

REFERENCES OF THE NEW THEORY OF TRADE AND ECONOMIC GROWTH

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Abstract: *This paper shows that the dynamization of the traditional theory of international trade through the study of growth effects on the foreign trade in the framework of neoclassical analysis, alongside the approach with the Keynesian toolkit of the role of foreign trade as a factor of growth, have constituted the main aspects of the new theory of trade and economic growth. The “new theory” basically represents a set of theories and models of the type “growth-led export” or “export-led growth”, which explain the complex role of foreign trade in the dynamic of development, the new segments of international trade, and also provides base for trade strategies for development. Their typology includes: “import-substitution strategy”, “export-promotion strategy”, and more recently “outward oriented strategy”. In the context of regionalization and globalization of competition the author believes most appropriate the states’ option for a “outward - oriented competitive development strategy”.*

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It is widely recognized that throughout economic evolution existed close and complex interrelationship between foreign trade and economic development. They are evident both in export and in imports. Exports allow realizing economies of scale by increasing production and the use and value of production factors, permitted by the access to foreign markets. Moreover, they procure the means of payment in foreign currency in order to purchase imported goods. In turn, imports, depending on their scope, exercise positive effects of different intensity on the process of development. The so-called “necessary imports” covering products for which there are no inputs in the local economy covers important segments of consumer demand and production, which would remain unsatisfied by the domestic products; then the “alternative imports”, covering goods that could be assimilated in their own production but in low efficacy conditions, allow the distribution of internal production factors to more profitable activities. They also support the development process when they are composed of consumption goods which ensure a high standard of living, and especially when their object are production goods and advanced technical means that enable the development and the modernization of the local production branches.

In other words, overall, beyond the necessary imports – which are directly related with the development process, foreign trade appears as an instrument of international specialization: it allows the allocation of internal production factors to activities that are characterized by high

productivity and profitability, providers of goods to meet the domestic demand and for exports, thereby increasing the national output.

In turn, economic development is reflected directly on exports. In varying degrees, the increase of the national output can generate an additional export offer and a supplementary import demand.

Therefore the relation foreign trade-economic development can be characterized as a two-way one and the economic theory has the task to study the both sides of the correlation: on one hand the import of growth process and economic development and, on the other hand, the influence of foreign trade on economic growth and development.

Although the interconnections between trade and development are evident, in macroeconomics the two terms of the binomial have been studied mostly separately. Thus there emerged two distinct sequences of macroeconomics: international trade theory and economic development theory.

The first theory assumed as a subject of study the defining of the international specialization criteria, evaluating the benefits of the foreign trade, explaining the distribution of benefits between the exchange partners and the trade policy substantiation which ensure their maximisation. The second theory studies the determinants of the economic growth and development, materialized mainly in: equipment with outputs, physical capital and infrastructure investment, technological progress, education and training introduced in economic analysis by the generic term of human capital, etc.

Interference between these two sequences was recorded from the moment of their crystallization and they generated in time in what we now call “the new foreign trade and economic growth theories”.

The correlation between foreign trade-economic development, although in an incomplete form, appears quite explicitly in the work of mercantilist predecessors, for which economic development meant increasing wealth, more accurate increasing the stock of precious metals that a country had. According to this understanding, they think that outside the extraction, foreign trade is the only way to increase wealth, to the extent that exports are in surplus against imports.

Going beyond the narrow mercantilist concept about wealth and expanding the analysis in the production domain, founders of the classical theory retains the idea of the binomial foreign trade-economic development relation. In this aspect, Adam Smith offers a wide pleading about the contribution of international division of labour based on absolute cost differences in increasing the “wealth of nations”. In his turn, David Ricardo deepens the analysis. He sees the limited character

of the resources and he generalizes the specialization criteria in his own version of “comparative costs”. International specialization based on comparative costs condition the participation in foreign trade to broaden the limits of economic growth of a country. “In a system with a perfect freedom of trade”, said Ricardo two centuries ago, the allocation of production factors after the principle of comparative advantage is able “to increase the overall weight of the products, to spread the general benefit and to bound through a common fabric of interests and relations the universal society of nations from one end to the other one of the civilized world” (Ricardo, 1959, p. 126).

Neoclassical theorists preserve and deepen on the Ricardian analysis without though manifesting different concerns on the investigation line between trade and development. In the version of opportune costs proposed by Alfred Marshall and Gottfried von Haberler, we could say that although the algebraic and geometric neoclassical tool allows to analyse these links, investigations in these direction are dimmed as far as the advantages generated by the priming of the foreign trade are explained by the shifting of the consumption indifference curves, while the possibilities curves stay invariable having a passive role (Heller, 1972, pp. 29-50).

The second neoclassical option proposed by the Swedish school, Heckscher and Ohlin, opens new perspectives for addressing the theoretical binomial foreign trade-development. First of all these happens because the Swedish authors explicitly aim “to demonstrate that the international division of labour is explained by the inputs endowment of each country” (Ohlin, 1967, p. IX). Thereby, the comparative advantages sources are identified with the endowment of inputs that constitutes the fundamental factor of development. Then the neoclassical analyse of the trade-development interrelation, although it remains static, is more extended than the Ricardian perspective with the new issue of foreign trade contribution to the equalization of the development conditions by equalizing input prices. Considered as a trend in the H-O model, mathematically-algebraic and geometric demonstrated in restrictive conditions by Samuelson, as an absolute equalization, this thesis has caused widespread and prolonged controversy, focusing the research on the trade and development relation and becoming a reference point for post-war theorists of the international economics relations.

The new theory of foreign trade and economic growth crystallized and drew the attention in the late 70's. It is not a unitary body theory, but rather a series of theories and models that have risen from the post-war disproof for the traditional classical and neoclassical theory, mentioning that the most of the critics were for the assumptions and the conclusions of the H-O-S model and less for the Ricardo theory.

The deficiencies and challenges of the traditional theories assumption as well as the new elements as a response to the causal relations between foreign trade and economic growth were drawn from two perspectives: some of them from the offer perspective which aimed with predilection the impact of economic growth on the foreign trade, and other of them from the demand perspective which mainly helped to elucidate the role of trade as a factor of economic growth.

On the offer side, many contemporary theorists, such as H. Johnson, Tadeusz Rybczynski, Jagdish Bhagwati, Gerald Meir, dispute the static characteristic of the traditional theory based on the restrictive condition of the invariability supply factors. This prevents analyzing the long-term evolution of the international division of labour during economic growth and development. The dynamic approach resulted, mainly, in the study of comparative advantages variation generated by changes in size, structure and quality of the endowment of factors, including: capital accumulation, population growth, increasing productivity and improving technology. But all of these represent sources of economic growth. Therefore, the “dynamic” theory of international trade has allowed the study of economic growth effects on trade.

Initially, this study was undertaken in the neoclassical frame of analyze, considered to be “extremely flexible and applicable to a very broad range of issues” (15, *L’Avenir des ...*, 1971, p. 81).

In this context, economic growth is defined as an increase of the output as a result of population growth, capital accumulation and technical progress (Johnson) or as an increase of the productivity level (Meir). Geometrical, the economic growth process can be represented as a production possibilities curve shift toward to the right and up (Johnson, 1958; Meir, 1963).

The purpose of this approach was to determine whether the growth process increases the export offer or reduces the demand for imports, more or in the same proportion; in other words, whether it attenuates or accentuates the dependence on the exterior. For this we will consider that exports (E) represent the difference between production (P) and consumption (C), so $E=P-C$. In turn, imports (I) appear as the difference between consumption and production, $I=C-P$.

In these conditions, the effect of economic growth on foreign trade is a result of the combining “effects of production” with the “consumption effects”. Both categories of effects are defined in terms of “elasticity-product” (“output-elasticity”) of production, respectively consumption. Production elasticity is calculated as the ratio between the production growth rate of the good which will be exported ($\Delta P_e/P_e$) or imported ($\Delta P_i/P_i$) and GDP growth rate ($\Delta P/P$). Similarly, it can be determined the elasticity-product of the domestic consumption.

Based on these concepts and values, first Hicks, and then Johnson and Meir, in different terminology, define the same five types of growth.

In Johnson's terminology (Johnson, 1958, pp. 76-77), in terms of production these types are:

–**Neutral economic growth**, when the offer of exportable and importable goods is increasing in the same proportion;

–**Unfavourable economic growth** for the foreign trade, when the offer of importable goods increases in a greater extent than the offer of exportable goods;

–**Favourable economic growth** for the foreign trade, when the offer of importable goods increases in a lesser extent than the offer of exportable goods;

–**“Ultra-favourable” economic growth** for the foreign trade, when the final result is a reduction of the importable goods supply;

–**“Ultra-unfavourable” economic growth** for the foreign trade, when the results are a reduction of the exportable goods offer.

In mathematical terms, says Johnson, “the economic growth will be favourable, neutral or unfavourable for the foreign trade as the product-elasticity of the importable goods offer is lesser, equal or greater than 1” (Johnson, 1958, p. 77); and referring to the last two types, “an ultra-favourable economic growth means a negative product-elasticity of the importable goods offer and the ultra-unfavourable economic growth means a negative product-elasticity of the exportable goods offer” (Johnson, 1958, p. 77).

Similarly are defined five types of economic growth in terms of “consumption effects”. By combining the above types, it can be revealed the overall effect of the economic growth on the foreign trade.

Although abstract, the typology presented may lead, in theory, to the identification of different types of openness to the exterior and the intensity dependence of an economy to international market.

In this regard, the attention of theorists has been detained by the “appauvrissante” economic growth (“la croissance appauvrissante”) (Kindleberger, 1981, pp. 82-84). This term was defined by Jagdish Bhagwati by analysing the growth effects of offer factors and technological progress not only on the volume and composition of the exports and imports but on the exchange ratio instead. The “appauvrissante” growth consists of an increase of the offer factors or productivity which, paradoxically, results in a negative effect for the country. Such a process may take place when the economic growth stimulates the production of exportable goods, increasing the external dependence

in terms of sales and if the increasing export offer helps or takes place in a period of declining international prices for such kind of goods.

As outlined above, the dynamic version of the neoclassical theory was formed in the basic model analysis of first side of the correlation foreign trade-economic growth, respectively the growth effects on foreign trade.

The contemporary protagonists of the new trade and economic growth theory have expended and deepened the analysis within very interesting and complex models, classified as “growth-led export”. In this direction, Bo Södersten and Geoffrey Reed for example, detailed the analysis of the economic growth types depending on the differential growth factors stock and on the nature of the technological progress (Södersten and Reed, 1994, pp. 117-145). Their point of departure is represented by the Rybczynski Theorema according to which if the endowment with one production factors increases and the stock from the other one remains invariable, then the production of the good which is composed intensively in the accumulated factor will increase while the quantity of the good which is composed intensively in the invariable factor will decrease in absolute amount but only if the goods and factors prices will remain constant. Taking into consideration the foreign trade, the above mentioned authors concluded that “if a country is relatively rich in labour and exports a good that incorporates intensively that factor then the increase of the labour endowment will generate an increase of the production that will be ultra-favourable for the foreign trade. If, on the other hand, the abundant factor is the capital, the increase of the labour factor endowment will generate an increase which will be ultra-unfavourable to trade” (Södersten and Reed, 1994, p. 126). In their model, the study is completed with the consequences of different types of growth on the variation of factors prices, respectively on the distribution of income. If, for example, “the country is rich in capital and an ultra-unfavourable growth for trade occurs, then the price level for the exported good will relatively increase. The relative and absolute wage level will increase and the relative and absolute level of profit for the afferent capital will decrease (Södersten and Reed, 1994, p. 127).

Another major part of the model deals with the analysis of the technological progress effects on the foreign trade. The study is detailed on the small and large country case and on the three types of technological progress, which are defined in terms of the effects that the production factors have on the marginal productivity. This refers to: the neutral technological progress which raises the marginal productivity of the production factors equally; technological progress which is labour-saving by raising the marginal productivity level of capital in a higher proportion than it does for labour; and technological progress which is capital-saving by raising the marginal productivity level

of labour in a higher proportion than it does for capital. Differentiated on production categories: capital-intensive or labour-intensive, the various types of technical progression have a direct impact on exports and imports and on the income distribution, defining various options of economic growth related to trade, that are important to characterize the diversity of specific situations in different countries and group of countries.

Two other prominent contemporary theorists of international trade - namely Paul Krugman and Maurice Obstfeld address in the same framework the effects of economic growth over an open economy (Krugman and Obstfeld, 1992, pp. 117-123). In other words they study how and to what extent growth in one country affects the world economy and conversely or the patterns of growth among trading partners reflect on the domestic economy through foreign trade channels.

The encounter of various patterns of growth within the open world economy and their analysis in terms of variations of the endowments stock, factor intensity of exported and imported commodities and price dynamics, allow for a theoretical separation of several cases more or less empirically tested. The model proposed by the authors mentioned above reveals that overall, economic growth in partner countries benefits the national economy, because it offers new export opportunities. Simultaneously however, it can also mean facing more competition on the new export markets with negative constraint outcomes, but also benefic effects which stimulate adjustment and modernization. Similarly, growth in the national economy may exert beneficial effects by enhancing export and import capacity.

Assessment of such cases is more nuanced if we radiograph them in terms of trade and income transfers fluctuations between engaged trading partners. Thus, Krugman and Obstfeld demonstrates what conditions can occur and the extraordinary situations in which (Krugman and Obstfeld, 1992, p. 119):

- A favorable export growth tends to damage the increasing terms of trade of the country in the rest of the world's benefit; or
- A favorable import growth tends to improve the country's terms of trade.

Regarding the effects of these growth patterns in partner countries over our terms of trade, the authors conclude that it is likely that a favorable export growth outside national boundaries to be a good deal for us in order to improve the terms of trade, while increased favorable foreign imports would damage our terms of trade (Krugman and Obstfeld, 1992, p. 120). They do however note that such situations may occur only if national or foreign countries increased exports alter so much the demand in international markets that leads to lower prices, which does not happen very often.

For the study of the other side of the trade-development binomial, the neoclassical framework proved to be insufficient. More suited to explaining trade as a factor of economic growth have proven to be the approach based on demand and the conceptual framework and tools of Keynes. From the range of concepts and tools developed by Keynes, the most useful to international macroeconomics is the multiplier mechanism.

Acknowledging this, many theorists, including Fritz Machlup, Ray Robinson, Roy Harrod, Ragnar Nurkse, F.D. Holzman, Lloyd A. Metzler and others have extended the multiplier theory to the conditions of an open economy, developing the so-called 'foreign trade multiplier' (Bye, 1971, pp. 193-207; Marcy, 1976, pp. 391-456). On this new line, the multiplier serves as a tool to analyze the incidence of export fluctuations on economic growth as well as the rampancy of fluctuations in the world economy.

Compared to the classical and neoclassical theories, Keynesian foreign trade multiplier brings in many respects viewpoint changes. Briefly these changes relate to the following issues:

- The importance and role of exports in the economy are assessed in terms of training effects and not the value and utility of imports purchased as a trade-off;
- While classical and neoclassical theories state for the 'world optimum' utopian goal whereby derives the 'universal advantage' and 'equalizing development conditions' illusions, from the Keynesian prospect benefits arising from foreign trade 'are declared national benefits, being unlikely that the whole world can benefit from them (Keynes, 1970, p. 339);
- Optimization is designed for classical and neoclassical assumptions of full capacity utilization, while the Keynesian multiplier describes national income growth by attracting no inputs from other industries, thus, not by structural adjustment, but by mobilizing the idle capacity;
- Foreign trade multiplier do not serve classical and neoclassical analysis tools but the one provided by Keynes.

Spreading the usage of the multiplier factor to the study of international relations is fully justified, since among the main sources of national income variations there are increases or reductions of exports, imports, and terms of trade.

The Keynesian view states the fact that exports have on national income an incidence similar to that of investment (I). Export earnings increase the amount of national income in monetary expression, but not in real terms over the same period. It means that the volume of goods and services does not increase along with the value of exports collection. The gains arising from the appreciation of the terms of trade, which is subtotaled to export revenues, could be considered in a similar manner.

In turn, imports, as well as losses through deterioration of terms-of-trade, reflect upon national income in a manner similar to savings (S). They levy a portion of what could be directed for investment or consumption of domestic goods and does not contribute to the creation of additional revenues.

By the logic of the previous statements, the equation of equilibrium in Keynes's model, $S = I$, have to be completed by the influence of exports (X) and imports (M). Consequently, the equilibrium relationship for an open economy becomes $S + M = I + X$.

Foreign trade multiplier expresses that national income fluctuations are more than proportional to changes in exports and imports they have caused. For example, a demand for additional goods by country B from country A may cause an increase in exports ΔX . Additional revenues obtained will be added in the first stage to national income, which will record an increase equal to ΔY .

Partly, the growth of national income would be allocated to the purchase of domestic goods. The allocated stake would trigger an income multiplier chain-kind reaction, identical to that described by the investment multiplier. The amount of national income allocated to the purchase of domestic goods is higher, the final gain obtained at the end of the national income multiplier cycle is more important. If another part of the income surplus emanated from exports would be allocated to savings, it will be temporarily diverted from growth rampancy reaction.

Regarding the international trade issue, there should be taken into account other diverting factors as well. The first is represented by the additional national income allocated immediately to imports (ΔM). Its dimension depends on the so-called 'marginal propensity to import' (m), expressed by the ratio $m = \Delta M / \Delta Y$. The second element of diversion is the so called 'choc en retour' (external repercussion) that designates income reduction in country B as a result of imports increasing from country A, materialized in time in a reduction in imports of country A and respectively, in a decrease of exports to country B, by a certain dimension ΔR (Marcy, 1976, p. 402). The foreign repercussion coefficient (r) takes the form of the ratio $r = \Delta R / \Delta Y$.

Considering the above statements, the foreign trade multiplier (c) is expressed by the formula: $c = 1 / (m + s + r)$, while the cumulative excess of income generated by the initial exports surplus is $\Sigma \Delta Y = \Delta x * 1 / (m + s + r)$.

As such, we deal with the so-called 'horizontal foreign trade multiplier'. In order to express the final revenue increase when at the beginning of each multiplication stage there are exports overflows (annual) there has been imagined a more complex version of the 'vertical multiplier' (Marcy, 1976, p. 395-398).

If trade deficits are recorded due to reduced foreign demand for a country's exports, the multiplier described above acquires the meaning of a 'descaler'.

As previously discussed, the keynesian foreign trade multiplier describes and allows the assessment of the contribution of foreign trade to support domestic economic growth.

Criticized for many shortcomings arising from judging the management solely in monetary terms, the theory of foreign trade multiplier has been complemented and enhanced later by analyzing in real terms the driving effect of exports and imports (Currie, 1983, pp. 42-48).

The above mentioned addenda transformed the theory of the foreign trade multiplier in the main helicon of the intensively promoted 'export-led growth' models in contemporary literature. Thus, appreciating the shortcomings of the analysis held exclusively in monetary terms, Francois Perroux develops in addition the so-called 'multiplier of the dominant sector', which entails the development of the related downstream and upstream industries. Hence, the exports driving effect intensity depends on the nature of the products: it is higher for 'driving exports' and lower for 'driven exports'. Other types of multiplier with connotations of international macroeconomics are as such: Young's multiplier that describes the support for the growing process by introducing new technologies and the input-output multiplier that captures industries interdependences.

The driving effect theory underlies many current models of economic growth based on exports called 'export-led growth' developed by authors such as: Backerman, Lamfalussy, Balassa and many others.

It is worth mentioning that although the Keynesian multiplier has been developed from the demand viewpoint, the new 'export-led growth' models does not exclude but complement neoclassical-inspired models of 'growth-led export'. Authors explicitly combine the supply and demand analysis to explain the role of trade in the dynamics of development processes.

Similar to neoclassical models, post-keynesian models abandon the identity of production functions hypothesis underlining the homogeneity of the production factors and technology identity, and focus on more realistic assumption of technological pluralism that characterizes the same output in different countries. Export supply incidences over demand are considered and are suggestively expressed by the 'demonstration effect' resulted in consumer tastes and preferences changes that come into contact with a new greater qualitative offer, which is reflected directly on the size and structure of domestic demand.

Demand role in stimulating the export supply is more qualified by empirical assessment of the 'representative national demand' thesis (Staffan Burenstam Linder) and the 'cyclical product lifetime' created by a patent effort to meet market demand (Raymond Vernon).

Besides these differences there must be considered the size differences which generate economies of scale along with the distorting effects of competition through government policies or unintentionally by social and cultural differences which invalidate the assumption of perfect competition.

Distancing from the rigid assumptions of classical and neoclassical traditional theories, and developing the reasoning based on more realistic assumptions related to monopolistic competition, to changing consumer tastes and preferences, to differentiate products and economies of scale, new theories and models of trade and economic growth provide explanations of important segments of international trade that are no longer generated only by cost advantage differences or differences of factors endowment (as it was defined in the HO model). Examples of explanations are as such: intra-industry and inter-industry trade between countries with parallel economic structures, two-way trade flows in goods characterized by the same factor intensity, and intra-firm trade carried on the global markets of multinational companies, all with an overwhelming weight in nowadays international trade.

Beyond the explanations given to these segments of international trade, new theories and models of trade and growth provide foundation to strategic trade policies and trade development strategies.

Regarding trade development strategies, their typology comprises mainly two basic types: industrial development strategies based on stimulating production of import competing goods, namely 'import substitution', hence the name 'import-substitution strategy' and development strategies based on export promotion strategy called 'export-promotion' (Sodersten and Reed, 1994, pp. 404-437; Winters, 1994, pp. 211-215). The former have a higher affinity for 'export-led growth' theories and models based on the assumption that faster national economic growth will increase the export supply and have been popular until the '70s. The second type of 'export-led growth' models updates the "mercantilist mindset" of the primacy of export and received great attention in the '80s and '90s.

In their empirical setting both have proven virtues and limitations. Deficiencies evidenced by their alternative application after the '90s led to a synthesis called 'outward oriented strategy'. It gives relevance both to exports and imports as variables interrelated to economic development.

We state that the outward opening is just a condition of development. Effective positioning within labor and international trade networks as well as the structures and stances of development are currently subject to competition. Current scholar disputes on issues such as 'export promotion versus import substitutions' or 'growth led export' against 'export led growth' materialize not only

in terms of economies of scale, factor endowment aggregation, capital utilization capacity / FDI, knowledge and technologies, but yield and tend to integrate analysis of competitiveness.

Competitiveness is a microeconomic concept but gain macroeconomic connotations throughout conceptualization like the one made by Michael Porter to 'national competitive advantage' (Porter, 1994). On this track we understand national competitiveness as a result of the competitiveness of its national business sectors, i.e. the business sector capacity to deliver withstanding products on international markets and of a favorable gained position within the regional and global competitive environment. Thus, the national competitiveness appears as a result of firms and governments strategic choices. Regarding national governments, based on the above considerations, to designate the strategic option in order to guide their intervention in the free game of the market and trade, appears to us that 'outward competitive strategy development' is the most adequate name. Supporting national competitiveness of governments they can mitigate the regionalization and globalization constraint effects on local business.

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