One of the most striking features of the Scottish and UK economies has been the sustained increase in labour productivity in manufacturing since the latter part of 1980. The "productivity boom" has been less marked in Scotland than in the UK as a whole, but has nonetheless been significant. Is the productivity boom good or bad news for the Scottish economy? The official view is that the increase in labour productivity reflects in some sense a strengthening of the economy. This view may indeed be an important element in the official, but nonetheless erroneous, view that Scotland is "leading the UK out of recession".

Productivity typically tends to rise during the recovery phase of the cycle as firms respond to an upturn in demand by using their labour forces more efficiently. This in turn tends to moderate inflationary pressures during the upturn. In previous cyclical upturns rising productivity has reflected the transitory effect of rising output against a background of less rapidly rising employment. Recent increases in productivity do not conform to this pattern. During the productivity boom of the 1980's manufacturing output has been static or falling while manufacturing employment has actually been falling. Recent increases in productivity should therefore be interpreted as "good news".

Similarly, the Treasury interpretation of the productivity figures as an indication that labour as a whole, and union labour in particular, has become more efficient due, for example, to the less rigid application of the union rule book, seems inconsistent with recent experience. For, given competitive product markets - which the government assumes to some degree - greater flexibility in the use of labour should stimulate permanent employment gains through reduced product prices and increased sales. Under such circumstances employment gains should accompany the productivity increases. Once again the experience of Scottish manufacturing in the 1980's would seem to be at variance with this "good news" interpretation of productivity gains.

Scepticism concerning the arguments of the "good news" camp should not necessarily be interpreted as implying that firms, given the state of the economy, could or should have behaved differently. The employment situation might, through induced bankruptcies, have been much worse in the absence of the productivity boom. But such a view is quite consistent with the alternative interpretations of the productivity boom considered below.
In some circles productivity increases are viewed as unambiguously "bad news", some sections of organised labour, for example, fear that productivity gains associated with new technology automatically imply job losses. While such a view might be justified in a world in which firms could not expand sales, this is patently not the case in an open economy such as Scotland. There are, however, less extreme alternatives to the "good news" interpretation of the productivity boom which are more plausible.

Amongst these is the possibility that firms have simply become more pessimistic about the longer term prospects for the economy. Firms hoard labour in a downturn in the expectation that sales will pick up subsequently. By hoarding, firms avoid the costs of firing and re-hiring. However, if a recession persists, contrary to initial expectations, firms begin to question their longer-term sales prospects. Downward revisions of projected sales will lead to the shedding of hoarded labour so increasing labour productivity. The conventional pro-cyclical pattern of productivity change, which is dependent on firms having a given state of long run sales expectations, is then broken (See Buitr & Miller; 1983). On this interpretation the resulting productivity boom is "bad news" since it primarily reflects firms' adjustment to more pessimistic long-run sales expectations. Once adjustment is complete, however, the productivity gains cease - as do the employment losses which generate them. On this interpretation the boom is "bad" but transitory.

Taking this idea a little further, it may be that firms have not simply revised downwards their future sales expectations, but have in addition become more uncertain about the future course of sales. Under such circumstances, firms will become much more cautious and seek to render their inputs much more "flexible". Two obvious ways of doing this are to substitute female for male workers and increasingly use part-timers.

Additionally, labour not directly involved in the production process may be shed and the requisite services hired instead from an outside agency. Such specialised agencies serving a number of firms have much greater opportunities to spread variations in the demand for labour than does an individual firm employing its own employees. This view implies that labour hoarding should be much less marked in subsequent cycles.

This "reallocation hypothesis" if correct, implies that the recorded productivity gains in the manufacturing sector are illusory, and simply reflect the shedding of overhead type labour from manufacturing and its absorption into the services sector. This view is certainly consistent with recent Scottish Employment trends, (See the Labour Market sections of the QEC). Such reallocation may have been encouraged by a tax regime which encourages leasing of plant and equipment rather than outright purchase. Leased equipment tends to be maintained on contract by the leaser so that leasing results in a reallocation of labour from the manufacturing to the service sector. Employers' national insurance contributions and pension obligations tend to produce a similar effect, making it less attractive to take on employees to provide services which can be subcontracted such as cleaning, catering, etc. This hypothesis implies that, until pressures for reallocation stabilise, measured productivity in manufacturing will continue to rise and thereafter remain permanently higher than before. From the viewpoint of the economy as a whole, the effect of the reallocation would be at best neutral, and certainly could not be interpreted as "good news".

A further possible explanation of the labour productivity boom is that the price of labour relative to other inputs has changed in such a way as to induce substitution away from labour and in favour of other inputs. Where labour is combined with increased quantities of other inputs, measured productivity will increase. However, this would merely reflect firms' attempts to reduce the labour input associated with any given level of output and so could not be interpreted as "good news". There is some evidence that increases in the relative price of energy and raw material inputs caused a shift in favour of labour during the 1970's (Lindbeck; 1983). Recent of that process.

Finally, but not exhaustively, it seems likely that firm closures may be
concentrated among the lowest productivity firms, so that the rise in measured productivity merely reflects a truncation of the distribution of existing firms (See Buiter & Miller; 1983). Whatever the cause of recent employment reductions, it seems likely that contracting firms endeavour to shed their least productive labour first. The "productivity boom" on these interpretations is "bad news" in the sense that it is a direct consequence of falling employment. To the extent that a recovery increases employment again, the productivity boom is likely to be reversed.

In summary, there are many possible interpretations of the recent rise in measured productivity, a number of which have been sketched in this perspective. No single explanation is valid, indeed many of the candidates can be viewed as complementary. However, the current official view, namely that the productivity boom is both "good" and likely to endure, is by far the most favourable interpretation of recent events. Whilst a proper evaluation of official wisdom on this issue must await more rigorous enquiry, casual empiricism suggests that, like the broader claim that "Scotland is leading the UK out of recession", it should be received with considerable scepticism.

REFERENCES
