PART IV

SUMMARY AND CONCLUSIONS

The findings of the study indicate that the level of the leading index for exports leads the quantum index, the unit value index, and the total value index. Furthermore, the growth rate of the leading index leads the growth rates of each of the above three target variables. These findings are very encouraging considering how volatile the series are. The results are also robust in the sense that the standard deviations of the leads are typically low, under 10 months for the overall lead.

The lead profile analysis shows that the lead profile of the leading index of exports vs. the reference cycle of the growth rate of the unit value index performs best.

Several limitations of the study merit mention. First, the 15 countries for which we have long leading indices account for roughly half of India's exports. Other countries like Russia or Middle Eastern nations are not included. This can distort the results substantially. For some of these countries, the price of oil may be a useful indicator of their demand cycle and can be combined (in future research) with the 15 leading indices to construct a comprehensive leading index for exports.

Export performance was also affected by tariffs and quotas. As noted by Srinivasan (2000, p.72), restricting imports through tariffs and quotas, that is explicit and implicit taxation of imports, is equivalent to taxation of exports. Moreover, the exchange rate was overvalued for long periods of time. In order to offset the negative impact on exports of import taxes and exchange rate overvaluation, measures of export subsidization were implemented. Srinivasan (2000, p.73), however, notes that the "…overall impact of export subsidization in offsetting the bias against exports, created by the import control regime, was at best modest and incomplete, and at worst negligible." In light of all these distortions, it is actually creditable that the level and the growth rate of the leading index for exports perform reasonably well.

It is also worth noting that there was a significant volume of barter trade (especially with the Soviet Union/Russia), which may have been driven less by exchange rates or the strength of foreign demand than by the size of Indian import needs from the foreign country. This, in turn, would have determined the size of exports. For instance, bilateral trade with Russia was $5.5 billion in 1960 – a significant level – but fell to $1.6 billion last year (Financial Times, October 4th, 2000). Again, the performance of the leading index is creditable given that the components of the leading index may not have incorporated these changes in trade.

Moreover, the composition of exports may also adversely affect the predictive ability of the leading index for exports and its growth rate. For instance, especially in the past, a significant portion of India's exports have included items like tea, the demand for which may not have much to do with the business cycle in the consuming countries. We therefore expect the performance of the leading index for exports to improve in the future with India moving into the cyclically sensitive (investment-driven) high-tech areas.

A major limitation of the present study is the long publication lags in the target variables. At the time of writing, the most recent export related data measuring the target variables are available up to December 1999 only, implying more than an eighteen months lag in the availability of data. For a leading index to be useful, meaningful and reliable, data must be available on a timely basis. Note that the components of the leading index (15 country leading index and REER) are available on a timely basis. The lag is in the availability of the target variables movements in which are predicted by the leading index. We hope that data availability will improve in the near future.

The fact that only demand factors have been taken into account in the construction of the leading index also merits mention. This, however, can be justified on the following grounds. First, supply factors are generally not cyclical. Second, apart from those that are not predictable (e.g. shocks), supply factors usually change more slowly than demand. This means that demand factors are generally the drivers in economic cycles. Finally, with further liberalization of trade, demand factors are expected to become more dominant than supply constraints, implying that they will primarily drive the cycles.

In sum, the construction of the leading index for exports in the past was beset with data limitations and other problems experienced by a developing country dominated by the public sector and import-substituting industrialisation. Nevertheless, the index performed reasonably well and its performance can only be expected to improve further in the future.