THE POST-CRASH ECONOMIC OUTLOOK

Andrew Bascand and Neil Humphries comment on the recent world-wide decline in equity prices and the outlook for the New Zealand economy in the wake of the sharemarket crash.[1]

Share prices fell sharply on world stock markets in mid-October 1987 and, in general, continued to drift downward into the New Year. The collapse in equity prices followed several years of strong stock market growth, reflecting a number of factors including sustained economic growth, low inflation and a general decline in the level of interest rates. The fall in share prices is expected to dampen world economic growth prospects over the next twelve months, but the exact impact is difficult to quantify.

This article firstly considers the international background to the sharemarket crash and examines the outlook for the world economy. The impact on the domestic economy of these international effects, together with the dramatic decline in New Zealand's own sharemarket, is then assessed, drawing on results from a simulation exercise using the Reserve Bank's econometric model. This exercise does not constitute a forecast as such, because it does not take account of the latest available information.[2] The article then goes on to discuss evidence from the most recent economic indicators, before turning briefly to the other major factor impinging on the domestic economic outlook, namely the effects of the December economic package and subsequent modifications.

The International Sharemarket Crash

Since the early 1980s, the United States' policy mix, involving a high budget deficit combined with a relatively tight monetary policy, has been associated with a growing imbalance in its export and import trade. The United States' trade deficit has had as its counterpart, trade surplus positions in Japan, West Germany and the new industrialised countries, particularly Taiwan and Korea. International forecasters have highlighted for some time that, despite the exchange rate realignments of the past eighteen months, the unwinding of present trade imbalances may take many years. With little in the way of significant corrective policies being introduced to reduce these quantity imbalances, and confidence in international economic co-operation weakening, pressures on market prices began to emerge.

The stock market declines and exchange rate volatility exhibited since mid-October were preceded by significant movements in interest rates and exchange rates in the first three-quarters of 1987. Specifically, interest rates rose in West Germany, Japan, the United Kingdom, and the United States. In the United States, increased interest rates reflected several concerns: rising inflationary expectations associated with increased import and raw material costs and labour market pressures; growing uncertainty over the speed at which the current account deficit would be reduced, despite adjustments in the value of the dollar; lack of a firm reduction in the budget deficit; and concerns over the pace of economic growth in the United States economy relative to that of its trading partners.

As well as rising interest rates, exchange rate volatility (especially vis-a-vis the United States dollar) also increased in the months prior to the crash, thereby adding to the uncertainties facing investors. Following the success of the earlier Plaza Agreement, exchange rate arrangements associated with the Louvre Accord were adopted in February 1987 by the major industrialised countries (G7) in an attempt to stabilise exchange rates; however, the dollar still continued to fluctuate around a downward trend.

From mid-August there was renewed downward pressure on the dollar. Doubts were growing about the ability of the dollar to sustain its value against the continuing large external and internal deficits. By October it appeared that if the dollar was to be supported at the levels agreed by the Louvre Accord, real interest rates in the United States would have to continue to rise to compensate lenders, especially foreign lenders (for the increased currency risk in holding United States securities).

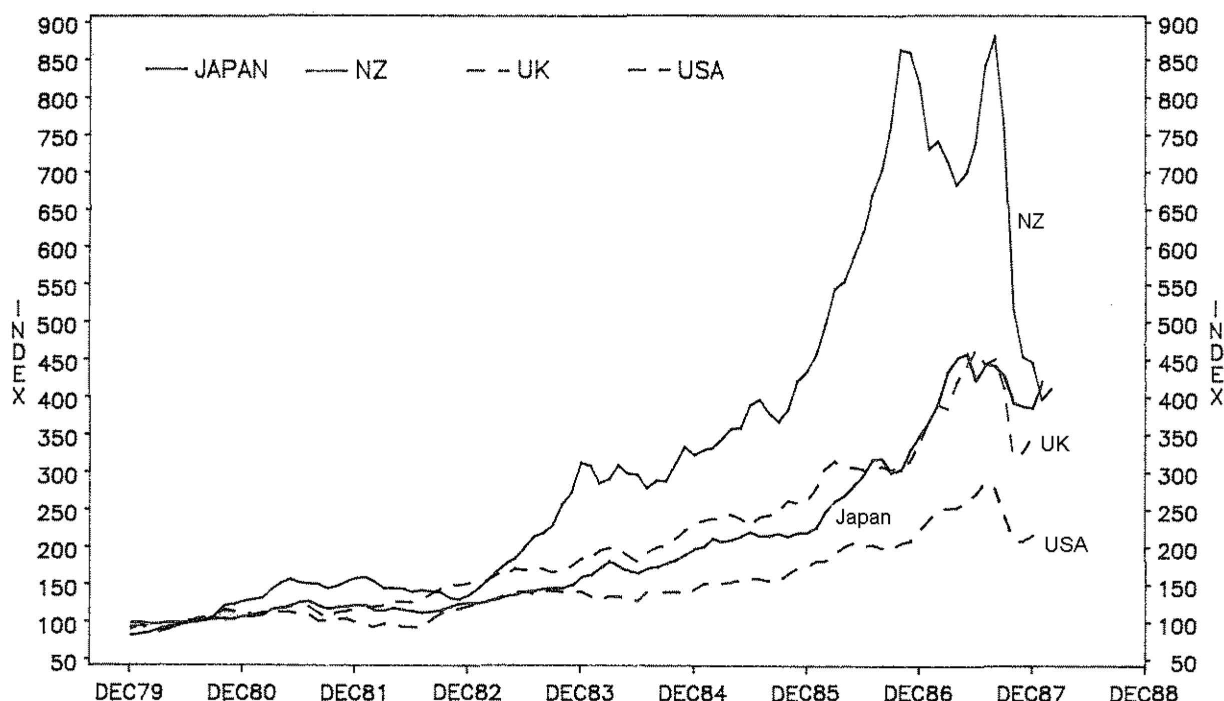
Over this period, many commentators also felt that stock markets had become overheated. The gap between returns on equity investment and bonds had become unusually large. Rises throughout most of 1987 did not appear to be based on economic fundamentals and occurred in the face of factors which normally exert a negative influence on stock markets, e.g. rising interest rates. These factors, together with the outlook for a further rise in interest rates, the release of poor United States trade statistics for August and a loss of confidence in continued international economic co-operation, finally led to a collapse in United States equity prices. While the underlying economic factors had indicated that some downward correction in share prices was quite likely, the actual size of the collapse was greater than could have been reasonably expected. There was little new information to suggest that fundamental economic trends had changed markedly from what was already widely perceived.

In the ten days to 16 October the Dow Jones industrial average (an index of major industrial equities on the New York exchange) declined by 16 per cent. On Monday, 19 October a dramatic 23 per cent collapse in the New York stock market occurred, almost four times any previous post-war record for a daily drop in the index. Major equity markets around the world followed this rapid downward trend and by 20 October 1987 stock markets in Japan, the United Kingdom and West Germany had fallen by 17, 21 and 11 per cent, respectively. The sharemarket in Australia dropped by 25 per cent on 20 October. (Figure 1 shows the movement in share prices for the United States,

[1] John Huddleston assisted in the preparation of this article.

[2] A full forecast round was underway at the time of writing.

Figure 1
Share Price Indices
BASE 1980=100



Japan, the United Kingdom and New Zealand.)

Following the crash, central banks made it clear that it was their intention to maintain adequate liquidity in domestic financial markets. The significant easing of monetary conditions in most countries through the injection of liquidity, pushed short-term interest rates down – in sharp contrast to the reaction of monetary authorities during the 1929/30 stock market collapse when monetary policy was tightened in some countries (in particular, the United States). Long-term interest rates fell in the period after the crash, partly as a result of the policy shift, while the interest rate spread between government securities and private sector securities increased. The latter feature was indicative of a global shift in preferences from equities to high quality bonds which have less risk – a 'flight to quality'.

The Sharemarket Crash and the International Outlook

The impact on the world economy of such a widespread decrease in equity values depends initially on the effect of the sharp decline in equity wealth on consumer spending, output growth and the cost of capital for investment. Subsequent policy reactions of central authorities, and the reaction of consumer and investor confidence, will also affect developments in economic conditions. In a recent publication by the OECD it is noted that studies of household consumption behaviour find a small but significant positive correlation between wealth and the propensity to spend, distinct from the normal impact on disposable income of the actual return from wealth. The negative wealth effect resulting from a fall in equity prices will be greater in aggregate, the larger the valuation of equity (capitalisation) relative to GNP and the higher the proportion of outstanding equity held directly by households. The impact of the sharemarket collapse on indirect holdings of equities by households through pension funds and the like could also lead to a reassessment of consumption and investment patterns; however, a reduction in their value would probably have less of an impact on current activity patterns than an equivalent reduction in the value of assets directly owned. Because both market capitalisation relative to GNP and the share of equity owned directly by households are higher in the United States than in other major economies, the negative wealth effects on private consumption, relative to the size of the fall in equity prices, are expected to be largest in the United States.

On the other hand, while equity market wealth has fallen, an in-

crease in the value of bond holdings has partly compensated the household sector and, to a greater extent, the corporate sector for their losses in equity markets. In addition, because many observers doubted that the high level of stock prices could be sustained in the months prior to the crash, it is conceivable that the full extent of pre-crash capital gains would not have been perceived by investors as additions to their wealth. After all, in aggregate, total world equity market valuation (in dollar terms) is still estimated to be higher after the crash than it was at the end of 1986.

Although direct wealth effects on consumption may be small, it is possible that the stock market collapse, and ensuing volatility on exchange markets, may lead to a decline in consumer and investor confidence which would add to the negative forces already set in motion. Consumers may now save more for precautionary reasons, and therefore consume less, while the incentive for businesses to invest in plant and machinery may have weakened. The fall in share prices has also raised the cost and reduced the availability of equity financing and, in combination with greater caution on the part of lending institutions, the effective cost of new investment may have risen. Although extra liquidity has been injected by central authorities, thereby lowering interest rates and alleviating pressures on credit availability, investor confidence may be further undermined if financial institutions run into difficulties as a result of customers affected by the crash not meeting their commitments.

Finally, given the dominance of United States activity trends on world growth, for most countries the major effects will be transmitted over time through international linkages. Even though some countries are not expected to suffer the initial effects of the crash to the same extent as the United States, they may nevertheless be adversely affected by a reduction in trade. A reduction in import volumes by the United States will bring a reduction to export growth for its trading partners-especially Canada and Japan and, to a lesser extent, some European and developing countries. Lower export growth could result in marginally lower growth in domestic demand for these countries. In many developing countries low domestic demand was already a problem prior to the stock market crash and any significant reduction in growth prospects may result in a deterioration in those countries' international debt position.

Reflecting the factors outlined above, the stock market collapse has resulted in a downward revision of output growth in industrialised countries and, to a lesser extent, developing countries. Assessments by some market commentators have suggested that the wealth effects associated with the fall in equity values may eventually lower real GNP growth in the United States by up to ¾ percentage point compared with pre-crash forecasts for 1988 and 1989. In quantitative terms, forecasters in the United States have judged that over six quarters a cutback in spending of around $25 billion could be expected. However, early assessments of the prospects for the world economy in the wake of the crash cover a broad range of possible outcomes. For instance, tracing through the linkages outlined above, revised forecasts by the OECD in mid-December suggest growth may be ¼ to ¾ percentage points below pre-crash forecasts for OECD countries as a whole in 1988 and 1989. The bulk of the impact is expected in the second half of 1988, reflecting international transmission and adjustment lags. As a result, the OECDs predictions are for average growth of around 2½ per cent for the G7 economies in 1988, slowing to a more moderate 1¾ per cent in 1989.

In contrast, more recent preliminary IMF forecasts, reported by the Fund's managing director in mid-January, take the view that the negative effect of the sharemarket collapse on growth may not be as large as earlier thought. The IMF expect average G7 growth to moderate to between 2½ – 2¾ per cent over the next two years, a downward reduction of around 0.1 percentage point on their forecasts prior to the crash. In part, the Fund's forecast reflects an assessment that the underlying momentum of growth prior to the crash may have been underestimated. They also note that the real sector has remained more insulated from the effect of the slump in share prices than previously thought.

Nevertheless the outlook for investors is still very uncertain. Exchange rate volatility increased in the wake of the crash and has continued into 1988. Moreover, concerns over the adequacy of current policies to correct major fiscal and external imbalances have not been dampened. It appears that a sustainable reduction in uncertainty in foreign exchange, equity and other financial markets can only be brought about by significant progress towards addressing these imbalances.

The Domestic Impact

It now seems widely recognised that there is limited scope for insulating the New Zealand economy from the impact of world-wide shocks, or for providing an artificial boost to the economy to prop up short-term activity. Therefore, against the background of a decline in world economic activity as well as a loss of domestic equity wealth, the short-term outlook for the New Zealand economy is, not surprisingly, for some further weakening in economic activity, over and above the moderate downturn which was already being experienced.

The channels through which the recent slump in New Zealand share values will impact on consumption and investment are similar to those in other economies. As highlighted above, members of the household sector holding equities prior to the crash are likely to lower their consumption expenditure. Although the

initial sharp decline in the New Zealand sharemarket on 20 October 1987 resulted in a 15 per cent fall in the Barclay's share price index (which refers to the largest 40 companies), by the middle of February the Barclay's index had fallen by some 48 per cent in the wake of the crash to reach its lowest point in more than two years (see figure 1). A day prior to the collapse, total sharemarket capitalisation stood at $43.8 billion, only some $1 billion higher than the level at the end of 1986, having already declined from peak levels attained in September. By the middle of February, however, market capitalisation had halved, falling to $21.7 billion.

It is difficult to assess the extent to which such a loss of wealth will affect households' consumption demand, and the analysis is complicated by a lack of data on household investment in the domestic sharemarket. Crude estimates for the United States relate the total decline in market capitalisation to consumption spending using an approximate wealth coefficient of between 2½ – 5 per cent (i.e. a one hundred dollar decline in wealth reduces consumption by between two and a half and five dollars over one-two years). Preliminary research in the Bank suggested a similar coefficient applies in New Zealand, giving a decline in consumer spending of between $550 – $1,100 million given a fall in market capitalisation of around $22 billion between 19 October 1987 and the middle of February.

Assessing the impact of the sharemarket collapse on investment expenditure is an even more formidable task. Basically, new investment will be constrained by the higher cost of equity capital and increased caution on the part of lending institutions and investors. But the uncertainty effect on investment may be more significant, in terms of the impact on GDP, than the wealth impact on consumption.

During November 1987 the Bank conducted a simulation exercise, using the Reserve Bank's econometric model of the New Zealand economy, to examine the likely effect of the sharemarket crash on the domestic economic outlook. The simulation exercise was based on the Bank's October 1987 forecast, making adjustments to allow for the international and domestic share price decline, but taking into account no other new information available at the time. In this way, the differences between the simulation results and the October forecasts, as presented in table 1, are due exclusively to an interpretation of the consequences of the sharemarket decline up to early November. By the same token, however, the simulation results cannot be thought of as a forecast as such.[3]

Central to the simulation results is the assumption that, compared with the October forecast, world growth will be little changed in 1987/88 but decline by 0.7 per cent in 1988/89. In addition, relative to the benchmark, other changes to pre-crash assumptions include a drop in domestic interest rates by up to 2 percentage points, a 1 per cent fall in both export volumes and prices, and a 0.4 per cent drop in import prices compared to the October 1987 estimates.

The econometric model simulation results suggested that the sharemarket crash will not have much effect on real GDP in 1987/88 but may reduce real GDP growth by around 1 per cent in 1988/89, mainly as a result of lower consumption and investment expenditure levels.

The simulation indicated that the impact of weaker external demand and a reduction in wealth on household consumption would more than offset the positive influence on consumption of an assumed decline in interest rates. Under the scenario adopted, the level of investment fell compared with the benchmark forecast as the effect of lower investor confidence and increased caution on the part of lending institutions was only partially offset by lower interest rates. The simulation exercise highlighted a slowing in overall domestic activity and therefore a re-

[3] Also, like the forecasts themselves, these simulation results do not constitute an official Reserve Bank view of the New Zealand economy but merely attempt to provide a preliminary assessment of the impact of the sharemarket decline. The simulation exercise, together with the benchmark October forecasts, contain a significant degree of judgmental input arising first from the structure chosen to represent the economy in the econometric model, and second from the assumptions made about exogenous variables.

Table 1

Comparison of October Forecast with Simulation Exercise

Average Annual % Changes
(March Years)

	1988		1989	
	Pre-Crash October Forecast	Post-Crash November Simulation	Pre-Crash October Forecast	Post-Crash November-Simulation
Real GDP	-0.6	-0.7	1.6	0.7
Private Consumption	-1.4	-1.9	0.3	-1.2
Private Investment	-1.7	-2.2	3.6	0.2
Export Volumes	1.5	1.4	3.2	2.4
Import Volumes	1.6	1.2	1.3	-1.5
Current Account Balance ($ million)	-1,854	-1,825	-1,586	-1,346
CPI (point to point % change)	9.4	9.1	6.1	5.8

duction in import volumes, which contributed to the balance of payments current account deficit improving slightly in 1987/88 and by $240 million in 1988/89, relative to the pre-crash forecasts. In line with impressions for the world economy, the simulation results indicated a more favourable outlook for domestic inflation compared with the October benchmark forecasts, mainly due to the dampening effect of weaker demand.

The simulation results presented only provide a broad overview of the likely impact of the sharemarket crash on the economy. At the time of writing, however, Reserve Bank econometric model forecasts, updating those released in early October 1987, were being prepared and these will probably be released prior to the publication of this article. These forecasts will be coloured not only by an assessment of the sharemarket collapse but also by analysis of recent economic indicators and details of new policy reforms outlined in the Government's December Economic Statement and subsequent announcements.

Recent Trends in Economic Activity

Some evidence supporting the pattern of activity highlighted in the Bank's simulation exercise had emerged by early February. However, the available consumption and investment indicators provide a mixed picture of the economy and do not yet suggest a dramatic downwards revision in growth prospects.

For example, retail sales (seasonally adjusted and excluding the automotive sector) rose by 2.8 per cent in real terms in the December quarter, following two quarters of relatively static activity. However, this growth was concentrated in the first part of the quarter, with sales declining in nominal terms in the month of December. Also, new car registrations fell by a seasonally adjusted 2.1 per cent in December, although this followed a 2.6 per cent increase in November. Declines in luxury car registrations were particularly noticeable in December.

Indicators of investment, which had been providing mixed signals even prior to the sharemarket crash, have also yet to confirm anecdotal evidence which suggests a downturn in activity. After reaching a four year low in September 1987, residential building activity has since shown some rebound in growth. The number of residential building permits issued in December and January rose by 5 and 4 per cent, respectively, in seasonally adjusted terms. Recent business investment indicators, however, have been less encouraging. Results from the January NZIER Quarterly Survey of Business Opinion found increased pessimism expressed by all four sectors surveyed – manufacturing, builders, merchants and services – while seasonally adjusted surveyed import orders for machinery/electrical and transport equipment weakened in the three months to November. The value of non-residential building permits issued strengthened over the same period, but there have been a number of informal reports of commercial building intentions being curtailed since the crash.

Unemployment continued to trend upward in the last quarter of 1987, although this is likely to be mainly a reflection of economic trends existing before the crash.

By mid-February it was still too early to gauge the impact the sharemarket crash has had on the Consumer Price Index given the measurement lags involved. Nevertheless, the short to medium-term prospects for inflation seem favourable with dampened expectations following the December quarter CPI out-turn. Reports of a weakening in property price rises, together with greater competition in the retail sector as a result of weakened demand, also contribute to the fairly positive inflation outlook. Partly as a result of the lowering in inflationary expectations, interest rates generally have continued to ease.

The Economic Policy Statement

Although the downstream effects of lower equity prices and greater financial market uncertainty will affect the shape of economic activity over at least the next eighteen months, the introduction of several major policy reforms announced by the Government in December will have a more permanent effect on the economic environment. The package of reforms outlined on 17 December, together with modifications of some aspects presented on 10 February 1988, provided confirmation of the medium term orientation of economic policy. Rather than aiming to boost activity in the short term (although the package may nevertheless be of some benefit in this regard), the thrust of the package related to removing various types of price distortions and improving economic signalling.

Measures affecting the personal sector originally outlined in the December package included a shift to a single nominal tax rate combined with a guaranteed minimum family income for all full-time wage and salary earners with children. Subsequent Cabinet discussions, however, resulted in a 'deferral' of the shift to a flat tax rate and, instead, from 1 October 1988 current personal marginal tax rates are to be flattened to 24 per cent for income up to $30,875 and 33 per cent thereafter. A rebate, together with abatement arrangements, result in a different tax structure for some taxpayers, with effective marginal tax rates of 15 per cent to $9,500 and 28 per cent between $9,500-$30,875. Many existing rebates affecting the personal sector were influenced by the package, but details of major reforms outlining the structure of new income support schemes had not been released by mid-February.

Corporate reforms announced by the Government included a lowering of company tax rates for the 1988/89 March year to 28 per cent for resident companies, thereby providing a significant tax differential in

New Zealand's favour between domestic and most foreign corporate tax rates. Other major reforms included proposals for a full imputation scheme and the fuller taxation of New Zealand residents' foreign income. Measures placing superannuation funds, life offices and related organisations on an equal taxation footing with other financial institutions were also announced.

The December package announced the intention of raising some $14 billion through asset sales so as to reduce the level of outstanding public debt, and also introduced tariff reform measures. These involved a programme of tariff reductions on goods not subject to industry plans and a two step reduction in rates of duty on cars. Subsequently, further reforms of protection affecting the textile and apparel industry were announced.

In terms of the macroeconomic impact of the measures outlined above, the Government has indicated that there will be a net fiscal improvement in 1988/89 as a result of the tax changes. However, there is a possibility that reduced personal sector taxes, could provide a stimulus to consumption activity from the fourth quarter of 1988, and that the lower company tax rate, coupled with measures to close many taxation loopholes, could provide a net stimulus to corporate investment.

Summary

To date, economic indicators appear to present a pattern of international and domestic activity which is stronger than might first have been expected in the wake of the sharemarket collapse. Overseas, in particular, recent evidence suggests that the sharemarket decline has not seriously affected the momentum of growth. Nevertheless, market anxiety has not substantially lessened, with concerns over the United States budget deficit, world trade imbalances and growth prospects in heavily indebted developing countries providing downside risks to the outlook.

Domestically, consumption activity may have weakened somewhat, but there has been no sign of a dramatic collapse; and given the lags involved, it is also too early as yet to gauge fully the secondary effects of a downturn in demand and business confidence on investment. Overall, it currently appears that the New Zealand economy is experiencing a relatively shallow recession which was evident prior to the stockmarket collapse but which has been reinforced by the subsequent effects of the crash. The economy had slowed in the months leading to the sharp decline in equity prices, and more recent indicators of economic activity suggest that the downturn will now be more prolonged, in line with the simulation results presented above.

From a medium-term perspective, the reduction in inflationary expectations achieved to date holds the promise of an environment amenable to a return to healthy and sustainable economic growth. The struggle against inflation is now showing some signs of real progress, but there is still a considerable way to go before an inflation rate of, say 3 to 5 per cent or better is locked in. But despite this, and contrary to suggestions made by some commentators, inflation expectations remain rather high (as shown by the March quarter expectations survey reported elsewhere in this *Bulletin*), and New Zealand cannot afford to relax anti-inflation policies prematurely.

Also fundamental to a return to sustainable medium-term growth is continued progress towards improving the allocative and operational flexibility of the economy. The most recent package of economic reforms is a major further step in this direction. State sector reform in general, and in the major expenditure areas of health, education and welfare must be a central element of future reforms, as must moves to increase flexibility in public and private sector labour markets.