Globalization is defined as a dynamic process of liberalization, openness, and international integration across a wide range of markets, from labor to Goods and from Services to capital and technology. The first stage of globalization is the development of new technologies in transport and telecommunication, and the second stage is the liberalization of the exchange of goods, services, and capital through the creation of GATT, WTO, OECD and the IMF. Many governments view globalization as a threat to national sovereignty because of the growing influence of financial markets and multinational corporations. Bhagwati (1988, 2004), a proponent of free trade and globalization, opposes the liberalization of short-term capital flows. Krugman and Eichengreen (1999) defend both trade and financial globalization, but favor the selective and temporary controls on short-term capital inflows to avoid financial crises. On the other hand, Maurice Allais (1999), a Nobel laureate opposes both the liberalization of capital flows and the globalization of trade. Another Nobel laureate, Joseph Stiglitz (2003) in principle, is not against globalization, but strongly opposes with the way the IMF, the World Bank, the WTO and other international organizations implement their policies in the developing countries. Like most policy makers, majority economists support the globalization because of its benefits in terms of productivity gains, technology transfer, the introduction of new products, managerial skills, R&D activities, and openness of the domestic economy to the global market. These benefits suggest that Foreign Direct Investment (FDI), an ingredient for globalization can play an important role in modernizing the national economy by promoting faster economic growth. As a result, over the past several years, many developing countries with liberal policies have witnessed an increasing role of FDI in total capital inflows. For example, at the end of the last decade, FDI accounted for more than half of all private capital flows to developing countries.

A growing strand of the literature attributes the growth impact of FDI depends on the characteristics of the host country. It is argued that the host countries’ capacity to absorb FDI productively is linked to their GDP per capita. Host countries with a better endowment of human capital are supposed to benefit more from FDI-induced technology transfers. Openness to trade is also considered important as foreign investors are said to increasingly pursue strategies which require unrestricted trade of intermediate goods at all stages of the production process. Balasubramanyam et al. (1996) stress that openness to trade is essential for reaping positive growth effects of FDI. The extent to which multinationals transfer modern technology and technical know-how to their foreign affiliates may depend on the host countries’ institutional
development. According to De Mello (1997), the larger the technological gap between the host and the home country of FDI, the smaller is the impact of FDI on economic growth. Borensztein et al. (1998) find FDI enhances growth only in countries with a significant qualified labor force. About a century ago, Schumpeter recognized the importance of well-developed financial intermediaries in enhancing technological innovation, capital accumulation, and economic growth. A well-functioning financial markets, by lowering transaction costs, ensure capital is allocated to the projects that yield the highest returns, and therefore, enhances growth rates. This view is supported by Goldsmith (1969), McKinnon (1973) and Shaw (1973), Boyd and Prescott (1986), Greenwood and Jovanovich (1990) and King and Levine (1993). Although most FDI relies capital from external sources, it is important to recognize that the spillovers for the host economy might crucially depend on the extent of the development of domestic financial institutions & markets. Moreover, the lack of financial institutions & markets also can constrain potential entrepreneurs. This is true when the arrival of an entirely new technology brings with it the potential to tap not just domestic markets but export markets. Alfaro et al (2004) examine whether countries with better financial systems can exploit FDI more efficiently. Their study shows that FDI alone plays an ambiguous role in contributing to economic growth. They find that countries with well-developed financial markets gain significantly from FDI. Blomstrom et al. (1994) find that the positive impact of FDI on economic growth is confined to higher-income developing countries. However, the empirical evidence of these benefits both at the sector level and at the national level remains ambiguous. Some studies find a positive role of FDI inflows on economic growth in the host countries. Yet, the linkages between FDI and economic growth is not firmly established once endogeneity problems and the heterogeneity of host economies are considered. Researchers such as Zhang (2001), Broensztien et al (1998), Sun and Parrikh (2001), Barell and Pain (1997) have shown that increased FDI has also been associated with higher economic growth in the host countries. According to their research, FDI, which can serve as a substitute for domestic investment as well as being a source of foreign technology spill-over and can stimulate the engine of growth in an economy. In addition, R&D expenditures can be an important source for economic growth. R&D based growth models have been presented by Uzawa (1965), Shell (1973), Lucas (1988), Romer (1990), Grossmand and Helpman (1991), Aghion and Howitt (1992), and others. Their work supports the view that growth depends on technological progress which arises from intentional investment in R&D sectors by profit maximizing agents. The extent of R&D expenditures in a country also has important bearing on trade performance of an economy. R&D plays an important role by creating technological innovations that reduces the domestic relative price of a good, thus enhancing exports and reducing imports. Studies by Gruber et. al. (1967), Kessing (1967), Mansfield et. al. (1979), and Franke (1989) conclude that R&D intensity is a good predictor of corporate growth, which is a primary engine for increasing market share in the global economy.
Though there are several studies which investigate the impact of FDI, R&D expenditures, financial institutions and international trade on economic growth, these studies are not complete. Most of these studies attempted to analyze the impact of the variables on economic growth separately. The role of R&D was mostly examined from micro perspective. At the macro level, the studies are mainly based on Developed countries. The last two decades of the twentieth century witnessed a series of financial reforms in less developed countries of Asia, Africa and Latin America. This study will contribute to the existing literature by taking selective developing countries from Asia, Africa and Latin America. Our empirical investigations would be of interest to the policy makers of these countries, who can pursue national economic policies conducive to economic growth. The primary selection of countries of our investigation are China, India, Indonesia, Malaysia, South Korea, Thailand, Turkey, Ngeria, Benin, Burkania, Botswana, Brazil, Chile, Mexico and Venezuela. Data are collected from BEA, IMF and World Bank covering the period from 1975 through 2004.

Before estimating the models (not provided here), time series properties of the variables will be investigated. If the variables are non-stationary, the estimates of the coefficients through conventional regression procedure will not be efficient and tests of cointegration are necessary to establish long-run relationships. Unit root tests such as Augmented Dickey-Fuller (ADF) and Phillips-Perron tests will be employed to detect any non-stationarity of variables. The tests of cointegration proposed by Johansen and Juselius (1990) will then be applied to determine whether the variables are cointegrated. The Johansen-Juselius maximum likelihood procedure provides two likelihood ratio tests, the Maximal Eigenvalue and Trace tests statistics, to determine the number of cointegrating vectors, if any, that can link the variables in the long run. A dynamic error correction model will also be estimated to determine the speed of adjustment of variables to the long-run relationship, if any one or more variables deviate from their common stochastic trend. The nature of causality between various variables will be examined using pair wise Granger Causality test. In the Granger model, the procedure is to determine whether the inclusion of the causal variable reduces significantly the forecast error. It uses the lagged values of both the causal and the dependent variable. The VAR model is commonly used for forecasting systems of interrelated time series and for analyzing the dynamic impact of random disturbances on the system of variables. Since the individual coefficients in the estimated VAR models are often difficult to interpret, the practitioners of this technique often estimate the so-called impulse response function (IRF). The IRF traces out the response of the dependent variable in the VAR system to shocks in the error terms. Innovations or surprise movements are jointly summarized by the error terms of the VAR model. Therefore, impulse response functions from the VAR models will also be utilized to test the directions of influence between the variables. All statistical results will be analyzed and provided in tables.