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IV. Improving confidence in financial markets

In recent years, financial-market confidence has been harmed by a number of influences such as the bursting of the stock-market bubble and geopolitical uncertainties. But corporate governance and accounting scandals have also played a role and could well be one factor behind the uneven pace of the recovery from the 2001 recession (Ferguson, 2003b). Continued reforms in this area, focusing on transparency and accountability, would bolster financial-market confidence and thereby contribute both to sustaining strong economic growth and to a less fragile external adjustment process. Against the backdrop of recent developments in foreign-exchange and stock markets, this Chapter reviews recent corporate-governance and accounting reforms and their effects so far. It also deals with other issues relevant in this context, notably the systemic risks surrounding private pension plans and government-sponsored enterprises as well as the Basel II Accord still under negotiation.

Exchange-rate and stock-market developments

Investor concerns regarding the magnitude and trend in the US external imbalance, prospects for a deeper fiscal shortfall, unfavourable interest-rate differentials and the plethora of corporate governance problems have weighed on the dollar since early 2002 (Figure 4.1, Panel A). Although, at around 28 per cent, the depreciation has been dramatic against the euro, in effective terms the dollar has weakened by only around 12 per cent, since it has remained strong against Latin American and Asian currencies. This has followed upon an effective appreciation of around 34 per cent from 1995 to 2001, which contributed to the rise in the external deficit. As a result, the exchange rate is still above its long-term average and estimates of purchasing power parity. Model simulations suggest that, in the absence of other adjustments, considerable further currency depreciation would be necessary to bring the external deficit back to more sustainable levels, although a scenario based solely on exchange-rate depreciation is not likely to work very well because of repercussions on foreign growth and hence US exports. Current account adjustment would seem to require both lower domestic absorption through appropriate domestic policies (in particular, fiscal restraint) and an improvement in growth prospects abroad. The potential for dollar depreciation to

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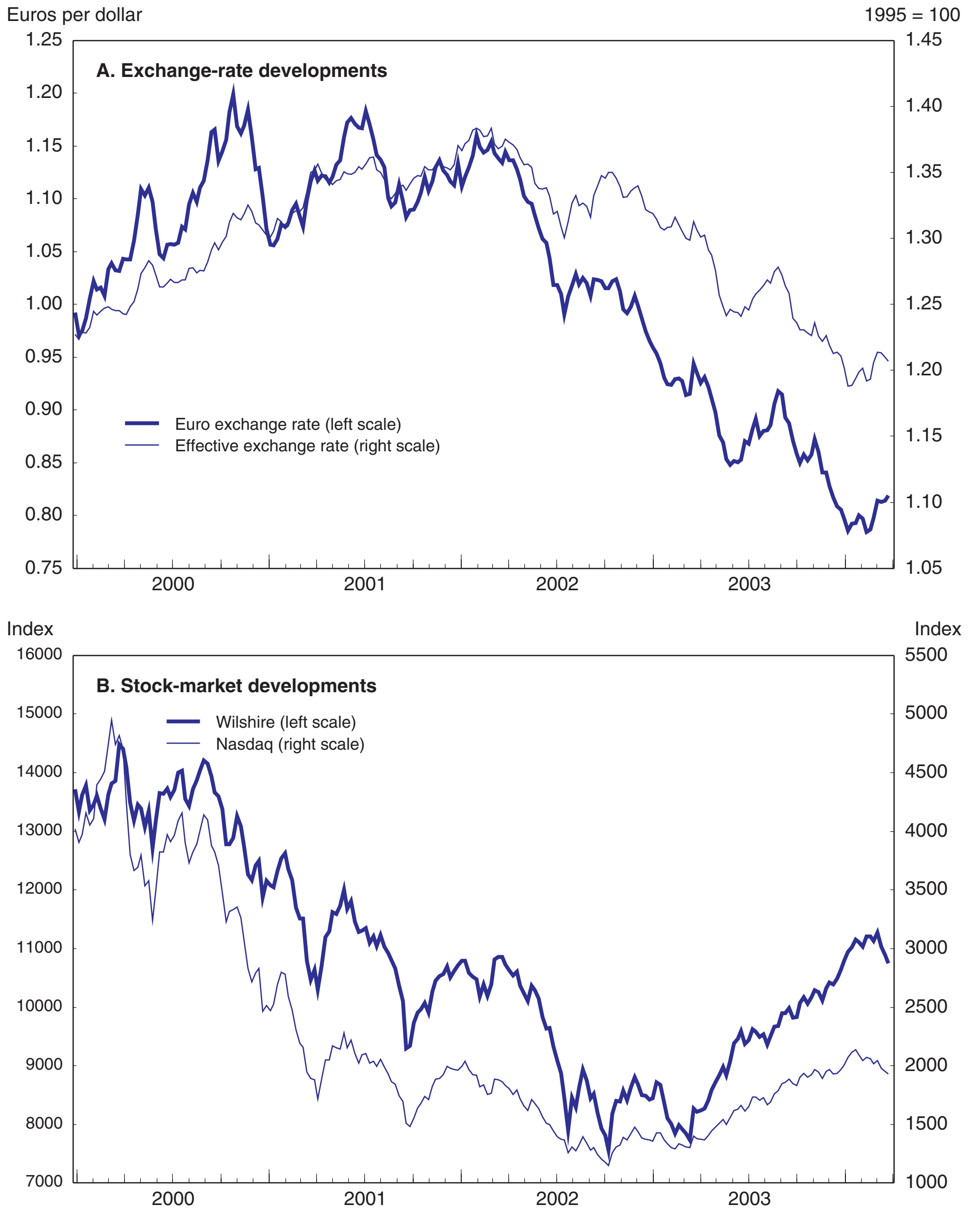
Figure 4.1. **Exchange-rate and stock-market developments**



Source: Thomson Financial and OECD.

become disorderly or to overshoot would increase if the policy response to corporate scandals were to be inadequate (Horne and Merlin, 2002). In this case, international investors might further reduce acquisition of dollar assets until they were persuaded that the situation was correcting satisfactorily. However, there are also other factors at work, such as the lack of investment alternatives and some features of the US economy – deep capital markets, flexible factor markets, a strong investment climate and robust productivity and profit growth. Indeed, so far the fall in the dollar has not spilled over to stock or bond markets.

The increased risk aversion that weighed on equity markets in the first few years of the decade appears to have lifted (Figure 4.1, Panel B). All major stock-market indices have risen considerably since their lows in March 2003, reflecting improved earnings prospects. In the two years before, stock prices had reacted sharply to news of a scaling back of profit forecasts and various corporate scandals. While shares have recuperated only part of the losses suffered since their peak in 2000, volatility of all major equity indices has declined significantly over the past year. While earlier studies revealed a relationship between corporate governance and firm value (Gompers *et al.*, 2001), a recent survey of corporate governance standards among the S&P 500 firms (Hooper, 2003) finds that volatility in share prices is negatively correlated with such standards and especially their changes over time. The criteria taken into account include board structure, shareholder treatment, information disclosure and executive compensation. The survey also finds that, even into 2003, standards still differed widely across firms and that improvements in corporate governance have not been universal.

Corporate governance and accounting reforms

As noted, corporate scandals exacerbated the stock-market decline in the early part of the decade. Starting with the collapse of Enron in 2001, it became clear that the preceding boom years had been accompanied by instances of fraud, other misconduct and a serious erosion in business principles. Important factors explaining the corporate malfeasance seem to have included declining audit quality and weaknesses in governance structures, compounded by executive compensation schemes that provided undue incentives to boost short-term company earnings and by questionable accounting practices.[1] During the boom years, many corporations developed a short-term focus, fuelled by an obsession with quarter-to-quarter earnings and the temptation that inherently resulted from the massive amount of stock options granted to insiders, often outweighing their positive incentive effects. In 2001, for example, the ten most highly rewarded chief executive officers in the S&P 500 were granted option packages with an estimated average value of $170 million per person[2] (Holmstrom and Kaplan, 2004). Analysts, some tainted by conflicts of interest, contributed to creating an atmosphere in which "hitting the numbers" became the objective rather than sound, long-term

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strength and performance (Donaldson, 2003). This environment made it irresistible for many managers to make adjustments – fraudulent or otherwise – in financial reports in order to meet targeted results. It also led many gatekeepers (accounting firms and legal and financial advisers) to get into the game and enhance their compensation by offering "value added" services that tested professional and ethical standards.

To address the widespread decline in investor confidence and perceived weaknesses in corporate governance structures, Congress passed the Sarbanes-Oxley Act (SOA), which took effect 30 July 2002. This is arguably the most important securities legislation since the 1930s. Self-regulatory organisations, such as the New York Stock Exchange (NYSE) and National Association of Securities Dealers (NASD), have established basic corporate governance standards as part of their listing requirements and other organisations (*e.g.* the Conference Board) have proposed a number of voluntary corporate governance codes. Among other things (see Annex IX of the 2002 *Survey* for more details) the SOA:

- created a new Public Company Accounting Oversight Board (PCAOB);
- promoted auditor independence;
- added new disclosure requirements for public companies;
- strengthened the oversight role of corporate audit committees and established their independence;
- documented the responsibility of chief executive and chief financial officers (CEOs and CFOs) for corporate reporting and internal controls;
- authorised the Securities and Exchange Commission (SEC) to set minimum standards of professional conduct for attorneys practicing before it; and
- enhanced civil and criminal penalties for securities fraud.

The rules mandated by the SOA are now in place, but their implementation is still underway. Thus, it is still too early to draw firm conclusions. Nonetheless, it appears that the reforms' impact has been largely positive. Concerns that some provisions of the SOA (such as requirements for CEOs to certify financial statements) could adversely affect business behaviour are as yet unproven. On the other hand, new scandals involving the NYSE and, most recently, in the mutual fund industry have shown that there is still unfinished business in the area of corporate reform.

Accounting and auditor independence

The creation of a special, national board (the PCAOB) to oversee the auditing of public companies' financial reports is perhaps the most visible reform under the SOA. In establishing the PCAOB, the Act introduces a new check on the quality of audit services supplied to public corporations whose securities are

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listed on US exchanges. The role of the board is to strengthen the auditors' incentives to do their job properly, even in the face of pressure from managers who might in some instances prefer not to accurately report their companies' performance. To increase the chance of detecting any future misconduct by auditors, each public accounting firm must register with the board (paying registration and annual fees) and must submit to periodic reviews of its performance. If there is evidence of misconduct, the board has the power to impose sanctions, including barring auditors from supplying their services to a US-listed corporation. The PCAOB, which is overseen by the SEC, began its work a year ago. Its staff is expected to increase from over 100 in late 2003 to around 300 people. More than 700 firms have already registered with the board, and foreign companies have to do so by mid-2004. Inspections have commenced, with annual reviews scheduled for firms auditing more than 100 public companies.

The SOA goes beyond direct oversight of auditing firms, however, to address the conditions under which external auditors are chosen and employed. To limit the influence of managers who prepare financial reports, a corporation's choice of auditor must be made by a committee of independent directors. For each of its clients, the accounting firm that does the audit must periodically assign a new person as the lead audit partner. Both provisions are intended to reduce the opportunities for collusion between auditors and managers. Moreover, in order to avoid potential levers for managerial influence over auditors, registered public accounting firms are no longer permitted to sell certain non-audit services to their customers. Any exceptions to this as well as the fees paid to auditors must be disclosed to investors. In January 2003, the SEC strengthened its rules regarding auditor independence accordingly. In particular, it defined more precisely the non-audit services that must not be provided to a client and the auditor rotation frequency (every five or seven years, depending on the partner's role in the audit). In April 2003, as directed by the SOA, the SEC adopted a provision prohibiting managers from taking any action to influence the auditor in a way that could result in rendering the audited financial statements materially misleading. These measures should help restore investors' confidence in the audit process and the integrity of financial information, although it remains to be seen whether rotating certain partners on audit teams, rather than auditing firms themselves, will be sufficient to avoid periodic capture.

The SOA also sets forth criteria that must be met by an accounting standard setting body if its rules should be "generally accepted". In April 2003, the SEC decided that the Financial Accounting Standards Board (FASB) meets these criteria and that the Board's pronouncements must continue to be followed in the preparation of financial statements. In enacting the SOA, Congress recognised that accounting standards that involve too many exceptions and interpretations might have contributed to efforts by managements and accountants to structure transactions in a way that provides a desired result and yet allows the company to avoid

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clear disclosure of their economic consequences in financial statements. Congress therefore mandated the SEC to examine whether a system of "principles-based" accounting standards should be adopted in the United States. After studying the issue, the SEC considered that the best approach would be to develop an accounting system that provides sufficient detail and structure so that the standard may be applied on a consistent basis, while minimising exceptions from the standard. In December 2003, the FASB proposed changes that are in line with these recommendations. Moreover, there is now a process in place to encourage convergence of the standards of the International Accounting Standards Board (IASB), which are to be adopted by the EU, amongst others, and of the United States. One difficult issue is the proper accounting for the cost of stock options. The FASB has proposed to require companies to treat stock options as expenses from 2005 to provide better information to investors – at present they are only required to disclose their effect on earnings in footnotes on financial statements – but there is some industry as well as Congressional reticence to impose such a requirement. In any case, several large companies have already moved to expensing stock options while making more use of share grants.[3]

Strengthening corporate governance

Recent events confirm that, prior to the SOA, the boards of US companies were exhibiting less than the optimal amount of independence from and oversight of management (Holmstrom and Kaplan, 2004). Many of the recent corporate scandals were the consequence of shifting power in favour of CEOs, who are usually also the Chairman of the board, and away from the boards of directors over the past decade or more (Donaldson, 2003). "Imperial" CEO/Chairs came to dominate boards through strong influence over direction nominations. This was particularly the case with compensation committees where conflicted directors appointed by the CEO decided bonuses and pay with the aid of consultants hired by management. Moreover, it was natural for internal audit functions to report to the board *via* the CEO who has, in some cases, also had direct dealings with the external auditors. The ensuing intense discussion of corporate governance and increased scrutiny of business led to the growing recognition that, for the protection of investors, this situation needed to be reversed. Duties of corporate board members are generally established by state statute, but the SOA and the SEC rules implementing it now outline additional specific responsibilities of a company's board, primarily pertaining to its audit committee. The above-mentioned mandate of independence for the latter is essential to the new central role of the board. There is evidence that audit committees are meeting more often and for longer periods and have become more inquisitive. On the other hand, compensation committees still need to reassert control and demand more executive pay be tied to specific performance measures. The November 2003 NYSE listing requirement that compensation committees (as well as audit and nomination committees) be made up

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entirely of independent directors is welcome but will need some time to have an effect. Requiring the expensing of stock options would make compensation more transparent and avoid inappropriate incentives facing managers, such as boosting earnings in the short term at the expense of long-term outcomes. Perhaps most critically, the director nomination process needs to be reformed so as to offset the CEO's control over it, and the recent moves by the NYSE and NASD in this direction (see also below) are welcome. Finally, an unresolved question for the United States remains the practice of combining the CEO and Chairman positions, although this approach may be appropriate at particular points in the development of a corporation (Donaldson, 2003).

Another crucial issue in this regard is the strengthening of management accountability. Managers of public corporations oversee the preparation of the financial reports that their companies have to file periodically under existing securities regulations. Holding them accountable for the quality of those reports can thus serve as a further check on their accuracy and completeness. Managers who expect their companies' actual performance to become known also face more powerful incentives to serve the investors' interests. The SOA promotes management accountability by clarifying the roles and responsibilities of various corporate officers, by introducing sanctions for those who fail to live up to those obligations, and by requiring that corporations adjust their internal governance structures so that outside investors can more readily verify the management's incentive to serve the shareholders' interests. In particular, the Act demands that CEOs and CFOs certify the accuracy and completeness of financial statements contained in quarterly and annual reports. It makes false certification a Federal criminal offence, subject to fines of up $5 million, imprisonment of up to 20 years, and the eventual loss of bonuses, incentive compensation or other gains that offenders have received from their company during the year after the issuance of a false report. Moreover, a corporation's attorneys are expressly held responsible for reporting any evidence they might receive of a violation of the Act or other duties. The certification provision was very controversial because of concerns that it could make managers more risk-averse and stifle innovation in addition to the considerable SOA compliance costs. A positive effect has been that more issues are apparently both raised and resolved even before the auditing process begins.

Apart from increasing focus on executive responsibility, recent corporate governance reform seeks to promote investors' access to information about the performance and operation of public companies. Recognising that investors need accurate, reliable and timely reports to make informed investment and voting decisions, the SOA introduces new disclosure requirements. In particular, directors, officers and principal investors now have to disclose their transactions in company stock more quickly than before so that shareholders can react more rapidly to such information. Indeed, faster disclosure strengthens the capacity of outsiders generally to act on news of insider transactions. To facilitate compliance

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with the new rules, the SEC has created an on-line filing system for insider transaction reports, which are accessible on the Internet. The Act also stipulates that corporations make more information available about the quality of their internal control structures. A PCAOB rule adopted in May 2003 calls for an annual evaluation of internal control over financial reporting with a view to encouraging companies to devote sufficient resources and attention to this issue. For many companies, the internal control reports will represent the most significant single obligation associated with the SOA reforms. In view of the substantial time and resources needed to properly prepare the reports, they will be due only after a transition period. One of the revelations of the recent accounting failures was the abuse of off-balance-sheet transactions. All such transactions, arrangements and obligations now have to be revealed in quarterly and annual reports filed with the SEC. Financial analysts and auditors, too, must publicly disclose to investors whether any conflicts of interest might exist to limit their independence from influences other than the desire to serve the interest of shareholders. This provides an additional check against any conflicts that might remain after the other reforms are taken into account. Finally, the SOA aims to improve the effectiveness of the securities disclosure regulations by dramatically increasing some of the sanctions for violating them (providing for prison terms of up to 25 years).

Reinforcing the SEC

Restoring investor confidence also requires strengthening the enforcement of the federal securities laws and regulations. To this end, the SOA calls for an increase in SEC funding and staff which is to expand by about 25 per cent (from around 3 000 in 2002). The SEC has been criticised for reacting to market problems rather than anticipating them. Indeed, the number of initiated enforcement actions remained largely unchanged at around 500 per year from 1994 to 2001 before jumping towards 700 as corporate scandals unfolded. In part this reflected insufficient SEC funding by Congress, which adversely affected the frequency and scope of examinations. However, an internal report, produced by SEC staff and consultants in 2003, depicts an overly cautious agency, hampered by bureaucratic inefficiencies and problems in monitoring a rapidly changing market.[4] Chief among the flaws is a reactive culture that often fails to identify danger ahead of time, leaving the agency to respond after others expose problems. The report found that the SEC used to generate just one-third of its enforcement cases internally, the rest being spurred by external sources (including "whistleblowers"). The SEC is already taking steps to fix these shortcomings. It aims to complete a review of the financial statements of one-third of reporting companies each year, focusing on the largest companies, as mandated by the SOA.[5] It is enhancing its enforcement programme so that it can carry out more investigations and complete them sooner, emphasising "real-time" enforcement in major cases.[6] And it is establishing an Office of Risk Assessment to identify and prioritise current risks.

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Besides stepping up enforcement efforts and implementing the SOA, the SEC has moved on other fronts, addressing such critical areas as shareholder access to the director nomination process. At the moment, shareholders are generally given an opportunity to vote only on those candidates nominated by the company. In addition, many companies use plurality rather than majority voting for board elections, the result being a "rubber stamping" of company choices. The business community, in particular, has argued that strengthening shareholder rights could turn every election of directors into a contest, which would be costly and disruptive to companies and discourage some qualified board candidates from agreeing to appear on a company's slate. On the other hand, proponents of such a move have emphasised that it would make corporate boards more responsive and accountable to shareholders as well as, in many instances, more diverse. After studying the issue, the SEC adopted new rules to improve disclosure related to the nomination process and proposed a requirement for companies to incorporate in the election materials the names of nominees for directorship submitted by shareholders. However, these rules can apply as proposed only in those cases where state law allows security holders to nominate a candidate for election as a director. Although limited, this initiative is welcome and is in line with the proposed revisions to the OECD corporate governance principles that call for a more forceful role for shareholders (OECD, 2004).

The need for the SEC to become more pro-active has been illustrated by renewed scandals in recent months, involving the NYSE and the mutual funds industry in particular. As noted, in 2002, self-regulatory organisations (SROs) such as the NYSE and NASD also submitted proposals designed to strengthen the corporate governance of their listed firms, requiring *inter alia* shareholder approval of most equity compensation plans and a larger role for independent directors. These proposals were approved by the SEC in November 2003. However, recent developments have revealed severe problems at the NYSE itself, both as to its own governance and as to the fundamental question whether it can regulate and police itself effectively. According to the SEC, regulatory conflicts arose due to the concentration of power in the hands of the NYSE's chairman and CEO, and the NYSE has been criticised for failing to expose and discipline misconduct by specialists and exchange members. A new management adopted, and the SEC recently approved, governance changes at the NYSE, which enhance the independence of the board and split the positions of chairman and CEO. Moreover, they aim to better insulate the NYSE's self-regulatory staff from pressure and influence exerted by both the CEO and business interests. It remains to be seen whether these initiatives are sufficient and whether it will not be necessary to create a separate SRO. Alternatives would be a complete structural separation of regulation from the business of being a market or an on-site presence of the SEC at the NYSE (and perhaps other exchanges), an approach that has served regulators in other industries. The SEC has announced that it will examine the

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effectiveness of self-regulatory organisations more generally in the context of a review of overall market structure.

The risks of ineffective regulation and weak governance have also been highlighted by evidence of widespread abusive activity in the mutual funds industry, although the recent scandal encompasses a great deal of wrongdoing by intermediaries and brokers. This is all the more important since mutual funds are financial intermediaries that occupy a major place in the US economy, providing financial resources to fund business growth and job creation. Over 90 million Americans have invested around $7½ trillion (about one-fifth of total household financial assets) in mutual funds, which are entrusted with more than one-fifth of the retirement savings market and are hence crucial to the financial well-being of the population. The industry has been exempted from some of the SOA reforms: for instance, the law's requirement to have outside auditors evaluate its internal controls. Although the SEC was already investigating some of the mutual fund abuses that involved broker-dealers, it realised their full extent only after a widening state investigation that began last summer. Abusive practices included late trading, abusive market timing, selective portfolio disclosure and undisclosed payments to gain placements on brokers' preferred lists, with fund insiders facilitating or participating in this irregular activity. "Late trading", that is allowing favoured investors to submit orders after the stock market shuts, is illegal but in its recent investigations, the SEC has found that many fund managers let intermediaries send orders after the official deadline, which allowed the latter to hide illegal, late trades among legitimate transactions. Another practice, "market timing", – the rapid trading in and out of the fund to exploit the difference in the fund's daily fixed price and the fluctuating value of its underlying shares – is not illegal, but many funds had stated that they would preclude the behaviour, and so were committing fraud when they failed to do so. More fundamentally, both practices breach the basic obligation of fund managers to treat all their investors equally. In December, the SEC proposed new rules that would address late trading, market timing and related abuses by closing loopholes, reinforcing compliance rules and enhancing disclosure requirements. More recently, the agency has made proposals to require mutual funds to adopt better governance practices, focusing on board independence. While some new rules are certainly needed, better enforcement of both existing and new ones as well as more active monitoring of the mutual funds industry are crucial to assure that funds operate in the interest of all investors.

Bankruptcy and private pensions

Although the importance of defined-benefit (DB) corporate pension plans has declined steadily and defined-contribution plans, which pose less financial risk to employers, have become predominant since the mid-1990s, the emergence

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of substantial DB plan funding gaps in recent years has significant macroeconomic and policy implications. DB plans remain an important source of retirement security for 44 million American workers and retirees. Their assets still amount to almost 15 per cent of GDP, accounting for more than two-fifths of those in private pension plans. Given the long lives of such plans, they will continue to affect corporate costs and profits for decades. Under-funded pension obligations have already acted as a drag on corporate profits and credit ratings for a number of major US corporations. The failure of several large companies with significantly under-funded plans has also weakened the finances of the Pension Benefit Guaranty Corporation (PBGC), which has partially insured private pensions since 1975. Given the adverse impact on corporate finance and potential risks to financial-market stability, policymakers need to address the weaknesses of the regulatory framework, which has been tested by the emergence of the funding gaps. Some improvements in the situation due to the economic recovery should not lead to complacency, since to a considerable extent the problems facing the system are not cyclical but structural.

With rising life expectancies, the average number of years spent in retirement has continued to grow. These demographic pressures have been compounded by more recent financial-market developments. The stock-market decline has severely weakened the value of plan portfolios, given that a significant proportion of assets – more than half in the late 1990s – are invested in equities. In addition, the sharp drop in long-term interest rates has substantially increased the discounted present value of future liabilities. As a result, total under-funding for under-funded plans in the single-employer DB system, which was less than $50 billion at the end of 2000, rose sharply to around $400 billion at the end of 2002 (Figure 4.2, Panel A). Against this backdrop, rating agencies began to scrutinise pension obligations more closely in their assessments of firms' credit worthiness and downgraded many companies with particularly large liabilities, causing their stock prices to fall and their credit spreads to widen. Since then, rises in the stock market and higher contributions of firms have significantly reduced under-funding to an estimated $350 billion by the end of 2003, and this trend is likely to continue as the economy recovers and long-term interest rates pick up. In a longer-term perspective, it is difficult to argue that excessive investment in equities *per se* is responsible for the pension system's financial problems, given the substantial capital gains realised in the late 1990s. However, it has had some adverse indirect effects, which ultimately affected investor confidence. Recent research (Coronado and Sharpe, 2003) suggests that insufficiently transparent accounting practices led investors to place an unjustifiably high valuation on firms with high pension plan earnings from equity investments. The stock-market boom also contributed to insufficient employer contributions to their DB pension plans in the face of long-standing demographic pressures. While a recent FASB ruling requires enhanced disclosure of pension plan contributions and asset allocation,

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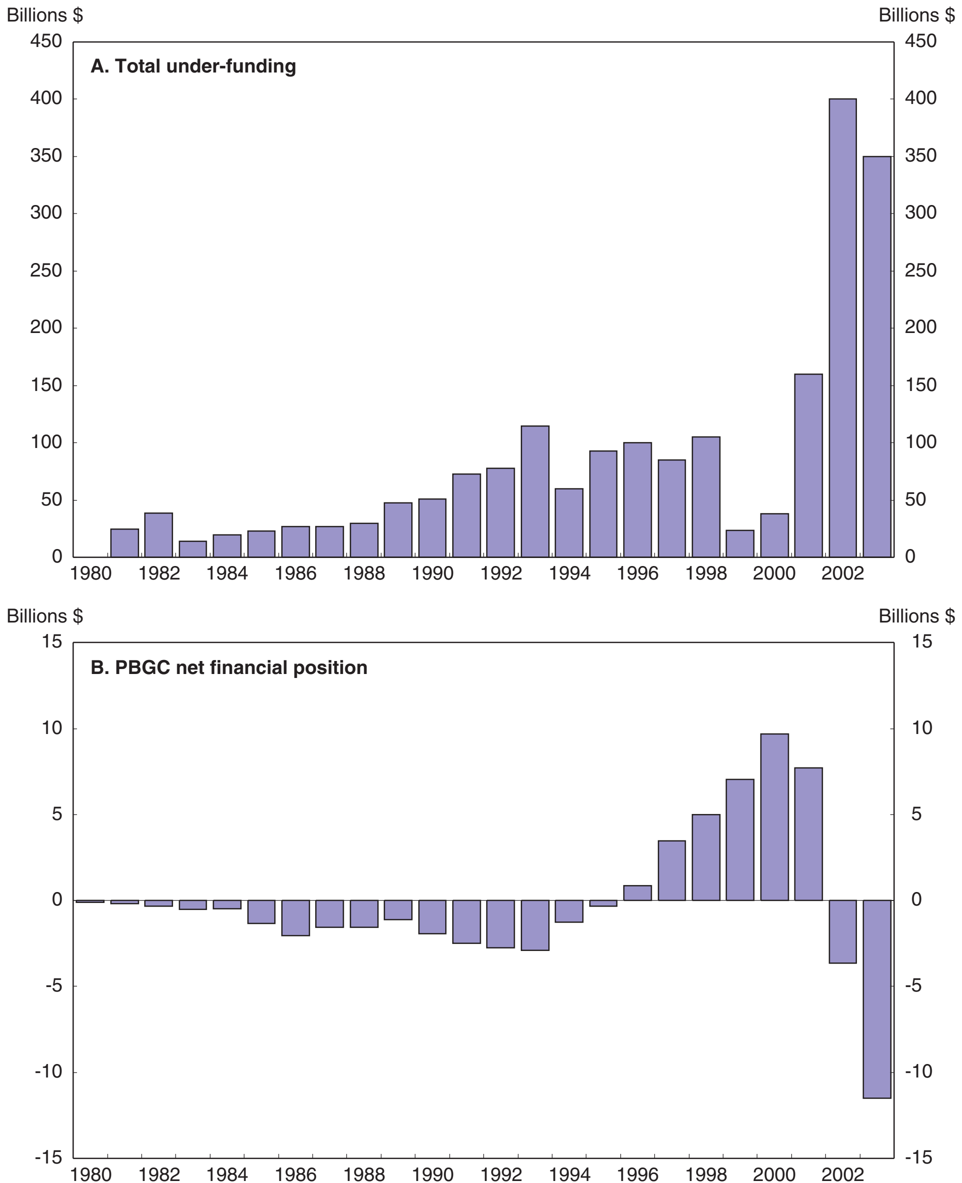
Figure 4.2. **Private pension under-funding and PBGC financial position**
Single-employer programme, fiscal year



Source: Pension Benefit Guaranty Corporation.

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it does not alter the potentially problematic calculations of pension cost that are included in corporate income statements.

As a result of record pension under-funding and the failure of a number of major plan sponsors in mature industries, PBGC finances deteriorated sharply in the last two years, with the single-employer insurance programme moving from a surplus of $7.7 billion in FY 2001 to a deficit of around $11 billion in FY 2003 (Figure 4.2, Panel B). During the economic downturn in the early 1990s, the pension insurance programme already had to absorb what were then the largest claims in history. But these claims appear modest compared to those it has had to cover recently (Table 4.1). Terminations of insured plans have mainly concerned the steel and airline industries, which now account for 56 per cent and 17 per cent, respectively, of historic PBGC claims. By comparison, these two industries have historically represented less than 3 per cent and less than 2 per cent, respectively, of participants covered by the PBGC. Pension claims against PBGC for 2002 alone were greater than the total since its inception in 1975, and, at current premium levels, it would take about 12 years to cover just the claims for 2002. Stochastic simulations carried out by the PBGC suggest that, in the absence of corrective measures, there is only a 19 per cent probability that it would be in a surplus position by 2013 (Pension Benefit Guaranty Corporation, 2003). The General Accounting Office (GAO) has found that the health of the PBGC single-employer insurance programme – the multi-employer programme is relatively small – requires the attention of policymakers. Because of the extraordinary recent losses, the dramatic increase in pension under-funding and the risk of additional large claims, the GAO has placed the programme on its "high risk" list.

Table 4.1. **Top 10 firms presenting claims since 1975**

Top 10 firms	Fiscal year of plan termination	Claims (billions $)	Covered participants	Funded ratio[1] (per cent)
Bethlehem Steel	2003	3.6	95 000	49
LTV Steel	2002	1.9	79 600	50
National Steel	2003	1.3	35 400	54
Pan American Airways	1991, 1992	0.8	37 500	31
Trans World Airlines	2001	0.7	34 300	47
US Airways Pilots	2003	0.6	6 000	71
Eastern Air Lines	1991	0.6	51 200	65
Wheeling Pittsburg Steel	1986	0.5	22 100	27
Polaroid	2002	0.4	11 400	67
Sharon Steel	1994	0.3	6 900	21

1. Funded ratio at termination for PBGC benefits; participants lose additional benefits not covered by PBGC.
Source: Pension Benefit Guaranty Corporation (PBGC).

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In mid-2003, the Administration issued a set of proposals to deal with these problems, which are consistent with the principles promoted by the OECD for the regulation of private pensions. *First*, as a necessary initial step toward comprehensive reform of the pension plan funding rules, the accuracy of liability measurement is to be improved to reflect the time structure of each plan's benefit payments. This would be accomplished by measuring a plan's liabilities using a yield curve of highly-rated corporate bonds to calculate the present value of future payments. In 2002, Congress passed legislation that temporarily changed the pension discount rate from 105 per cent to 120 per cent of the 30-year Treasury bond interest rate in order to provide funding relief to plan sponsors. A bill currently under consideration in Congress would replace the Treasury bond rate with a corporate bond rate for a two-year period before moving to the proposed yield-curve approach for discounting pension liabilities. To grant such further funding relief[7] with no offsetting action to address systemic under-funding would seem to be ill-advised. Moreover, it would be prudent to use a conservatively low discount rate to calculate pension obligations while aiming at greater accuracy and transparency.

Second, in order to improve incentives for adequate funding, better disclosure to workers, retirees, investors and creditors is to be ensured. It is clear that current liability disclosure methods are inadequate to inform workers about the funded status of their benefits. For example, in its last filing prior to termination, the US Airways pilots' plan reported that it was 94 per cent funded on a current liability basis; at termination, however, it turned out that it was only 35 per cent funded on a termination basis, resulting in $1.6 billion of pilot losses, given legal limits on PBGC benefit guarantees. The fact that, under current law, firms are not obliged to provide timely and transparent information about the funding of corporate pension plans can also have a distortionary impact on the stock prices of plan sponsors. The Administration proposes appropriately to increase the timeliness and accuracy of disclosure by obliging firms to make public each year the value of their pension plans' assets and liabilities measured on both an ongoing and a termination basis.

Third, new safeguards against under-funding would be provided by requiring financially troubled companies with highly under-funded plans to immediately fund or secure any plan improvements in the form of new benefits or lump-sum payments. Similarly, unfunded benefit increases by severely under-funded plans sponsored by corporations with below investment-grade debt ratings would be prohibited. The urgency of such measures is highlighted by the fact that, according to the PBGC,[8] under-funding in financially troubled companies is estimated to have exceeded $80 billion at the end of FY 2003, up from $35 billion a year earlier.

Fourth, the Administration calls for, and is currently examining, additional reforms to protect workers' retirement security by improving the funded status of DB plans. There are many weaknesses with funding rules, which would be only partially addressed by the above proposals. In particular, funding targets are

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clearly set too low, and amortisation periods for plan improvements are relatively long. Employers can stop making contributions when a pension plan is funded at 90 per cent of "current liability", which does not recognise the full cost of providing annuities as measured by prices in the private market and the possible additional cost involved in an early termination of the plan. As long as this "full funding limit" is respected, companies do not have to pay the variable-rate PBGC annual premium of 0.9 per cent of the dollar amount of a plan's under-funding that is due in addition to the annual flat-rate charge of $19 per participant. Moreover, the funding rules often act to disguise market conditions and allow "contribution holidays" even as plans are in reality becoming increasingly under-funded. Thus, Bethlehem Steel, the largest claim in the history of the PBGC (Table 4.1), was able to pay no variable-rate premium and make no cash contributions to its plan for five and three years, respectively, prior to termination. The current funding rules are particularly lax for flat benefit plans, where benefits can be increased regularly for past service, creating sudden jumps in liabilities that are amortised over long periods. The structural under-funding of many steel companies' pension plans is due to such benefits. Linking amortisation periods to the expected future period of service of active plan members would help solve this problem. There is also a need to further reduce the risk shifting and moral hazard in the current system, which implies that sound, well-funded plans – and potentially taxpayers – bear the burden of unsound, under-funded plans. If these transfers become too large, then over time strong companies with well-funded plans may choose to terminate them by switching to defined-contribution plans. While care must be taken to avoid encouraging adverse selection and creating disincentives to employer participation through excessive premium increases, the PBGC should have greater flexibility so as to charge higher premiums to firms generating more risk to the system.

Distortions from government-sponsored enterprises

A number of government-sponsored agencies, later to become enterprises, were created in the 1930s in order to overcome perceived problems of the financial system. In particular, they were charged with developing the market for housing and agricultural finance. These now privately owned institutions benefit from some advantages denied to other private firms. Even though no explicit guarantees exist, the market appears to believe that the federal government will not allow these institutions to default on their debt. In addition, they enjoy a line of credit with the Treasury and a number of other privileges, such as being exempt from SEC registration and disclosure requirements faced by other private institutions (see Annex I of the 2000 *Survey* for more details). These government-sponsored enterprises (GSEs) have expanded strongly in recent years and are now major players in the financial markets (Figure 4.3). This primarily reflects the rapid growth of the housing-finance GSEs, in particular Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation), the

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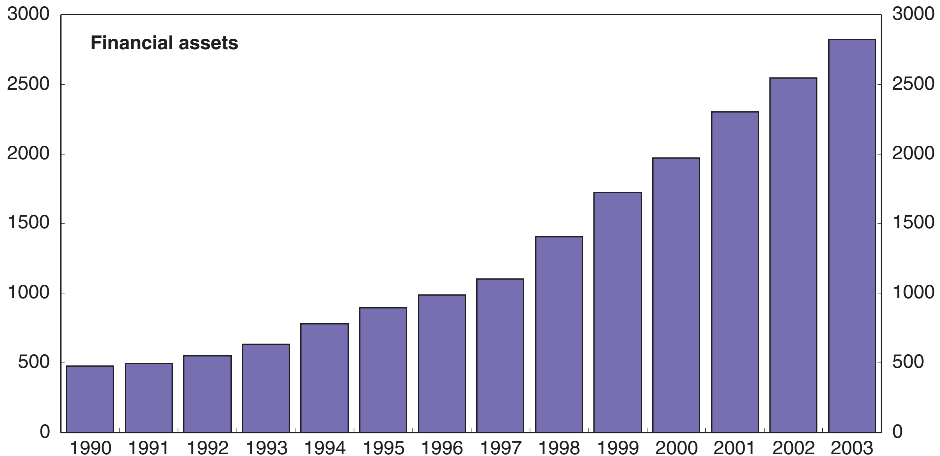
Figure 4.3. **Rapid expansion of government-sponsored enterprises**
Billions of dollars; end of period



Source: Board of Governors of the Federal Reserve System.

two enterprises chartered by the federal government to support the secondary market for residential mortgages, which have grown into two of the largest financial institutions in the world, as well as the Federal Home Loan Bank system (FHLB), which as a group is as large as Freddie Mac.

Although the direct statutory benefits of the various charter privileges are relatively modest, the privileges signal a special relationship between the federal government and the GSEs, feeding market perceptions that, if necessary, the former would bail out the latter. Indeed, when one GSE – the Farm Credit System – suffered threatening losses in the 1980s, the Congress authorised financial assistance to avoid a default, so that, in that case at least, the implied federal guarantee became real. Given this perception, investors are willing to accept a lower yield on GSE debt than on the debt of other private companies. This funding advantage has allowed the GSEs to dominate the market for certain types of mortgage securities. The Congressional Budget Office tried to gauge this implicit subsidy and concluded that the average interest-rate gain, across all types of housing GSE securities was around 40 basis points in 1998-2000, which translated into $10 to $15 billion per year (Congressional Budget Office, 2001). Adjusted for the growth of the enterprises, the implied current annual subsidy is, at the minimum, above the upper end of that range (Holtz-Eakin, 2003). The CBO estimates that only about half of the funding advantage gets passed on to homebuyers, the rest going to executive compensation and to shareholder profits. On the basis of

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similar interest-rate assumptions, a recent study (Passmore, 2003) puts the discounted present value of the gross implicit subsidy to GSE shareholders and homeowners at $119 to $164 billion, with the former retaining more than half of the gains, and estimates that the implicit subsidy accounts for more than half of the market value of Fannie Mae and Freddie Mac. Moreover, it finds that, if they were purely private, these enterprises would hold far fewer of their mortgage-backed securities in portfolio (see below) and as a consequence would be much smaller, while their capital-to-assets ratios would double. Finally, the implicit subsidy does not appear to have substantially increased homeownership or homebuilding because the estimated damping effect of the GSEs on mortgage rates is minor (7 basis points, according to Passmore).

These findings raise concerns over fairness and economic efficiency, but also over the potential destabilising effect of the implicit subsidy on the financial system. Given their funding advantage, the debt issued by housing GSEs has tripled since 1995 (to reach $2.2 trillion at end-2002) and, if recent trends continue, could soon exceed the privately held debt of the federal government. The GSEs have used the proceeds from issuing debt to amass enormous portfolios of mortgages and mortgage-backed securities. Given that they are now also in the asset-management business – which is not their mandate – their financial health depends heavily on the performance of those portfolios. While the credit risk associated with mortgages has been low so far, the housing GSEs have increasingly become exposed to interest-rate and prepayment risks, which means that they are vulnerable to losses from both increases and decreases in interest rates. A year ago, OFHEO, the regulator of Fannie Mae and Freddie Mac, published a comprehensive report (Office of Federal Housing Enterprise Oversight, 2003a), which concluded that the likelihood that the two enterprises will pose a systemic risk is quite low. The report acknowledged, however, that the economy could be seriously impaired if one of them were unable to meet its obligations. This is not surprising, since almost all banks and other financial institutions hold substantial portions of their capital in the securities of the two GSEs. Thus, even a small mistake in GSE risk management could have ripple effects throughout the financial system.

This highlights the importance of effective regulation. OFHEO introduced risk-control mechanisms only in 2002, ten years after its inception. A special examination of Freddie Mac was undertaken only after a new auditor replaced the company's long-term auditor Anderson LLC in 2002 and detected significant irregularities, which necessitated a $4.5 billion accounting restatement. The recently published report (Office of Federal Housing Oversight, 2003b) found that Freddie Mac disregarded accounting rules, internal controls and disclosure standards, while the incentive compensation plans of senior executives contributed to improper accounting and management practices. It recommended that OFHEO require the enterprise to hold a capital surplus and limit the growth of the

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retained portfolio until it produces timely and certified financial statements. Most recently, OFHEO announced a special review of Fannie Mae, which had also admitted significant accounting errors.

Against this backdrop, the Administration has proposed legislation to create a new regulatory agency for housing GSEs that would be able to deal with their size and complexity and have sufficient strength and credibility to reduce systemic risk. The new regulator would be granted permanent funding mechanisms and have authority to set both risk-based and minimum capital standards and to reject new GSE activities and receivership powers necessary to wind down the affairs of a troubled GSE. While these are steps in the right direction, the distortions created by the implicit government subsidy and the risks to taxpayers from the GSEs could remain. Without reducing the size of the GSEs portfolios, investors may still perceive them as "too big to fail".[9]

The impact of Basel II

The health of the banking system is crucial to investor confidence. The 1988 Basel Capital Accord, the current international framework on commercial bank capital adequacy, aims at promoting the soundness and stability of the international banking system and providing an equitable basis for international competition among banks. Although it was intended specifically for internationally active banks, the Accord has, in practice been applied beyond these institutions. Views differ as to whether the Accord has achieved its objectives (for a negative assessment, see Rodriguez, 2003). There is agreement, however, that it appears to have outlived its usefulness for some institutions. From the perspective of US supervisors, it needs to be replaced, at least for the largest, most complex banks, for three major reasons: it has serious shortcomings as it applies to these large entities; the art of risk management has evolved; and the banking system has become increasingly concentrated all over the world (Board of Governors of the Federal Reserve System, 2003). In particular, the 1988 Accord specifies only a few levels of credit risk, even though the credit quality can vary greatly. This limited differentiation among degrees of risk provides incentives for regulatory capital arbitrage,[10] so that minimum capital ratios of larger banks become less meaningful and creditors and investors are hampered in evaluating the strength of these institutions.

Over the past several years, the Basel Committee on Banking Supervision has been working on a new Accord to reflect changes in the structure and practices of banking and financial markets and to make, in particular, minimum regulatory capital requirements more sensitive to an institution's risk profile. Furthermore, it aims to strengthen market discipline by requiring banks to publicly disclose related key information. The most recent version of the new Accord, now known as Basel II, was released in a consultative paper in April 2003. The Basel Committee

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is developing important modifications to its proposal that it hopes to have available as an agreement by mid-2004, with a view to implementing the new regime by the end of 2006. The US banking agencies have proposed to implement Basel II somewhat differently from other nations (Ferguson, 2003a). Most banks would not be required to adopt Basel II, although they may do so if they wish; rather they would remain under the existing Accord. This is because the agencies consider that, in general, their banks have relatively straightforward balance sheets, already hold considerable capital in excess of the Basel I minima and have long been subject to comprehensive supervision. In these circumstances, the costs of imposing a new capital regime on thousands of US banks would not seem worthwhile. Only large, internationally active banks would be required to adopt Basel II. Initially, this would mean that only about ten banks would be concerned, although market expectations are that a similar number of other large banks would find it advantageous to adopt the new system voluntarily.

The proposed bifurcated application of Basel II in the United States has raised a number of concerns. Although the banks remaining under the current regime avoid the costs of adopting the new one, some have argued that Basel II would give the largest banks, if not a lower overall capital requirement, then lower capital charges on certain credits and hence a competitive advantage. Focus has been placed on residential mortgages, small business loans and credit cards. The Federal Reserve is currently conducting empirical research on these issues, which might lead to modifications to the proposed bifurcated application of Basel II or to changes to the current capital regime in the United States (Ferguson, 2003c). A solution to these problems and endorsement by the United States, with the world's biggest banking system, is crucial to the success of any proposed new Accord.

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Notes

1. Erickson *et al.* (2003) provide evidence that the probability of accounting fraud increases with the share of corporate compensation that is stock based. Erickson *et al.* (2004) show that firms charged with accounting fraud went so far as to pay income taxes on their overstated earnings.
2. In the same year, the median value of total compensation for CEOs of S&P 500 companies was about $7 million.
3. There has been a trend towards replacing options with "restricted" stock. Restricted shares must be held for a fixed period before they can be sold. They are favoured by experts because they encourage a focus on the company's long-term growth and profitability.
4. According to a report in the Wall Street Journal on 24 December 2003.
5. The SEC is mandated by the SOA to review the disclosures, including financial statements, made by each reporting issuer that is listed on a US stock exchange or trades on NASDAQ at least once every three years.
6. It has also increased its extra-territorial activity, in line with its standard that if companies want access to US capital markets, they have to submit to SEC oversight. It has, however, been willing to accommodate foreign regulatory schemes where there have been conflicts between foreign and US law in implementing the SOA.
7. The legislation under consideration would also, during a two-year period, allow companies in specific sectors to pay only part of the amount in principle required to shore up their under-funded plans.
8. Testimony of S.A. Kandarian, Executive Director, before the Special Committee on Aging, United States Senate, 14 October 2003.
9. Some observers consider that fully privatising and eventually breaking up the housing GSEs is the only solution (Wallison, 2003).
10. This entails "gaming" the system through selling, securitising or otherwise avoiding exposures for which the regulatory capital requirement is higher.

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BASIC STATISTICS OF THE UNITED STATES

THE LAND

Area (1000 sq. km)	9 629

Population of major cities, including their metropolitan areas, April 2000 (thousands):	
New York	21 200
Los Angeles-Anaheim-Riverside	16 374
Chicago-Gary-Kenosha	9 158

THE PEOPLE

Resident population, July 1st 2002	288 369 000
Number of inhabitants per sq km	29.9
Annual net natural increase (average 1998-2002)	1 592 400
Natural increase rate per 1 000 inhabitants (average 1998-2002)	5.7

Civilian labour force, 2003	146 515 667
of which :	
Health services	11 812 800
Unemployed	8 776 583
Net immigration (annual average 1998-2002)	1 116 000

PRODUCTION

Gross domestic product in 2003 (billions of US $)	10 988
GDP per head in 2003	38 073
Gross fixed capital formation	
Per cent of GDP in 2003	18.4
Per head in 2003 (US$)	6 997

Origin of national income in 2002 (per cent of national income[1]):	
Manufacturing	13.7
Finance, Insurance and real estate	20.0
Services	24.7
Government and government enterprises	13.7
Other	27.9

THE GOVERNMENT

Government consumption 2003 (per cent of GDP)	15.5
Government current receipts, 2003 (per cent of GDP)	30.7
Federal government debt held by the public (per cent of GDP), FY 2003	36.1

Composition of the 108th Congress as of November 5th 2002:

	House of Representatives	Senate
Republicans	228	51
Democrats	205	48
Independents	1	1
Vacancies	1	–
Total	435	100

FOREIGN TRADE

Exports:	
Exports of goods and services as per cent of GDP in 2003	9.5
Main exports, 2003 (per cent of merchandise exports):	
Foods, feeds, beverages	7.5
Industrial supplies	23.2
Capital goods	40.5
Automotive vehicles, parts	11.0
Consumer goods	12.4

Imports:	
Imports of goods and services as per cent of GDP in 2003	14.1
Main imports, 2003 (per cent of merchandise imports):	
Foods, feeds, beverages	4.8
Industrial supplies	15.2
Capital goods	25.3
Automotive vehicles, parts	18.0
Consumer goods	28.5

1. Without capital consumption adjustment.

Note: An international comparison of certain basic statistics is given in an annex table.

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•

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•

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•

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