

Transmission of World Growth Cycle to the Indian Economy

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Introduction

Our earlier studies of the short-run economic fluctuations in India have led us to the following main conclusions:

(a) The Indian economy has not been free from substantial short-period fluctuations in economic activity. A large number of key economic processes such as industrial productions, factory employment, fixed capital formation, stock exchanges, money credit, interest rates, commodity and security prices, profits of public limited companies, exports, imports, etc., show more or less synchronous movements around their respective long-term trends. These movements appear to be sufficiently pervasive, temporally cumulative and self-reversing to justify our viewing them as reflecting the growth cycle in India's overall economic activity, that is, business cycle adjusted for long-run trends in the economy. (Chitre [1982]).

(b) While deviations of India's agricultural income and agricultural production from their respective exponential trends do not show the presence of serial auto-correlation and are thus random with respect to their time-sequence those of India's non-agricultural income, industrial production, gross fixed investment and gross total investment by public sector, quantum index of exports and the index of the gross domestic product of the world show positive serial auto-correlation, that is, exhibit a cumulative behaviour over time (Chitre [1988]). Furthermore, by decomposing the growth-cyclical fluctuations in non-agricultural income between those originating from fluctuations in agricultural income and those originating in other impulses, it has been shown that even if the other impulses had been absent, the random, serially uncorrelated deviations from trend in agricultural income would have produced a cyclical movement around the trend in non-agricultural income (Chitre and Paranjape [1987]), a result reminiscent of the well-known work of Ragnar Frisch (1933) on the role of random shocks in generating business cycles.

(c) Decomposing the growth-cyclical fluctuations in non-agricultural income further into those originating from fluctuations in agricultural income, those originating from fluctuations in gross fixed investment by the public sector and those origi-