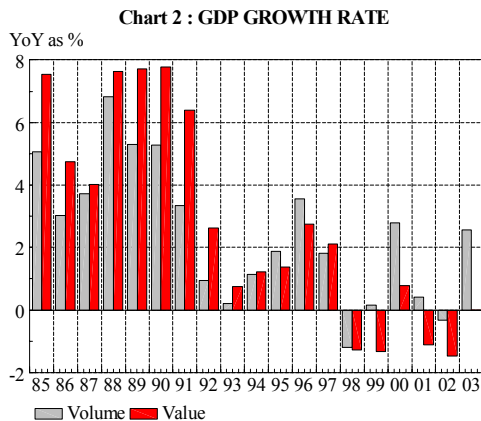
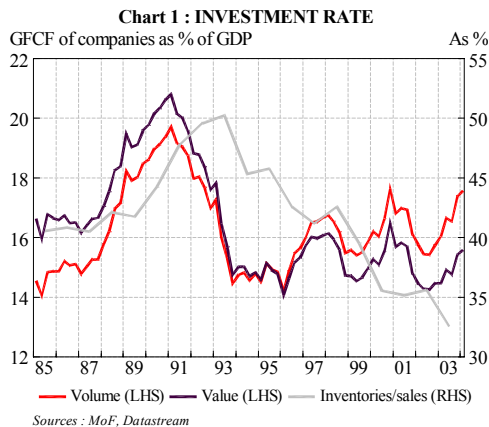


## MID-WAY IN THE CLEAN-UP OF CORPORATE BALANCE SHEETS

- After making major changes to the structure of balance sheets during the bubble period, Japanese firms have been in a deep adjustment period since the middle of the 1990s. Balance sheets have been largely repaired despite a very difficult economic and financial environment of low growth, deflation, loss of pricing power and the sharp depreciation of financial assets and real estate. However, the process is not complete. Debt is still too high and profitability too low.
- Two things have enabled companies to reduce debt: the sharp drop in interest rates since the bursting of the bubble, which has eased the debt burden, and the reduction of excess capacity, reflected in a marked drop in the investment rate in value terms, better inventory management and the end of the job-for-life system.
- Japanese firms have managed to draw full benefit from the improvement in the economy since late 2002 and profits are expanding.

### FROM MAJOR FINANCIAL IMBALANCES... TO POSITIVE CASH FLOW<sup>1</sup> GENERATION

During the bubble period, firms operated in a world of artificially high growth. Almost unlimited access to credit allowed investment and debt to skyrocket. This created an investment bubble and threw balance sheets severely out of kilter. Chart 10 on page 3, for example, shows how the debt/sales ratio grew by a quarter over the period even though sales were brisk.



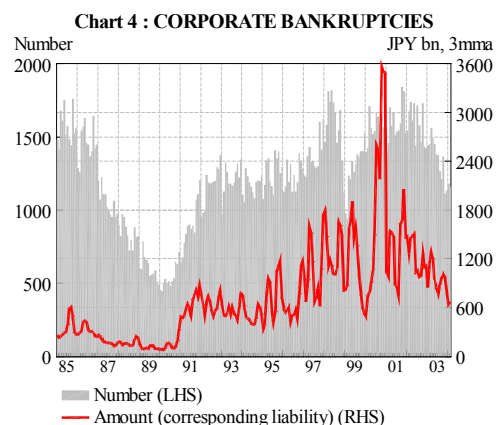
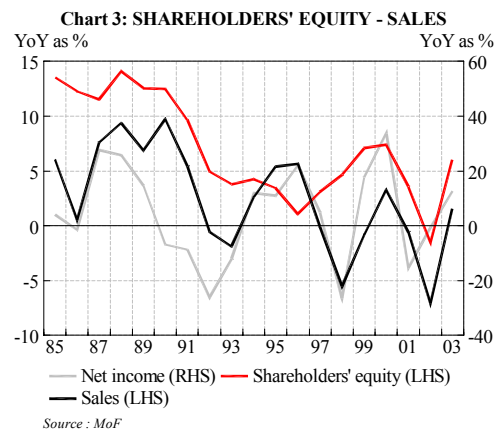
After the bubble burst, the economic environment became increasingly difficult. Growth was slow to negative, and deflation was added to the mix from 1996 onwards.

<sup>1</sup> Study based on the Ministry of Finance Corporate Survey database of the balance sheets of 120,000 firms, which are segmented by size. A distinction can be made between the balance sheets of manufacturing and non-manufacturing firms. There are also four categories of companies.

- category A (all enterprises),
- category B (capital above or equal to JPY 1 billion),
- category C (capital between JPY 100 million and JPY 1 billion),
- category D (capital between JPY 10 and JPY 100 million).

The “lost decade” was interspersed with three periods of recovery. The first two failed to take off, and we are now in the third.

Between the bursting of the bubble and 1992-1993, the government’s reassuring rhetoric led business to underestimate the seriousness of the situation, and, at that stage, there was little comprehension of the gravity of the situation. It was assumed that the correction of past excesses would be a short-term process. Although lending standards were tightened, access to credit remained relatively easy. Sales shrank dramatically (leading to an involuntary build-up of inventories), but debt was trimmed more slowly. Consequently, financial imbalances increased and the debt/sales ratio reached a peak of 178% in 1993 – four years after the bubble burst (Chart 10).

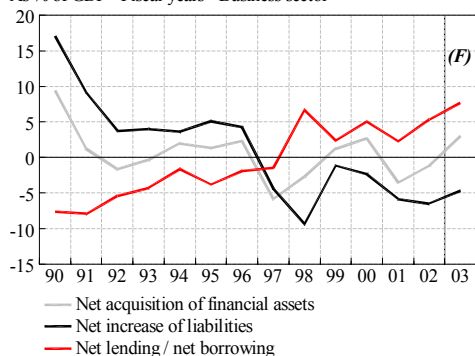


From 1992-1993 onwards, after the *junsen*<sup>2</sup> went under and bad debts spiralled, lending standards were rapidly tightened. At the same time, the monetary authorities became more pessimistic. Economic agents started to realise that the adjustment was not cyclical but

<sup>2</sup> *Junsen*: non-bank property lending companies, created by the banks at the end of the 1970s.

structural and therefore likely to be long. Firms showed the classic response to tighter financing conditions: they tapped into their savings. This trend repeated itself during the Asian crisis in 1997 and after the bursting of the IT bubble (Chart 5).

**Chart 5 : INVESTMENT AND BORROWING FLOWS**  
As % of GDP - Fiscal years - Business sector



Sources : Datastream, Bank of Japan, SG forecasts

Between 1992-93 and 1996, the investment rate stabilised temporarily, which in turn stabilised debt. This, along with a temporary pick-up in sales, led to an improvement in corporate balance sheets. Firms took advantage of the upswing in sales to run down inventories – a trend that deflation later intensified.

Although businesses started to invest again, a good deal of arbitrage between financial assets also took place during the period. The most significant examples are cited below.

- As a legacy of the *Keiretsu* structures, Japanese firms held a large portfolio of cross-shareholdings, which exposed them to considerable market risk. They gradually pulled out of equities between fiscal years 1990 and 2001, but the trend reversed from 2002 onwards as the economy recovered.
- Due to increasing uncertainty surrounding the banking system up until 2002 and the temporary implementation of the “pay off system”<sup>3</sup>, firms increasingly turned their backs on term deposits in favour of cash investments.

The economic recovery of 1996 ran into a number of exogenous shocks from 1997 onwards (i.e. the Asian and Russian crises and the appreciation of the yen) and an endogenous shock in the form of an increase in VAT. The business environment deteriorated dramatically as crisis-stricken banks imposed strict credit rationing after rising bankruptcies added to the bad debt problems. Businesses were also hit hard by deflation, which completely removed their pricing power. Deleveraging became an overarching objective in this very challenging environment, which explains why debt payments have bordered 5% of GDP since then. Businesses scaled down investment and inventories, except during the 1999-2000 IT bubble and the post-2002 recovery.

As a result of this strong wave of deleveraging, Japanese firms achieved considerable positive cash flow from 1998 onwards in contrast with the huge borrowing requirements of the early 1990s (Chart 5).

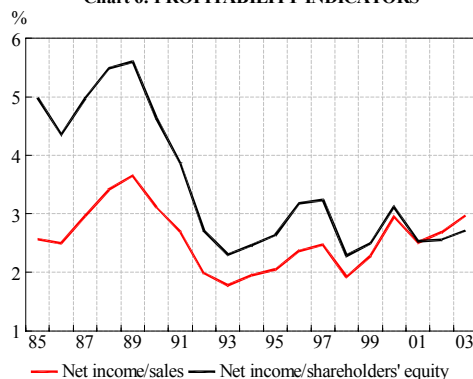
**CORPORATE PROFITABILITY REMAINS LOW...**

After the euphoria of the bubble, the profitability of Japanese enterprises plummeted before gradually picking up again. The ratio of net income to sales rose above pre-bubble levels, suggesting that

<sup>3</sup> The pay-off system refers to the removal in 2005 of unlimited guarantees on term deposits. Current deposits will remain fully guaranteed.

equilibrium had been reached. By contrast, the ratio of net income to shareholders’ equity remained at half the pre-bubble level reflecting the consolidation of shareholders’ equity despite the chaotic performances of net income (Chart 3).

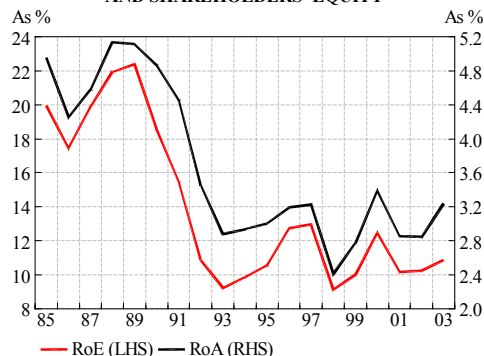
**Chart 6: PROFITABILITY INDICATORS**



Source : MoF

Firms have been in profit again since mid-2002, which saw the beginning of the export-led recovery, primarily fuelled by China. Large manufacturing firms were the first to benefit and gradually the entire production process improved. However, the sustainability of the recovery depends partly on the amount of progress firms have made in cleaning up their balance sheets.

**Chart 7: A LOW RETURN ON ASSETS AND SHAREHOLDERS' EQUITY**



Source : MoF

RoE<sup>4</sup> and RoA<sup>5</sup> have followed a similar path. The level of RoE is now equivalent to that of US firms, but RoA is much lower. This divergence obviously reflects the excess debt and undercapitalisation of Japanese firms as well as their leverage, which remains abnormally high. This tends to pump up RoE, especially when interest rates are low. It is also clear that the return on capital in Japan is low relative to the benchmark made up of US firms.

As %	JAPAN					USA
	1990	1995	2000	2002	2003	2002
Debt/shareholders' equity	228	219	169	155	137	70
RoA	4.9	3.0	3.4	2.8	3.2	4.8
RoE	18.5	10.6	12.4	10.2	10.9	11.5

Source: Corporate Survey, IMF

**... EVEN THOUGH THE COST OF DEBT IS VERY LOW**

As a result of the BoJ’s zero-rate policy, short- and long-term lending rates have gradually fallen, which has significantly eased the financial burden by means of a reduction in has the average interest rate paid on debt.

<sup>4</sup> Net income to shareholders' equity

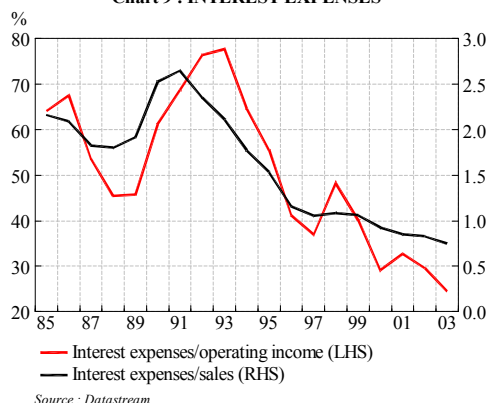
<sup>5</sup> Operating income to total assets

Chart 8: AVERAGE INTEREST RATE PAIED ON DEBT



Because interest expenses are low, operating profits now cover about four years' worth of interest. Extremely low interest rates have also enabled banks to "mask" non-performing loans for a long time. Debtors who are virtually bankrupt continue to meet interest payments, in some cases with the help of further loans. Until the past few years, loans granted to zombie firms were not recorded as "non-performing" and were therefore not provisioned for accordingly.

Chart 9 : INTEREST EXPENSES

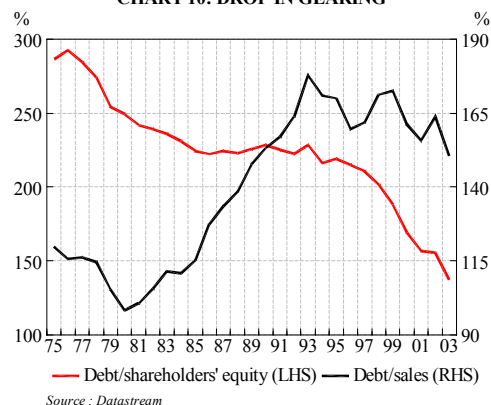


**PROGRESS HAS BEEN MADE, BUT THE ADJUSTMENT PHASE IS NOT COMPLETE**

On the asset side, Japanese firms are highly liquid, both in the wider sense (the liquidity ratio was 100% in late 2003) and the narrower sense (the liquidity ratio excluding inventories was 91%). On the liabilities side, deleveraging has gathered pace, but debt ratios remain high, both in absolute terms (the ratio of debt to sales is 150%) and relative to pre-bubble levels (115%). Japanese firms remain undercapitalised, which is a typical feature of debt economies and has been made worse by the bubble (chart 10). Nonetheless, they have managed to improve their position despite the worsening business environment. Since the bubble burst, the ratio of debt to shareholders' equity ratio has fallen from 228% to 137%. In terms of international standards, however, the ratio remains high (see Table p. 23). Since 2002, the Chinese boom and plummeting capital goods prices have boosted investment to pre-bubble levels or above in terms of volume, although not yet value (Chart 1). One element that needed to be tackled in order to complete the clean-up of balance sheets was the substantial surplus capacity built up during the bubble. The assault on the job-for-life system in the late 1990s and resulting increase in unemployment helped to absorb the surplus. The process has gathered pace since the

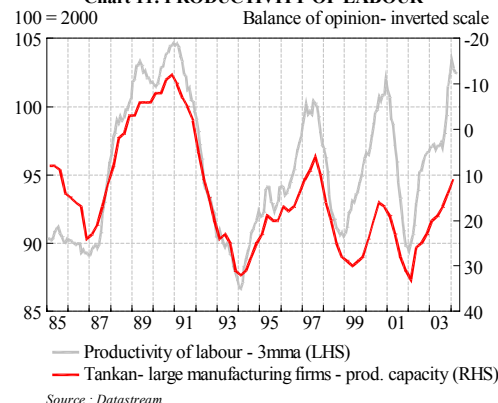
economic recovery that began in late 2002. According to the "production capacity" component of the Tankan survey, surplus capacity has largely been absorbed.

CHART 10: DROP IN GEARING



If we compare pre-bubble levels and those of US firms, further adjustment seems necessary. Corporate debt is still too high and profitability too low, especially since Japanese firms have enjoyed abnormally low financial expenses because of deflation. As Japan comes out of deflation, future borrowings will become more expensive, which will weigh on profitability.

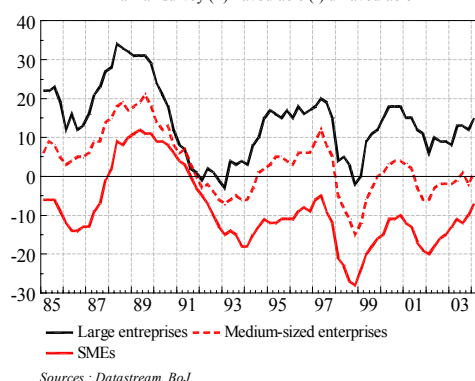
Chart 11: PRODUCTIVITY OF LABOUR



**HOWEVER, RATIOS STILL VARY WIDELY ACROSS SECTORS**

The "financial position" component of the Tankan survey shows the importance of size in determining a firm's financial position. For large enterprises, there is a high correlation between financial position and exports, hence the significant improvement at the end of the period. There is an indirect correlation (via sub-contracting) for SMEs, most of which are currently struggling.

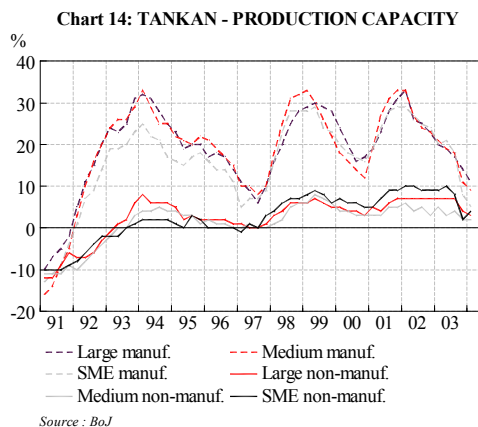
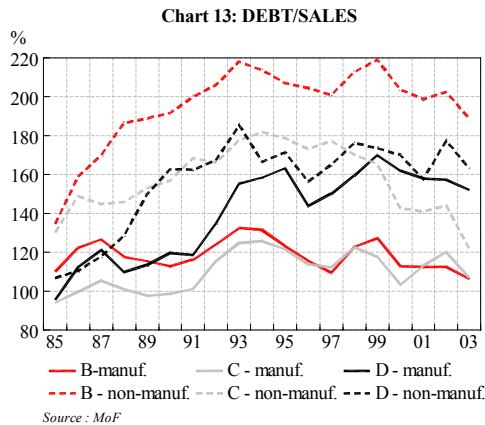
Chart 12 : TANKAN - FINANCIAL POSITION



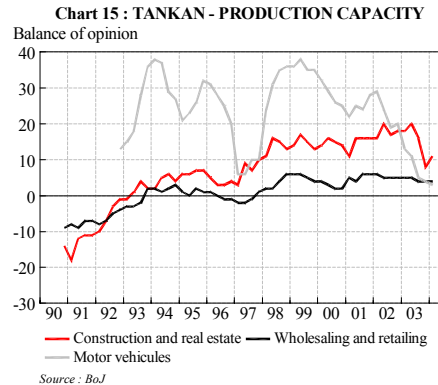
The Corporate Survey put out by the MoF identifies six business categories and highlights a similar pattern for all of them, namely

increasing debt until 1992-1993, followed by a period of lower debt ratios. This trend is more pronounced among non-manufacturing firms. Large- and medium-sized manufacturing companies tend to have lower debt-to-sales ratios because they enjoy easier access to other types of finance.

As Japanese banks are relatively bad at identifying counterparty risk, interest expenses are relatively homogenous regardless of the size of the business or its sector. However, excess capacity varies widely from one sector to another, and non-manufacturing firms are relatively unaffected by the problem.



Concentrating on a few key products, the differences between results are even greater<sup>6</sup>. Apart from automobile and computer manufacturers, all sectors have deleveraged since 1990. However, the indebtedness of the sectors shown below is less than aggregate data (Chart 10). Automobile manufacturers have seen profits explode but have not taken advantage of lower interest rates to pay down debt. Nonetheless, the sector has gained a lot through restructuring: for motor vehicles, the production capacity component of the Tankan survey fell from 38 in Q2-99 to 3.0 in Q1-04.

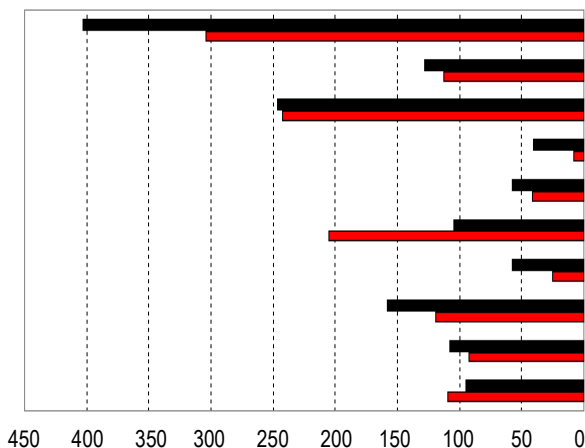


As a result of the 13 Keynesian stimulus programmes undertaken by the government since the bursting of the bubble and the current scaling back of public investment, the construction sector suffers from conspicuous overcapacity (see Chart 15) and very low profitability. The Japanese retail sector has also been hit particularly hard and continues to suffer from high surplus capacity. However, both sectors, particularly retail, have started a restructuring process, which, coupled with the economic upturn, improved profitability in 2003.

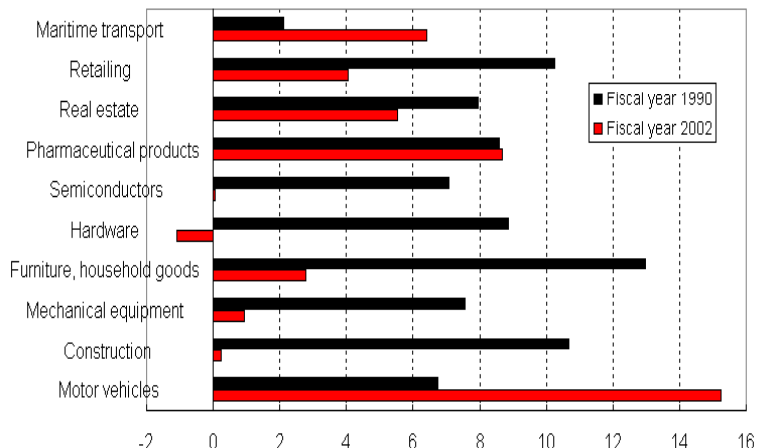
Deflation has been particularly severe in the household goods sector, which partly explains its low profit margins. Hardware companies benefited from a strong leverage effect during the dot.com period, which is why their indebtedness has increased. Fiscal year 2002 marked the end of the IT correction. The trend was the same for semi-conductors.

Florence ASTIER – 33 1 42 14 40 70

**GROSS DEBT / SHAREHOLDERS' EQUITY**



**RoE**



<sup>6</sup> Study based on the WorldScope database of balance sheets providing financial and balance sheet information about Japanese enterprises.