volatility, or else foreign price volatility will not be as great, as would be expected with semi-manufactured and manufactured goods. Nevertheless, all the literature cited above, with the exception of Arize (1995), points to negligible or small and insignificant exchange rate volatility effects on trade volumes. As Eichengreen and Ghironi (1995) point out though, just because economic studies have not managed to identify significant trade volume effects from exchange rate volatility does not mean that such effects may not exist. Certainly all anecdotal evidence (and the evidence provided by the survey which accompanies this study) suggests that exchange rate volatility does affect trade - but it may be that exporters and importers do not let short term exchange rate losses (or profits) influence their longer term decision regarding their prospects for gaining or consolidating market share. Or, as Wihlborg (1996) notes, if exporters and importers do not hedge, they may decide to incorporate larger profit margins into their pricing, to reflect the greater exchange rate uncertainty. Lastly, it could be that our current level of econometric sophistication does not allow us to uncover these volatility effects.

On a macroeconomic level, as the Economist (1997) has pointed out, EMU could make other exchange rates more volatile, if it is assumed that an equal amount of exchange rate trading is concentrated on fewer exchange rates. In addition, European policymakers currently pay close attention to exchange rates against the US dollar, as dollar movements tend to affect European exchange rates differently, implying bilateral movements which then have an impact on ERM participants. With a single currency, European policymakers may decide to pay less attention to US dollar rates, thereby intervening less and permitting a greater degree of volatility. Recent research by Martin (1997), however, suggests the opposite - he concludes that the US dollar-euro exchange rate should be less variable compared with past variability of the US dollar-DM exchange rate. According to Martin's model, the decrease in the volatility of the euro should be more important the larger the size of EMU. Clearly, these results are extremely scenario-dependent, so are taken solely as an indication of the lack of consensus on this issue.

As part of the third stage of EMU, the European Commission proposed a revamped ERM (already nicknamed ERM2) for Member States that remain outside the EMU "core" (see Commission of the European Communities (1996)). A confirmatory decision on the ERM2 was taken in Amsterdam in June, 1997, and there is now a commitment to voluntary membership of this mechanism with a +/-15 percent margin of fluctuation (which is the current width of the fluctuation band) for those Member States not in the first wave of EMU participants. Although the ERM2 will most certainly be a pre-requisite for EMU membership, there is unlikely to be any significant reduction in exchange rate volatility for Member States that participate in the new mechanism.

If EMU leads to more investment because of a reduction in uncertainty caused by elimination of exchange rate volatility, then this could be growth-enhancing. Once again, though, there exists little in the form of empirical evidence to determine the direction of these effects (see Leahy and Whited (1995) for a survey with respect to uncertainty, and with respect to exchange rate volatility, Campa and Goldberg (1995)). Campa and Goldberg (1995) only find a weak, and generally insignificant effect of exchange rate volatility on investment.

7.3 A Discrete Change in Exchange Rates?

At the beginning of stage three it is likely that there will be a discrete jump in exchange rates, when the Council announces the conversion rates for all transactions between currencies participating in EMU on January 1, 1999. Inevitably there will be a discrete change in some exchange rates, just from the fact that bid-offer rates will collapse onto a single conversion factor, but there is the possibility that the Council will decide to use "rounded" rates so as to make the transition to the single currency as easy as possible for the business community and the general public. Giovannini (1991) analyses the last stage of EMU, but in terms of a currency reform. As Giovannini notes, if market rates at the end of 1998 are significantly different from those established by the Council at the beginning of 1999, then there will