Survey

Foreign direct investment plays a key role in the process of economic globalisation, *i.e.* in international economic integration. With the liberalisation of markets, the penetration of FDI in the world economy has grown significantly, not only in terms of volumes but also in terms of diversification of markets and industries. Another feature is the diversification of direct investors. For many years, direct investors were mostly large multinational enterprises. More recently, small and medium-size enterprises are increasingly involved in foreign direct investment transactions, with the objective of increasing their competitiveness and gaining access to other markets. The benefits of direct investment for the investing economy as well as the recipient economy are multifold. FDI provides the means for facilitating international transactions by creating direct and stable links between economies. FDI is a source of financial capital. It is an important vehicle for increasing the competitiveness of enterprises. It also enables the transfer of technology and know-how and contributes to improving the productivity of enterprises.

Against this background, FDI statistics should be comprehensive with a view to providing the appropriate tools for a meaningful interpretation of FDI trends for the purpose of policy analysis and decisions. Moreover, the globalisation of economies reinforces the need for internationally comparable statistics which serve as an important measure of economic integration. In sum, there is need for a single international standard in measuring FDI. The guidelines in IMF's *BPM5* and in OECD's *Benchmark* provide such standards. In May 1997, the IMF and OECD launched SIMSDI, which would determine the extent to which countries have adopted the international standards for FDI statistics.

Three objectives were set for the survey:

1. To discover the extent to which OECD and IMF member countries have adopted the recommendations on FDI statistics made in *BPM5* and the *Benchmark*. Consequently, the survey included questions on all the major methodological issues related to the measurement of FDI.

2. To obtain standardised information on data sources, collection methods, and dissemination practices (*e.g.,* availability, periodicity, timeliness, revision policy, breakdowns) from Member countries of both organisations.

3. To facilitate the exchange of information between reporting countries. Consequently, the survey form was designed with a view to providing a set of easily comparable metadata (information about data) on FDI statistics. The survey form is also designed to identify countries that would make available their survey information to IMF member countries.

Organisation of the Survey and responses

The survey form was designed as a multiple choice questionnaire. This design was intended to reduce, as much as possible, the time required by compilers to complete the form, while covering all the major issues. It was understood that the multiple choice design meant that uncommon practices might not always be explicitly reported. Therefore, space was provided for comments throughout the survey form. The final questionnaire was endorsed by both the IMF Committee and the OECD WFS.

The survey form was sent to 171 IMF member countries (of which 29 are also OECD Member countries). The form was made available in the English, French, Spanish and Russian languages to insure a higher response rate and to improve the quality of responses. As of end-July 1998, 114 countries had responded to the questionnaire including the 29 OECD Member countries. The response rates from European non-OECD countries and Western Hemisphere countries were very good, with over 70 per cent of these countries completing and returning the form, while over 60 per cent of Asian countries did the same. Approximately 45 per cent of African and the Middle Eastern countries returned the completed questionnaire. The Annex provides a complete list of the survey respondents.

The overall quality of the survey responses was very good. The editing process suggested that the questions were generally understood and that countries' submissions were generally internally consistent. In a few instances where countries had difficulty completing the detailed questions, the information that they provided in comments or about their future plans was still very useful. A few countries which are still developing their systems for compiling FDI statistics preferred not to complete the form but provided letters indicating their future plans in this area. A total of 18 countries either provided letters or completed part of the questionnaire but do not compile and disseminate FDI statistics. These countries were excluded from the analysis of the survey results, which focused on 96 countries, distributed as follows: 29 OECD countries, 15 African countries, 13 Asian countries, 16 European countries, 2 Middle Eastern countries, and 21 Western Hemisphere countries.

Survey responses are recorded in a database jointly organised by IMF and OECD on the INTERNET but with restricted access. Only officials from the Member countries

of these two organisations as well as the secretariats of other international organisations are entitled to access the information on this database which is password protected. The intention is to continue revising the details recorded for each country on a regular basis. This process will allow an accurate description of data sources, dissemination practices and use of methodological standards in each country over time.

Major findings[8]

1. *Direct investment relationship*: International manuals recommend that 10 per cent or more of the ordinary shares or voting power (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise) establishes a direct investment relationship – the so-called "10 per cent rule". SIMSDI results indicate that about three-fourths of OECD and non-OECD countries apply this recommendation for the identification of direct investment relationships. Twenty-four OECD countries currently apply the 10 per cent rule, three countries are in the process of implementing it, and the others do not use a predetermined threshold. Many of the non-OECD countries responding to the survey that do not apply the 10 per cent rule rely on investment approval authorities for the collection of their FDI statistics, and only a few of them indicated future plans to adopt the 10 per cent rule.

2. *The "Fully Consolidated System":* Direct investment statistics should cover all enterprises in which the investor directly or indirectly has a direct investment interest. This means that once the 10 per cent "across the border" link is achieved with an enterprise, certain other enterprises related "down-the-line" to the first enterprise will also be regarded as direct investment enterprises. As a result, the FDI statistics should cover transactions between the direct investor and the first enterprise and certain of its affiliates and between the affiliates themselves if they are in different countries. SIMSDI indicates that 23 OECD countries and 36 non-OECD countries take account of indirectly-owned direct investment enterprises in their statistics. However, the procedures to determine the existence of indirect relationships between enterprises and the coverage of transactions between indirectly-owned concerns vary considerably between countries. According to the SIMSDI results, 35 countries, of which 13 are OECD countries, include earnings data of indirectly owned FDI enterprises and 31 countries, of which 13 are OECD countries, classify equity and other capital transactions between enterprises that belong to the same group of related enterprises as FDI transactions. However, the IMF and OECD are aware that a complete assessment of the extent of application of the rules for the "Fully Consolidated System" would require the collection of additional information from member countries regarding the special characteristics of each data collection system.

3. *Investment by affiliates in their parent companies*: SIMSDI results indicate that only 4 OECD countries and 11 non-OECD countries record the acquisition of equity capital by the direct investment enterprise in its direct investor in strict conformance with the recommendations of the international manuals. According to the international standards, all financial transactions of resident direct investment enterprises with foreign direct investors should be recorded by the country of the direct investment enterprise as direct investment in the reporting economy; symmetrically, all financial transactions with foreign direct investment enterprises should be recorded by the country of the direct investor as direct investment abroad. For the instances of reverse investment or cross-participation, such as the acquisition of equity capital by the direct investment enterprise in its direct investor, the direct investment enterprise acquires an interest in its direct investor. That interest should be regarded as an offset to capital invested by the direct investor and is equivalent to recording a disinvestment by the direct investor. However, many OECD countries record these transactions as portfolio investment. In cases in which the equity participation is at least 10 per cent in both directions, two direct investment relationships are established. Reverse investment transactions in equity capital or in the form of other instruments should then be recorded as direct investment claims and liabilities in both directions; that is, as direct investment in the reporting economy and as direct investment abroad, for each economy as appropriate. In the instances when two direct investment relationships are established, the acquisition of equity capital by the direct investment enterprise in its direct investor is recorded according to the international standards by 20 OECD countries and 24 non-OECD countries.

4. *Reinvested earnings:* SIMSDI results indicate that over three-fourths of OECD countries compile reinvested earnings data. The 1991 survey used for the *Godeaux Report* indicated that half of the 22 industrial countries in the survey sample were not compiling reinvested earnings. In 1997, 6 of these previous non-reporters compile data on reinvested earnings and 3 others have future plans for the collection of these data. Currently, 23 OECD countries include reinvested earnings in their statistics. The SIMSDI results indicate that 44 non-OECD countries also compile reinvested earnings for inward FDI statistics, which represents about two-thirds of the non-OECD respondents. However, less than 50 per cent of these countries compile outward reinvested earnings data.

5. *The calculation of reinvested earnings*: International standards state that both realised and unrealised capital gains and losses should be excluded from the calculation of reinvested earnings data. The international manuals recommend that earnings of FDI enterprises be measured according to the rules of the *Current Operating Performance Concept* (COPC), under which earnings of an enterprise are its income from normal operations and before allowing for non-recurring items

and capital gains and losses. However, of the countries that compile reinvested earnings data, about half of OECD countries incorporate realised or unrealised capital gains or losses and a large number of non-OECD countries incorporate realised or unrealised capital gains or losses. The *BPM5* and the *Benchmark* also recommend that earnings data be calculated net of any provision for depreciation of fixed capital, but only half of OECD and non-OECD countries follow this recommendation. Overall, only 8 countries fully apply the rules of the COPC when measuring reinvested earnings.

6. *Short-term financing between affiliated enterprises*: The *Godeaux Report* indicated that data on short-term loans between affiliated enterprises were included in the FDI statistics of only a minority of the countries included in the survey sample. The 1997 SIMSDI results indicate that almost 80 per cent of the OECD countries and over 60 per cent of the non-OECD countries include short-term loans between affiliated enterprises in FDI. Notwithstanding this improvement, there are still many OECD countries that include these flows in the other investment component of the financial account.

7. *Accrual accounting*: Direct investment income data should be recorded on an accrual basis, that is recording dividends as they are payable and income on debt as it is accruing. Most OECD countries record dividends as they are paid. This is not a departure from the international standards with regard to the time of recording income as long as dividends are paid on the date they are payable. About half of OECD countries and almost 60 per cent of non-OECD countries record interest on a paid basis, rather than as it is accruing.

8. *Valuation methods*: The *BPM5* and the *Benchmark* recommend that all external financial assets and liabilities should be measured at current market prices as of the date involved. However, the international manuals recognise that book values from the balance sheets of direct investment enterprises are generally utilised to determine the value of the stock of direct investments. The SIMSDI results indicate that 19 of the 25 OECD countries that compile FDI position data use book value to determine the stock of FDI assets and liabilities, although 5 of these countries also use market value as the second most frequent valuation method.

9. *Activities of "Special Purpose Entities" (SPEs) of multinational enterprises*: SIMSDI results indicate that financial transactions between SPEs and affiliated enterprises are recorded in the FDI statistics of over 80 per cent of the OECD countries that report the establishment of SPEs in their economy or the establishment of SPEs abroad by resident enterprises. However, only about half of non-OECD countries record the transactions between SPEs and affiliated enterprises in FDI statistics.

10. *Construction enterprises*: Work undertaken in one economy by a construction enterprise resident in another economy should be regarded as being done by a direct investment enterprise resident in the economy in which the work is being carried out. If production is maintained for one year or more, a separate set of accounts is maintained for the local activities and income tax is paid to the host country. About one-fourth of OECD countries and even fewer non-OECD countries apply this recommendation for construction enterprises that do not establish a separate legal corporation in the host country.

11. *Real estate investment*: The *Godeaux Report* indicated that a significant number of countries were excluding all cross-border purchases and sales of real estate in reporting FDI flows, while many additional countries were excluding "non-commercial" real estate transactions from the statistics. SIMSDI results indicate little improvement compared with the practices described in the *Godeaux Report*. Only 19 OECD countries cover cross-border real estate transactions by enterprises, and 17 cover such transactions by individuals. A small proportion of non-OECD countries include these transactions in FDI statistics, as only 28 countries (about 40 per cent) include real estate transactions in the reporting economy when they are conducted by non-resident enterprises, while 22 countries (or about one-fourth of respondents) include these transactions in the statistics when they are conducted by non-resident individuals.

12. *Data collection and dissemination*: Despite the progress of recent years, many countries still do not disseminate FDI data on a regular basis. OECD Member countries report FDI statistics to the OECD on the basis of a joint OECD-EUROSTAT statistical questionnaire. One OECD country temporarily interrupted data reporting to international organisations due to the implementation of the new balance of payments system. The Survey results indicated that over 30 per cent of non-OECD countries do not report statistics to the IMF on direct investment in the reporting economy and more than one half of these countries do not report statistics on direct investment abroad. FDI position data are disseminated by approximately three-quarters of the OECD countries but less than 30 per cent of the non-OECD countries report these data. When reporting data two-thirds of OECD countries have two data dissemination cycles; "the most timely" FDI statistics are monthly or quarterly data usually available around 10 weeks after the end of the reference period while "most comprehensive" FDI statistics are most often annual data disseminated between 30 to 52 weeks after the end of the reference period. Data sources used for compiling these statistics vary across the countries. Over half of the OECD countries rely on an international transactions reporting system (ITRS) for "the most timely" transactions data, while the "most comprehensive" transactions data are usually based on data collected from enterprise surveys. Non-OECD countries also rely

Table 1. **Data reporting to international organisations**
By number of countries

	Countries that report FDI statistics for the following components					
	Direct investment income		Direct investment financial flows		Direct investment position data	
	Inward	Outward	Inward	Outward	Inward	Outward
OECD (29)*	28	27	28	27	25	24
Africa (15)	11	12	13	10	5	4
Asia (13)	8	5	10	9	5	4
Europe (16)	13	11	14	11	9	8
Middle East (2)	1	2	–	1	–	–
West. Hem. (21)	21	5	20	5	4	1
Total (96)	**82**	**62**	**85**	**63**	**48**	**41**

* One OECD country temporarily interrupted data reporting to international organisations due to the implementation of the new balance of payments system.

largely on these two sources, although the information collected by exchange control and investment approval authorities represents the primary data source for 30 per cent of these countries. Geographical breakdowns of FDI data are available from most OECD countries, which bodes well for the bilateral exchange of the data. However, only about one-half of non-OECD countries compile FDI financial flows with geographical breakdown.

Notes

1. This article was prepared by Ayse Bertrand, Head of Financial Statistics Section, Financial Affairs Division, Financial, Fiscal and Enterprise Affairs of OECD. It is based on the results of a joint IMF-OECD report.
2. In the second half of 1998, the OECD Group of Financial Statisticians (GFS) was given a new name: Working Party on Financial Statistics (WFS).
3. *IMF Report on the Measurement of International Capital Flows*, 1992.
4. *Benchmark Definition of Foreign Direct Investment*, *third edition* is issued by the OECD to provide detailed operational guidance on how foreign direct investment statistics should be compiled to meet internationally agreed standards. It reviews the main statistical concepts and definitions of direct investment and proposes practical solutions with concrete examples.
5. An electronic edition of the *International Direct Investment Statistics Yearbook* is also available.
6. *Balance of Payments Manual*, *fifth edition* "continues the series of international standards that have been issued by the International Monetary Fund for providing guidance to member countries in the composition of balance of payments and related data on the international investment position".
7. It is envisaged to disseminate the joint IMF-OECD report on the Survey of Implementation of Methodological Standards of Direct Investment on the WEB site of both organisations. The report provides detailed analysis for 96 countries on data reporting and revision practices, availability of geographical and industrial breakdowns and methodological standards. The analysis is based on numerous tables drawn from survey results reported to the IMF and the OECD.
8. Findings are based on the responses of the sample 96 countries as indicated above.

Annex

Country classification and list of respondents (the survey respondents are identified in bold)

OECD Countries **(29 respondents)**	Africa **(22 respondents)**	Asia **(16 respondents)**	Europe **(18 respondents)**	Middle East **(6 respondents)**	Western Hemisphere **(23 respondents)**
Australia	Algeria	**Bangladesh**	**Albania**	Bahrain	**Antigua & Barbuda**
Austria	Benin	Bhutan	**Armenia**	Egypt	**Argentina**
Belgium	**Botswana**	**Brunei* Darussalam**	**Azerbaijan**	Iran, I.R. of	**Bahamas, The**
Canada	Burkina Faso	**Cambodia**	Belarus	**Israel**	Barbados
Czech Republic	**Burundi**	**China, P.R.: Mainland**	**Bulgaria**	**Jordan***	Belize
Denmark	Cameroon	**China, P.R.: Hong Kong**	**Croatia**	**Kuwait**	**Bolivia**
Finland	Cape Verde	**Fiji**	**Cyprus***	**Lebanon***	**Brazil**
France	C. African Rep.	**India**	**Estonia**	Libya	**Chile**
Germany	Chad	**Indonesia**	Georgia	Oman	**Colombia**
Greece	Comoros	Kiribati	**Kazakhstan**	Qatar	**Costa Rica**
Hungary	**Côte d'Ivoire***	Lao P. D. Rep.	**Kyrgyz Rep.**	**Saudi Arabia***	**Dominica**
Iceland	Djibouti	Malaysia	**Latvia**	**Syrian Arab* Rep.**	Dominican Rep.
Ireland	Equatorial Guinea	**Maldives***	**Lithuania**	United Arab Emirates	**Ecuador**
Italy	**Ethiopia***	Myanmar	**Macedonia,* former Yugoslav Rep. of**	Yemen, Republic of	**El Salvador**
Japan	Gabon	**Nepal***	**Malta**		**Grenada**
Korea	**Gambia, The***	Pakistan	**Moldova**		**Guatemala***
Luxembourg	Ghana	**Papua New Guinea**	**Romania**		Guyana
Mexico	**Guinea***	**Philippines**	**Russia**		**Haiti**
Netherlands	Guinea-Bissau	**Singapore**	**Slovak Republic**		**Honduras**
New Zealand	Kenya	Solomon Islands	**Slovenia**		Jamaica
Norway	**Lesotho**	Sri Lanka	**Tajikistan**		Nicaragua*
Poland	Liberia	**Thailand**	Turkmenistan		Panama
Portugal	**Madagascar**	**Tonga**	Ukraine		**Paraguay**
Spain	**Malawi**	**Vanuatu**	Uzbekistan		**Peru**
Sweden	Mali	Vietnam			**St. Kitts & Nevis**
Switzerland	Mauritania				**St. Lucia**
Turkey	**Mauritius**				**St. Vincent and The Grenadines**
United Kingdom	**Morocco***				Suriname
United States	Mozambique				Trinidad & Tobago
	Namibia				**Uruguay**
	Niger				**Venezuela**
	Nigeria				
	Rwanda*				
	Sao Tomé & Principe				
	Senegal				
	Seychelles				
	Sierra Leone				
	Somalia				
	South Africa				
	Sudan*				
	Swaziland				
	Tanzania				
	Togo				
	Tunisia				
	Uganda				
	Zambia				
	Zimbabwe				

* indicates countries that either provided letters or completed part of the questionnaire but have incomplete FDI compilation and data dissemination systems. These countries were excluded from the analysis of the survey results.

New Financial Statistics

The OECD Financial Affairs Division is responsible for the collection, processing and dissemination of a broad range of financial statistics covering, *inter alia*, the financial accounts of OECD countries, foreign direct investment, financial statements of banks, assets of institutional investors, privatisation proceeds and statistics on insurance.

With a view to facilitating the prompt dissemination of financial data, *Financial Market Trends* includes, from time to time, presentation of statistics released recently in other publications of the Division. This section includes cross-country data on foreign direct investment and bank profitability.

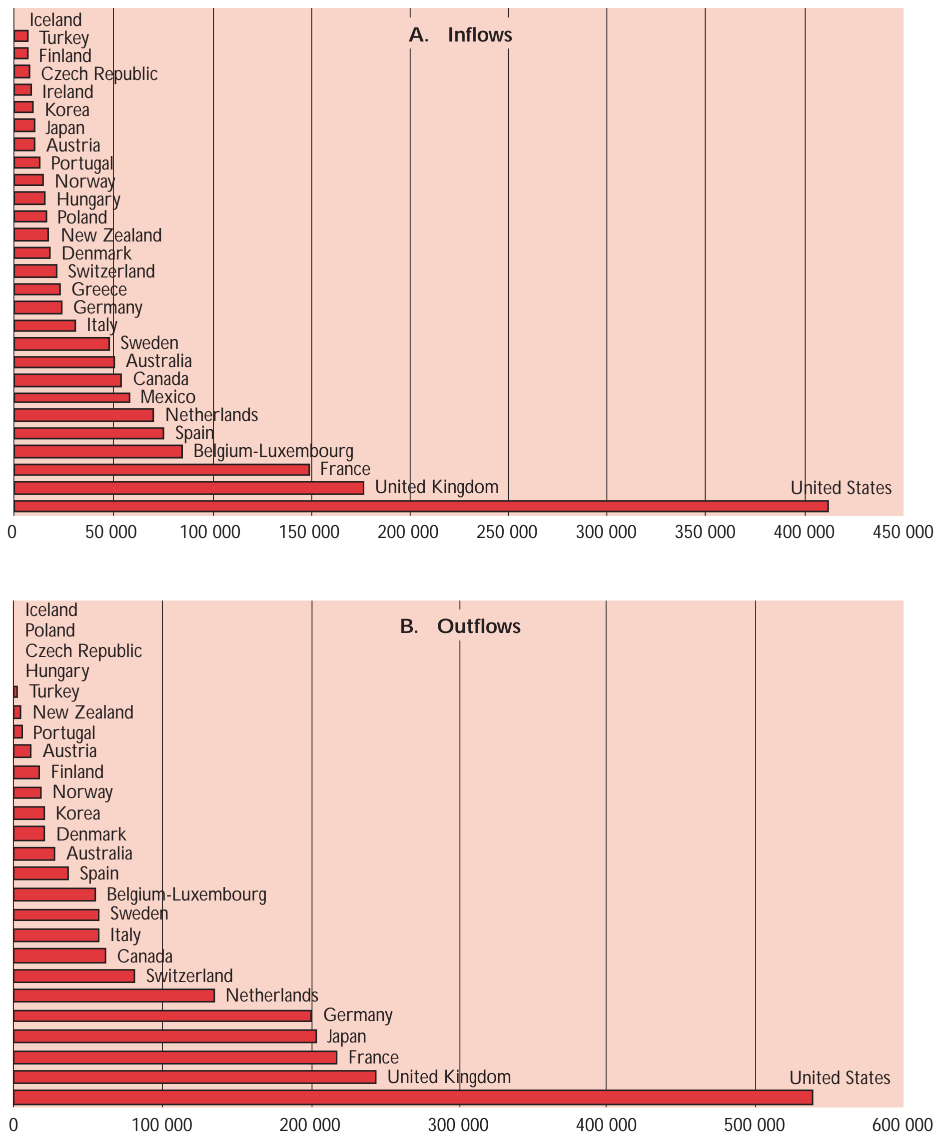
The first set of data (Chart 1 and Tables 1-2) relate to foreign direct investment statistics drawn from *International Direct Investment Statistics Yearbook*, 1998. These data, which provide breakdowns for inward and outward investment for direct investment flows and positions for 1990-1997, include revisions as compared to preliminary series published in the June 1998 edition of *Financial Market Trends*.

The second set of data (Tables 3-5) covers the period 1991-1996 commercial banks' net income, net provisions and profit before tax and is based on the statistics published in *Bank Profitability – Financial Statements of Banks*, 1998.

For information on definitions and coverage of the data, readers are referred to the above mentioned publications which are available both in printed and electronic editions.

◆ Chart 1. ***Direct investment cumulative inflows and outflows in OECD countries, 1990-1997p***

In $US million



p. Provisional.

Source: International Direct Investment Statistics Yearbook, 1998. OECD.

Table 1. Foreign direct investment flows
a) Inflows to OECD countries

$US million

	1990	1991	1992	1993	1994	1995	1996	1997p
Australia[1]	6 513	4 042	5 036	3 007	3 951	13 202	5 456	9 346
Austria	647	359	940	982	1 314	636	3 842	1 739
Belgium-Luxembourg	7 966	9 292	11 326	10 751	8 313	10 558	14 117	12 525
Canada	7 562	2 870	4 717	4 748	8 431	10 780	6 416	8 217
Czech Republic	..	..	1 004	654	869	2 562	972	1 252
Denmark	1 212	1 453	1 015	1 681	4 890	4 179	776	2 970
Finland	787	–247	406	864	1 578	1 063	1 109	1 542
France	15 609	15 157	17 855	16 439	15 580	23 681	21 960	23 178
Germany	2 492	4 090	2 662	1 915	1 790	13 449	–2 720	–188
Greece[2]	1 005	1 135	1 144	2 583	3 081	4 272	5 928	3 585
Hungary	311	1 462	1 479	2 350	1 144	4 453	1 983	2 085
Iceland	22	18	–11	..	..	14	61	126e
Ireland[3]	258	1 168	1 244	850	420	621	1 888	1 676
Italy	6 344	2 481	3 210	3 746	2 236	4 817	3 535	3 779
Japan	1 806	1 286	2 755	210	888	41	228	3 224
Korea	789	1 180	728	588	809	1 176	2 325	2 341
Mexico	2 633	4 762	4 393	4 389	10 973	9 526	9 185	12 478
Netherlands	12 165	6 552	7 824	8 561	7 586	11 611	7 766	8 678
New Zealand[4]	1 681	1 695	1 089	2 212	2 690	2 690	3 687	1 339
Norway	1 807	655	–426	2 244	1 359	1 644	3 437	3 692
Poland	88	359	678	1 715	1 875	3 659	4 498	3 077
Portugal	2 608	2 451	1 914	1 550	1 265	695	708	1 728
Spain	13 839	12 445	13 352	8 073	9 425	6 217	6 468	5 540
Sweden	1 971	6 351	–41	3 843	6 346	14 455	5 074	9 665
Switzerland[5]	5 485	2 644	411	–83	3 368	2 224	2 797	4 408
Turkey	788	910	911	746	636	935	913	852
United Kingdom	32 889	16 027	16 214	15 468	10 497	22 738	26 084	36 972
United States	48 422	22 799	19 222	50 663	45 095	58 772	76 453	90 748
Total OECD	**177 699**	**123 396**	**121 051**	**150 748**	**156 408**	**230 670**	**214 947**	**256 574**

Note: Data are converted using the yearly average exchange rates.
p. Provisional.
e. Estimates by the country.
1. Break in series. As from 1995, data are based on the calendar year.
2. Up to 1992 and including, data are on an approval basis. As from 1993, change in the coverage: the amounts include entrepreneurial capital net and real estate investment inflows.
3. Break in series. The results shown are for net direct investment capital flows.
4. Data are based on the fiscal year, ending 31 March.
5. Data for 1996 are also provisional.

Source: International Direct Investment Statistics Yearbook, 1998, OECD.

◆ Table 1. **Foreign direct investment flows** *(cont.)*
b) **Outflows from OECD countries**

$US million

	1990	1991	1992	1993	1994	1995	1996	1997p
Australia[1]	265	3 001	951	1 779	5 291	3 728	6 306	6 219
Austria	1 663	1 288	1 871	1 467	1 201	1 043	1 405	1 450
Belgium-Luxembourg	6 130	6 493	10 389	4 693	1 205	11 786	8 365	6 709
Canada	5 222	5 813	3 586	5 868	9 090	11 165	8 524	12 896
Czech Republic	..	..	21	101	120	37	25	25
Denmark	1 509	1 844	2 225	1 373	4 041	3 018	2 484	4 045
Finland	2 708	–124	–753	1 409	4 297	1 498	3 598	4 405
France	36 220	25 115	30 416	19 732	24 381	15 760	30 419	35 591
Germany	23 964	23 623	19 526	15 320	17 179	38 791	29 546	33 166
Greece[2]	..	..	..	..	..	..	..	..
Hungary	..	..	..	11	49	43	-3	431
Iceland	10	27	3	11	23	24	65	26e
Ireland[3]	..	..	..	..	..	..	..	..
Italy	7 612	7 326	5 948	7 221	5 109	5 732	6 465	12 164
Japan	50 774	31 688	17 301	13 916	18 117	22 629	23 420	25 992
Korea	1 052	1 489	1 162	1 340	2 461	3 552	4 670	4 287
Mexico	..	..	..	..	..	..	..	..
Netherlands	15 288	13 577	14 366	12 343	17 405	19 629	23 214	20 157
New Zealand[4]	2 358	1 472	391	–1 386	2 015	1 747	–1 257	–756
Norway	1 478	1 840	–80	791	2 145	2 844	5 341	4 114
Poland	..	..	13	18	29	42	53	36
Portugal	165	474	687	141	283	689	785	1 856
Spain	3 442	4 424	2 171	2 648	3 900	3 608	5 222	10 142
Sweden	14 743	7 053	409	1 357	6 698	11 221	4 662	11 382
Switzerland[5]	6 709	6 212	6 050	8 765	10 798	12 214	15 981	14 516
Turkey	88	127	133	175	78	163	325	319
United Kingdom	18 636	15 972	19 156	25 573	28 251	44 329	34 125	58 313
United States	30 982	32 696	42 647	78 164	73 252	92 074	74 833	114 537
Total OECD	**231 018**	**191 430**	**178 589**	**202 830**	**237 418**	**307 366**	**288 573**	**382 022**

Note: Data are converted using the yearly average exchange rates.
p. Provisional.
e. Estimates by the country.
1. Break in series. As from 1995, data are based on the calendar year.
2. Up to 1992 and including, data are on an approval basis. As from 1993, change in the coverage: the amounts include entrepreneurial capital net and real estate investment inflows.
3. Break in series. The results shown are for net direct investment capital flows.
4. Data are based on the fiscal year, ending 31 March.
5. Data for 1996 are also provisional.

Source: *International Direct Investment Statistics Yearbook*, 1998, OECD.

◆ Table 2. **Direct investment position, at year-end**
a) **Inward investment in OECD countries**

$US million

	1990	1991	1992	1993	1994	1995	1996	1997p
Australia[1]	75 801	78 018	79 857	75 450	92 389	101 548	119 051	..
Austria[2]	9 976	10 368	11 209	11 373	13 092	17 532	18 258	17 415
Belgium-Luxembourg	..	..	..	..	..	..	..	..
Canada	112 844	117 025	108 503	106 868	110 014	122 855	127 466	131 261
Czech Republic	..	595	1 606	2 053	3 077	5 062	6 842	6 511
Denmark	..	..	..	..	..	..	..	..
Finland	5 132	4 220	3 689	4 217	6 714	8 464	8 797	9 040
France	86 508	97 799	100 209	103 197	123 887	143 673	143 937	..
Germany[3]	58 759	67 819	65 657	61 591	160 128	192 898	188 502	..
Greece	..	..	..	..	..	..	..	..
Hungary	569	2 107	3 424	5 576	7 087	11 919	14 690	15 882
Iceland	147	165	124	117	128	129	197	308e
Ireland	..	..	..	..	..	..	..	..
Italy	57 996	59 686	48 474	52 512	58 846	63 453	72 482	81 082
Japan[4]	9 850	12 297	15 511	16 884	19 211	33 532	29 940	..
Korea	..	..	..	..	..	..	..	..
Mexico	..	..	..	..	..	..	..	..
Netherlands	73 824	78 144	81 191	82 792	103 359	121 970	..	..
New Zealand[5]	..	..	..	15 552	22 599	26 193	33 150	29 520
Norway	17 712	14 620	15 206	14 463	16 305	19 512	20 519	..
Poland	109	425	1 370	2 307	3 789	7 843	11 463	..
Portugal	..	..	..	..	..	..	..	..
Spain	65 917	79 572	79 203	71 071	86 161	99 769	98 431	..
Sweden	12 461	18 085	13 773	13 007	22 247	30 489	34 202	..
Switzerland	34 245	35 749	32 990	38 714	48 667	57 063	53 812	..
Turkey	..	..	..	..	..	..	..	..
United Kingdom	218 213	224 680	185 925	196 811	218 211	203 825	235 513	266 262
United States	394 911	419 108	423 130	467 412	480 667	535 553	594 088	681 651
Total OECD	**1 234 974**	**1 320 482**	**1 271 051**	**1 341 967**	**1 596 578**	**1 803 282**	**1 811 340**	**1 238 932**

Note: Data are converted using the end-of-year exchange rates.
p. Provisional.
e. Estimates by the country.
1. Break in series. As from 1994, data are based on the calendar year.
2. 1996 and 1997 data are estimates.
3. As from 1994, break in series due to methodological changes.
4. As from 1995, break in series due to methodological changes.
5. Data are based on the fiscal year, ending 31 March.

Source: *International Direct Investment Statistics Yearbook*, 1998, OECD.

◆ Table 2. **Direct investment position, at year-end** *(cont.)*
b) **Outward investment from OECD countries**

$US million

	1990	1991	1992	1993	1994	1995	1996	1997p
Australia[1]	31 153	29 436	32 454	30 381	37 194	41 116	52 463	..
Austria[2]	4 498	6 030	6 862	8 111	9 282	11 702	12 781	12 269
Belgium-Luxembourg	..	..	..	..	..	..	..	..
Canada	84 808	94 382	87 870	92 468	101 967	118 307	129 257	135 521
Czech Republic	..	..	..	..	..	..	..	..
Denmark	..	..	..	..	..	..	..	..
Finland	11 227	10 845	8 565	9 178	12 534	14 993	17 666	20 332
France	110 119	129 903	140 679	141 430	163 075	184 388	192 973	..
Germany[3]	112 037	129 422	133 772	138 039	213 654	258 142	271 241	..
Greece	..	..	..	..	..	..	..	..
Hungary	..	..	..	226	291	489	493	900
Iceland	75	101	97	112	146	179	241	249e
Ireland	..	..	..	..	..	..	..	..
Italy	59 039	65 912	65 816	76 422	81 383	97 038	107 441	124 977
Japan[4]	201 441	231 791	248 058	259 795	275 574	238 452	258 612	..
Korea	2 339	3 376	4 511	5 588	7 623	10 500	13 796	16 546
Mexico	..	..	..	..	..	..	..	..
Netherlands	109 094	119 713	124 746	124 820	149 023	177 279	..	..
New Zealand[5]	..	..	..	4 400	5 904	7 678	9 328	6 807
Norway	10 278	11 196	13 144	13 482	16 909	22 519	..	..
Poland[6]	..	..	101	198	461	539	735	..
Portugal	..	..	..	..	..	..	..	..
Spain	15 654	20 532	20 911	22 403	28 331	34 489	36 616	..
Sweden	49 491	53 531	47 707	44 559	59 237	71 941	70 877	..
Switzerland	66 086	75 884	74 413	91 571	112 586	142 479	143 189	..
Turkey	..	..	..	..	..	..	..	..
United Kingdom	230 824	234 055	223 774	253 213	286 394	314 340	360 485	390 297
United States	430 521	467 844	502 063	564 283	640 320	717 554	777 203	860 723
Total OECD	**1 528 684**	**1 683 953**	**1 735 543**	**1 880 679**	**2 201 888**	**2 464 124**	**2 455 397**	**1 568 621**

Note: Data are converted using the end-of-year exchange rates.
p. Provisional.
e. Estimates by the country.
1. Break in series. As from 1994, data are based on the calendar year.
2. 1996 and 1997 data are estimates.
3. As from 1994, break in series due to methodological changes.
4. As from 1995, break in series due to methodological changes.
5. Data are based on the fiscal year, ending 31 March.
6. As from 1994, outward position data include investment from the Polish banking system.
Source: *International Direct Investment Statistics Yearbook*, 1998, OECD.

◆ Table 3. **Commercial banks: Net income**[1]
As a percentage of average balance sheet total

	1991	1992	1993	1994	1995	1996
Australia[2]						
Net interest income	2.59	2.33	2.37	2.57	2.58	2.49
Net income	1.98	1.09	1.35	1.62	1.42	1.56
Austria[2]						
Net interest income	1.81	1.85	2.11	1.90	1.72	1.66
Net income	0.93	1.00	1.07	0.93	0.87	0.87
Belgium[2]						
Net interest income	1.48	1.51	1.35	1.27	1.23	1.22
Net income	0.56	0.61	0.61	0.49	0.56	0.60
Canada						
Net interest income	3.15	3.06	2.91	2.79	2.56	1.79
Net income	1.71	1.63	1.55	1.55	1.43	1.05
Czech Republic[2]						
Net interest income	..	..	..	3.64	2.77	2.69
Net income	..	..	..	2.76	1.72	0.89
Denmark[3]						
Net interest income	3.39[4]	3.56	3.93	3.94	3.17	2.70
Net income	1.48[4]	0.59	2.41	0.93	2.17	1.72
Finland						
Net interest income	1.25	1.12	1.37	1.36	1.44	1.38
Net income	–1.10	–1.86	–1.73	–1.17	–0.57	0.33
France						
Net interest income	1.43	1.16	0.93	0.89	0.80	0.70
Net income	0.48	0.60	0.60	0.34	0.46	0.31
Germany						
Net interest income	2.16	2.21	2.18[4]	2.18	1.98	1.83
Net income	1.05	1.16	1.24[4]	1.06	0.92	0.89
Greece						
Net interest income	2.19	1.60	1.57	1.35	2.02	1.87
Net income	2.29	1.47	1.40	1.71	1.52	1.34
Hungary						
Net interest income	..	..	..	..	5.41	4.54
Net income	..	..	..	..	0.39	1.29
Iceland[3]						
Net interest income	5.06	4.96	5.00	4.71	4.57[4]	4.32
Net income	1.52	1.71	2.51	2.34	1.83[4]	1.90
Ireland[2]						
Net interest income	..	..	..	..	2.97	2.53
Net income	..	..	..	..	1.72	1.58
Italy[2]						
Net interest income	3.29	3.25[4]	2.99	2.67	2.85	2.71
Net income	1.49	1.34[4]	1.59	1.08	1.14	1.19
Japan						
Net interest income	1.11	1.26	1.25	1.33	1.45	1.50
Net income	0.39	0.39	0.32	0.30	0.49	0.34
Korea						
Net interest income	2.24	2.37	2.17	2.02	2.18	2.25
Net income	1.36	1.66	1.63	2.34	1.47	1.28

◆ Table 3. **Commercial banks: Net income**[1] *(cont.)*
As a percentage of average balance sheet total

	1991	1992	1993	1994	1995	1996
Luxembourg						
Net interest income	0.83	0.84	0.77	0.75	0.70	0.68
Net income	0.67	0.72	0.79	0.62	0.58	0.59
Mexico						
Net interest income	5.37	6.09	6.37	5.07	5.10	3.28
Net income	2.39	3.23	3.77	2.32	3.29	2.15
Netherlands[2]						
Net interest income	1.78	1.83	1.82[4]	1.89	1.84	1.84
Net income	0.82	0.85	0.92[4]	0.87	0.90	0.94
New Zealand[2]						
Net interest income	2.98	2.92	2.77	2.78	2.85	2.52
Net income	1.35	1.30	1.30	1.30	1.50	1.27
Norway						
Net interest income	2.49[4]	2.93	3.08	2.84	2.53	2.26
Net income	–0.07[4]	1.55	2.20	1.24	0.92	0.89
Poland						
Net interest income	. .	. .	. .	5.14	5.80	5.83
Net income	. .	. .	. .	3.51	4.09	3.89
Portugal						
Net interest income	4.97	. .[4]	3.19	2.63	2.28	2.08
Net income	3.38	. .[4]	1.84	1.29	1.05	1.08
Spain						
Net interest income	3.96	3.44	2.96[4]	2.64	2.34	2.15
Net income	2.25	1.78	1.75[4]	1.44	1.17	1.15
Sweden						
Net interest income	2.09[4]	2.19[4]	2.72	2.56	2.68	2.09
Net income	–0.58[4]	–1.70[4]	–0.58	0.77	1.19	1.31
Switzerland[2]						
Net interest income	1.56	1.65	1.86	1.41	1.33	1.25
Net income	1.50	1.55	1.86	1.36	1.34	1.06
Turkey						
Net interest income	10.09	10.09	11.51	12.36	9.08	10.93
Net income	4.01	4.30	4.97	4.48	5.61	5.82
United Kingdom						
Net interest income	2.97	2.62[4]	2.45	2.34	2.32	2.20
Net income	1.72	1.54[4]	1.63	1.48	1.47	1.35
United States						
Net interest income	3.62	3.89	3.90	3.78	3.72	3.73
Net income	1.79	2.11	2.23	2.02	2.11	2.22

1. Net interest income is interest income less interest expenses; net income is gross income less operating expenses.
2. All banks.
3. Commercial banks and savings banks.
4. Break in series.

Source: Bank Profitability – Financial Statements of Banks, 1998, OECD.

◆ Table 4. **Commercial banks: Net provisions**

As a percentage of average balance sheet total (a) and as a percentage of gross income (b)

	1991	1992	1993	1994	1995	1996
Australia[1]						
a.	1.20	1.10	0.56	0.31	0.17	0.10
b.	24.24	26.55	13.76	7.06	4.26	2.58
Austria[1]						
a.	0.52	0.66	0.58	0.51	0.44	0.44
b.	19.62	23.70	19.93	19.17	15.64	15.64
Belgium[1]						
a.	0.31	0.38	0.24	0.14	0.24	0.22
b.	16.69	19.67	12.75	8.39	13.55	12.25
Canada						
a.	0.54	1.10	0.78	0.51	0.34	0.17
b.	11.93	24.81	18.26	11.92	8.56	6.08
Czech Republic[1]						
a.	. .	. .	. .	2.25	1.39	0.73
b.	. .	. .	32.05	22.13	14.63	7.03
Denmark[2]						
a.	1.49[3]	1.79	1.76	0.92	0.76	0.49
b.	37.66[3]	56.86	35.81	27.36	16.14	12.28
Finland						
a.	–0.01	–0.01	0.00	–0.05	–0.03	–0.05
b.	–0.36	–0.45	0.13	–1.72	–0.93	–1.58
France						
a.	0.23	0.53	0.63	0.53	0.37	0.28
b.	11.33	24.57	31.79	30.93	20.35	17.74
Germany						
a.	0.47	0.69	0.69[3]	0.52	0.41	0.39
b.	15.03	21.56	21.74[3]	17.64	14.75	15.29
Greece						
a.	0.69	0.32	0.34	0.39	0.26	0.55
b.	14.60	8.48	9.08	9.34	6.10	13.02
Hungary						
a.	. .	. .	. .	. .	–2.01	–0.91
b.	. .	. .	. .	–23.92	–49.66	–18.63
Iceland[2]						
a.	1.12	2.82	2.41	1.86	1.13[3]	1.05
b.	15.94	41.08	33.81	26.03	16.97[3]	15.95
Ireland[1]						
a.	. .	. .	. .	. .	0.16	0.13
b.	. .	. .	. .	. .	3.82	3.55
Italy[1]						
a.	0.55	0.64[3]	0.78	0.80	0.78	0.69
b.	12.97	16.20[3]	19.05	23.18	21.76	19.07
Japan						
a.	0.07	0.13	0.14	0.19	0.66	0.31
b.	5.72	10.16	10.86	14.71	44.87	22.28
Korea						
a.	0.47	0.72	0.71	1.40	1.03	0.87
b.	12.84	17.66	17.07	28.46	24.84	22.48

◆ Table 4. **Commercial banks: Net provisions** *(cont.)*

As a percentage of average balance sheet total (a) and as a percentage of gross income (b)

	1991	1992	1993	1994	1995	1996
Luxembourg						
a.	0.42	0.40	0.27	0.08	0.07	0.03
b.	36.87	33.43	21.04	7.53	6.18	2.55
Mexico						
a.	0.43	0.91	1.49	1.55	2.82	2.77
b.	5.95	11.49	17.66	24.01	39.99	46.78
Netherlands[1]						
a.	0.29	0.27	0.24[3]	0.18	0.16	0.18
b.	11.52	10.47	8.69[3]	6.62	5.85	6.14
New Zealand[1]						
a.	0.66	0.62	0.06	–0.11	–0.01	–0.04
b.	13.21	13.77	1.38	–2.51	–0.21	–0.95
Norway						
a.	4.50[3]	2.81	1.69	0.07	–0.25	–0.20
b.	146.01[3]	69.88	36.76	1.91	–6.88	–6.13
Poland						
a.	. .	. .	. .	2.01	0.39	0.18
b.	. .	. .	35.64	28.79	5.07	2.29
Portugal						
a.	1.77	. .[3]	0.86	0.58	0.40	0.39
b.	28.94	25.70[3]	20.39	17.23	13.37	12.75
Spain						
a.	0.69	0.66	1.74[3]	0.76[3]	0.45	0.42
b.	13.44	14.70	40.27[3]	21.61[3]	13.71	13.29
Sweden						
a.	–3.42[3]	–1.95[3]	–0.73	–0.21	–0.14	0.01
b.	. .[3]	–53.39[3]	–12.35	–5.26	–3.40	0.15
Switzerland[1]						
a.	0.96	1.04	1.16	0.85	0.78	0.95
b.	30.53	32.25	31.98	27.77	25.29	30.48
Turkey						
a.	1.15	0.53	0.91	1.50	1.02	1.02
b.	12.55	5.62	9.51	17.06	10.75	10.93
United Kingdom						
a.	1.31	1.24[3]	0.87	0.33	0.30	0.20
b.	26.30	27.17[3]	19.72	8.08	7.41	5.68
United States						
a.	1.03	0.78	0.47	0.28	0.31	0.37
b.	18.63	13.06	7.65	4.93	5.30	6.27

1. All banks.
2. Commercial banks and savings banks.
3. Break in series.

Source: Bank Profitability – Financial Statements of Banks, 1998, OECD.

◆ Table 5. **Commercial banks: Profits before tax**[1]

As a percentage of average balance sheet total (a) and as a percentage of gross income

	1991	1992	1993	1994	1995	1996
Australia[2]						
a.	0.78	−0.02	0.79	1.31	1.25	1.45
b.	15.72	−0.42	19.51	29.75	31.11	35.59
Austria[2]						
a.	0.41	0.34	0.49	0.42	0.39	0.43
b.	15.47	12.31	16.58	15.73	13.72	15.22
Belgium[2]						
a.	0.25	0.23	0.37	0.34	0.33	0.39
b.	13.25	12.06	19.40	19.90	18.85	22.05
Canada						
a.	1.17	0.53	0.77	1.04	1.09	0.88
b.	26.02	12.01	17.89	24.51	27.80	31.12
Czech Republic[2]						
a.	. .	. .	. .	0.51	0.33	0.17
b.	. .	. .	6.44	5.07	3.49	1.62
Denmark[3]						
a.	−0.01[4]	−1.20	0.65	0.00	1.41	1.23
b.	−0.23[4]	−38.23	13.10	0.13	29.86	30.84
Finland						
a.	−1.08	−1.85	−1.73	−1.12	−0.55	0.37
b.	−37.14	−74.05	−61.66	−40.23	−19.95	12.37
France						
a.	0.25	0.06	−0.03	−0.18	0.09	0.03
b.	11.99	2.97	−1.51	−10.79	5.25	2.13
Germany						
a.	0.58	0.47	0.55[4]	0.54	0.51	0.49
b.	18.75	14.79	17.13[4]	18.58	18.51	19.09
Greece						
a.	1.60	1.15	1.06	1.31	1.26	0.79
b.	34.07	30.47	28.20	31.18	29.63	18.91
Hungary						
a.	. .	. .	. .	. .	1.59	2.06
b.	. .	. .	. .	19.84	39.31	42.25
Iceland[3]						
a.	0.40	−1.11	0.10	0.48	0.70[4]	0.86
b.	5.69	−16.13	1.41	6.78	10.44[4]	13.02
Ireland[2]						
a.	. .	. .	. .	. .	1.50	1.46
b.	. .	. .	. .	. .	35.42	39.05
Italy[2]						
a.	0.94	0.70[4]	0.81	0.28	0.36	0.50
b.	22.08	17.90[4]	19.80	8.06	10.02	13.84
Japan						
a.	0.32	0.26	0.18	0.11	−0.17	0.03
b.	25.40	19.75	14.34	8.94	−11.41	1.98
Korea						
a.	0.89	0.93	0.92	0.94	0.44	0.41
b.	24.40	22.81	22.06	19.18	10.57	10.50

◆ Table 5. **Commercial banks: Profits before tax**[1] *(cont.)*

As a percentage of average balance sheet total (a) and as a percentage of gross income

	1991	1992	1993	1994	1995	1996
Luxembourg						
a.	0.26	0.32	0.52	0.53	0.51	0.56
b.	22.58	27.19	40.99	47.50	47.28	50.94
Mexico						
a.	1.96	2.32	2.28	0.76	0.47	–0.62
b.	26.88	29.31	27.11	11.80	6.63	–10.45
Netherlands[2]						
a.	0.53	0.58	0.68[4]	0.70	0.74	0.77
b.	20.98	22.30	24.74[4]	26.32	26.86	26.58
New Zealand[2]						
a.	0.69	0.68	1.23	1.41	1.51	1.30
b.	13.87	15.09	27.14	32.29	33.74	32.40
Norway						
a.	–4.56[4]	–1.26	0.52	1.17	1.17	1.09
b.	–148.19[4]	–31.36	11.25	30.66	31.88	33.28
Poland						
a.	. .	. .	. .	1.49	3.70	3.72
b.	. .	. .	21.49	21.39	48.08	48.36
Portugal						
a.	1.60	. .[4]	0.98	0.71	0.65	0.69
b.	26.15	20.83[4]	23.42	21.00	21.69	22.93
Spain						
a.	1.56	1.12	0.01[4]	0.68[4]	0.73	0.73
b.	30.50	24.75	0.21[4]	19.28[4]	22.22	22.91
Sweden						
a.	2.84[4]	0.25[4]	0.15	0.98	1.33	1.30
b.	101.54[4]	6.86[4]	2.54	24.16	31.85	35.51
Switzerland[2]						
a.	0.54	0.50	0.70	0.51	0.56	0.11
b.	17.18	15.62	19.38	16.60	18.27	3.39
Turkey						
a.	2.86	3.76	4.05	2.98	4.59	4.80
b.	31.16	39.80	42.14	33.95	48.42	51.14
United Kingdom						
a.	0.40	0.31[4]	0.76	1.15	1.17	1.15
b.	8.02	6.71[4]	17.13	27.83	28.76	31.99
United States						
a.	0.76	1.33	1.76	1.73	1.81	1.85
b.	13.71	22.25	28.51	30.05	31.43	31.18

1. Profit before tax is net income less net provisions.
2. All banks.
3. Commercial banks and savings banks.
4. Break in series.

Source: Bank Profitability – Financial Statements of Banks, 1998, OECD.

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