## THE STATIC AND DYNAMIC EFFECTS OF EUROPEAN INTEGRATION

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DOI: https://doi.org/10.31410/EMAN.2019.683

Abstract: The Single European Market is one of the principal achievements of post-war Western European integration. The SEM is perceived as reference point of the whole European Union. In addition, all its members have to obey Union's rules (Mercado et al, 2001). In March 1988 Paolo Cecchini was trying to estimate gains from the single market. Although his studies of integration were concerned with static and dynamic benefits from the common market, they were not very precise (El-Agraa, 2007). The greatest benefit of Single European Market can be found not in its once-off effect on resource allocation, but rather its dynamic effects: more innovation, faster productivity gains, greater investment and higher output growth (Baldwin, 1989). Especially innovation, which can be broadly divided into product and process development, is the key factor in the economic history of capitalist society (Rugman and Collinson, 2009). The new markets attract new investments and the entry of established and new companies (Piggott and Cook, 2006). According to Dent, "economists have established the concept of 'technological accumulation' whereby the technological advantage of countries, regions and firms is maintained by a so called 'snowball' effect" (1996:304). Consequently, economists assume that the growth of knowledge depends on future technological development. Unfortunately, there is a strong correlation between Europe's recent low levels of economic growth and its technological performance compared to its rivals (Dent, 1996).

The dynamic factors of Single European Market have a stronger impact on members of the European Union than the static effects of trade creation and diversion. The European integration can result in greater competitiveness between companies. They have to become more efficient in order to survive the increasingly competitive environment (Atkinson and Miller, 1998). Certainly, "all firms face more competition from other firms in their national market, but at the same time they have better access to the other EU markets" (Baldwin and Wyplosz, 2009:205). Furthermore, Europe's weaker firms will merge or get bought up as a result of industrial restructure. Thus, bigger enterprises will be able to compete more successfully in the global markets (Baldwin and Wyplosz, 2009).

All things considered, Cecchini Report underestimated economic gains from the Single European Market by taking into account mainly static effects of integration, whereas Baldwin suggested that the medium-run growth effect could roughly double the Cecchini estimates (Baldwin, 1989). As Mercado stated, "the single market is not a static concept but an ongoing process" (2001:116). As a result, of the European integration previously regulated and protected national markets have become more international in character, where more efficient companies are able to exploit the economies of scale and compete more effectively in world markets, selling products to countries outside the EU (Atkinson and Miller, 1998). However, in order to maintain competitiveness especially compared to the United States, the European Union must put more emphasis on the investment in new technology (Piggott and Cook, 2006). The technology is crucial to all strategies that aim improve corporate or economic performance (Dent, 1997). Finally, "the technological capability of firms, countries and regions is determined by their ability to generate, absorb and adapt to new technologies and innovatory processes" (Dent, 1997:305).

**Keywords:** International integration, European Market, innovation, technology.

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The Single European Market is one of the principal achievements of post-war Western European integration. The SEM is perceived as reference point of the whole European Union. In addition, all its members have to obey Union's rules (Mercado et al, 2001). In March 1988 Paolo Cecchini was trying to estimate gains from the single market. Although his studies of integration were concerned with static and dynamic benefits from the common market, they were not very precise (El-Agraa, 2007). The greatest benefit of Single European Market can be found not in its once-off effect on resource allocation, but rather its dynamic effects: more innovation, faster productivity gains, greater investment and higher output growth (Baldwin, 1989). Especially innovation, which can be broadly divided into product and process development, is the key factor in the economic history of capitalist society (Rugman and Collinson, 2009). The new markets attract new investments and the entry of established and new companies (Piggott and Cook, 2006). According to Dent, "economists have established the concept of 'technological accumulation' whereby the technological advantage of countries, regions and firms is maintained by a so called 'snowball' effect" (1996:304). Consequently, economists assume that the growth of knowledge depends on future technological development. Unfortunately, there is a strong correlation between Europe's recent low levels of economic growth and its technological performance compared to its rivals (Dent, 1996).

The static effects are associated with theory of comparative advantage concerning the efficiency with which economic resources within nations are allocated. "Countries have a comparative advantage in those goods that can be produced at a lower opportunity cost than in other countries" (Sloman et all, 2010:528). Thus, if trade would not exist, each nation would have some goods that were relatively expensive and some goods which were relatively cheap. However, "trade allows production to locate in its 'natural' place" (Baldwin and Wyplosz, 2009:392). Countries jointly benefit from free trade even if one has an absolute advantage in the production of all goods. As a result, total world efficiency and consumption increase (Rugman and Collinson, 2009).

A custom union is a form of economic integration where countries not only agree to have free trade among themselves, but also to impose common external barriers against imports from the rest of the world (Atkinson and Miller, 1998). The higher number of member countries in the union, the bargaining position of the union is likely to be greater. On the other hand, it will be more difficult to achieve consensus with many member countries since all nations must agree on a common negotiating position on every single product (Piggott and Cook, 2006). To quote from Baldwin and Wyplosz, "the Commission formally has the power to set tariffs on third nations goods, but very few groups of countries are willing to transfer that amount of national sovereignty" (2009:178-179). Nevertheless, until 1980's the formation of the custom unions was the main way of integrating economies of the member states (McDonald and Dearden, 1994). Generally speaking, the European Union promotes inter-block trade, but places restrictions on countries, which are not in the Union (Atkinson and Miller, 1998). At the beginning, the concepts of trade creation and trade diversion were associated with advantageous and disadvantageous welfare shifts in trading patterns (McDonald and Dearden, 1994). Trade creation appears as an effect of reducing trade barriers and greater specialization according to comparative advantage. Consumers do not have to pay high prices for domestically produced goods which are produced less efficiently, the goods can be imported cheaper from other members of the European Union. In return, the country may wish to export to them goods in which it has comparative advantage (Sloman et al, 2010). Trade diversion can be described as transfer of production from low-cost producer outside the European Union to less efficient producers within the Union that are being protected by tariffs or other barriers (Atkinson and Miller, 1998). Finally, trade diversion improves balance of trade for the European Union as a whole (McDonald and Dearden, 1994).

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As Pelkmans wrote, "technical efficiency is defined as input minimization at any given output level, given the employment of the best techniques available" (2001:97). Because of numerous public interventions, public regulations and border protection in the Western Europe of the 1950s, many industries were technically inefficient (Pelkmans, 2001). Thus, free trade, specialization and competition between industrial firms result in a more efficient use of resources (Atkinson and Miller, 1998). Apart from this, if producers are forced to reduce prices, consumers will enjoy an increase in their real incomes (El-Agraa, 2007).

The companies situated in the European market get the opportunity to gain the full potential economies of scale (Sloman et al, 2010). As Rugman and Collinson points out, "the cost of their components is kept to a minimum and the large production runs allow companies to spread fixed costs over more units" (2009:506). What is more, the exploitation of economies of scale and rationalization of production might lead to further new investment (El-Agraa, 2007).

The economic growth is the most important sphere of economic theory and policy (Winters, 1996). If given country wants to achieve economic growth, there must be investment. The higher the rate of investment, the higher will be the rate of economic growth (Sloman et al, 2010). The medium-term growth effects are called "induced physical capital formation", which is characterized by the investment in physical capital (Baldwin and Wyplosz, 2009). Unfortunately, "as the stock of capital relative to labour is rising, the marginal productivity of capital will fall, reducing the incentive to invest more" (El-Agraa, 2007:168). Due to diminishing marginal returns associated with pay rises and depreciation of machinery, further investment will only cause return of the growth rate to its former level.

The long-run growth effects refer to the rate of accumulation knowledge capital, for example technological progress (Baldwin and Wyplosz, 2009). Whereas technology transfer refers to benefits gained by domestic producers from the technology imported by companies from other member states (this is especially important in central European nations) (Sloman et al, 2010). It is the main mechanism through which growth is affected. Technological progress will rise productivity and output directly, and by rising the return on capital, it will increase the incentive to invest (Baldwin, 1989). Besides, technology spillovers can increase overall knowledge of workers and thus rise labour productivity (Piggott and Cook). Furthermore, advanced technology allows to reduce number of employees who are needed to carry out operations efficiently (Hodgetts et al, 2006). Finally, the ability of EU members to attract inward FDI flows is dependent on their techno-scientific capabilities (Dent, 1997). On the other hand, "some work by Hubert and Pain in 2000 showed that a 1 per cent rise in the output of foreign firms in a particular industry will rise technical progress by 0.53 per cent in domestic firm in that industry" (Sloman et al, 2010:511).

Baldwin suggests that,"allocation effects are 'one-off' in the sense that a single policy change leads to a single reallocation of resources" (Baldwin and Wyplosz, 2009:212). At the same time, dynamic effects operate in a way that is fundamentally different from static allocation effects – they are based on the changeable rate at which new factors of production – mainly capital – are accumulated (Baldwin and Wyplosz, 2009). What is more, it can be illustrated that gains from improvement of technical efficiency after the reduction of protection are many times larger than the net benefits from trade creation over trade diversion (Pelkmans, 2001). Consequently, it leads to a cost reduction per unit of production, so greater specialization and increased competition affect the entire output, not just a part that is traded (El-Agraa, 2007). Furthermore, the dynamic effects are ongoing, which continue being enjoyed several years after the integration process is complete (El-Agraa, 2007). Therefore, technological improvements can increase the marginal productivity of capital continuously since they are not subjects of diminishing returns (Baldwin and Wyplosz, 2009).

All things considered, Cecchini Report underestimated economic gains from the Single European Market by taking into account mainly static effects of integration, whereas Baldwin suggested that the medium-run growth effect could roughly double the Cecchini estimates (Baldwin, 1989). As Johnson (1995 cited Mercado et al 2001:116) stated, "the single market is not a static concept but an ongoing process". As a result, of the European integration previously regulated and protected national markets have become more international in character, where more efficient companies are able to exploit the economies of scale and compete more effectively in world markets, selling products to countries outside the EU (Atkinson and Miller, 1998). However, in order to maintain competitiveness especially compared to the United States, the European Union has to put more emphasis on the investment in new technology (Piggott and Cook, 2006). The technology is crucial to all strategies that aim to improve corporate or economic performance (Dent, 1997). Finally, "the technological capability of firms, countries and regions is determined by their ability to generate, absorb and adapt to new technologies and innovatory processes" (Dent, 1997:305).

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