INTERNATIONAL COMPETITION IN THE GLOBAL ECONOMY

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В статье обобщаются выгоды и преимущества глобализации мировой экономики. Также статья описывает некоторые особенности технологических изменений экономики в процессе глобализации.

International trade has symmetric and positive effects for all parties when a clear technological variety exists. Each country specializes in the technology which makes the best usage of locally abundant production factors. Following Ricardo, international trade is beneficial when the technology for the production of wine differs from the technology for the production of cotton. Specifically wine technology is successfully applied in Portugal as it makes intensive use of locally abundant resources, while cotton technology makes more intensive use of factors, such as skills and capital, relatively more abundant in England.

Technological variety is assumed as a founding condition for international trade to take place with mutual benefit for parties engaged. The performances on international markets of each economic system are strongly influenced by the structure of relative prices together with the specific bias of the technology in use. Much attention has been paid to the role of absolute factor costs and to the rate of technological change in assessing the performances of each country in the international market-place. Very little attention has been paid to the role of relative prices and to the direction of technological change. Yet it is clear that relative prices interact with absolute factor costs, the bias in the direction of technological change and the levels of actual total factor productivity in assessing the average costs of products. Countries with lower average costs are able to appropriate larger markets shares and possibly to earn extra profits especially if less efficient competitors delay exit.

In a dynamic context of analysis, the international competitivity of each economic system in global markets depends on the correct co-evolution of both the structure of the system, in the terms of factors absolute and relative prices, and technology. Countries able to generate new technologies that make a more productive use of locally more abundant resources and are able to further reduce their production prices and increase their supply can experience very fast rates of economic growth.

The effects of the introduction of general technologies

At a time of the introduction of new radical technologies that reflect the original endowments of production factors in innovating countries, but induce a factor intensity different from the one currently m use in adopting countries, international competition does not have positive effects for imitating countries, at least in the short term. Imitating countries cannot retain the old technology which is actually inferior, and they have little chance to compete internationally with the new technology as long as they are not able to introduce contingent technologies which make the new general purpose technology more appropriate to their own factors endowment, or alternatively, change their system of relative prices.

Total factor productivity levels of a given non-neutral technology differ among countries according to the differences in relative prices. The closer the structure of the economic system to that of the innovating country, the smaller are the differences in total factor productivity levels. For countries characterized by a significant difference in relative prices, the new technology yields lower efficiency levels which must be compensated for by the absolute levels of factors prices. Competition in international markets is clearly affected by such differences in relative prices and hence actual total factor productivity levels. The larger the differences among countries in terms of factors prices, the larger are the asymmetries in the gains from international trade.

The effects of contingent technologies

When innovating countries are able to generate contingent technological changes they are likely to better retain their competitive advantage which consists in a better combination of their specific economic structure and hence relative prices and the specific characteristics of the technology. Contingent technological changes cannot be imitated. Contingent technological changes cannot be imitated simply because prospective adopters cannot take any advantage of such a technology which is not appropriate to local factors endowments. From this viewpoint contingent technological change yields substantial barriers to imitation which in turn becomes a pervasive factor of barriers to entry in the new market for firms based in countries with a completely different price structure.

The distinction between contingent and general technological change makes it possible to highlight a major difference in the role of innovation and imitation. Imitation is sufficient for followers to reduce asymmetries m international markets only after the introduction of a perfectly neutral general purpose technology: that is, a new general technology which is neutral with respect to all the techniques in place before its introduction. This in turn implies that adopting countries already had a structure of endowments and relative process of production factors close to that of innovating countries.

In this case innovators can retain only a transient competitive advantage which lasts until all potential adopters are able to use the technology. It is clear that the faster the adoption, the higher arc the diffusion rates and the shorter the time spell of duration of the asymmetric distribution of the gains from trade in favor of innovators.

When technological change consists both of shift and bias effects, at least for adopting countries, followers face emerging asymmetries which last as long as not only they are able to imitate, but also to introduce incremental contingent innovations which adapt the general purpose technology to the local factors markets and/or reduce the differences in the relative prices with respect to innovating countries.

Finally, imitation cannot help followers when contingent technologies are being introduced in innovating countries. When technological change is contingent laggards can only face enlarging market asymmetries with the introduction of other innovations. In such circumstances international trade can be considered beneficial at large for all countries only in the long term if and when technological change can be considered endogenous and putty.