FEA Working Paper No. 2000-5

A Proposed Framework of Analysis for the Single Economic Environment: Prerequisites, impact and analysis in the context of the European integration

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August 2000

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Abstract

An examination of the process of European economic integration points to the single market as the 'nucleus' of the European Community. The central objective of the Treaty establishing the Community is the integration of the economies of member states within an economy that is greater than the sum of its parts. The purpose is to create conditions for greater economic efficiency, so that more goods and services can be produced at lower prices, and this is achieved principally through increased productivity and competition; hence the EC Treaty's repeated references to 'an open market economy with free competition' as the basis for Community policies.

Consequently, the achievements as well as setbacks faced by the EU while striving towards their ultimate objective has always been the subject of study and analysis, especially by those countries that will to establish and develop economic relationships with this ‘economic entity’. Moreover, it is the subject of research to apply the European experience in regional integration to other regional groupings that are at the initial stage of some form of integration.

This paper explores the rationale for such integration and examines the barriers that could stand in the way of the Union deriving full benefits from the integration process.

The study employs a mathematical model that captures the fundamental relationships between key macroeconomic variables in the European Union. The equations suggest that, while success has been achieved in the integration of the goods and services markets, labour supply market segmentation could result in disequilibrating mismatches with labour demand. This arises from the product-demand-driven labour employment function within an integrated system, while supply of labour remains disaggregated owing to migratory restrictions, political, technical, linguistic and geographical barriers.

While integration has been relatively successful in several frontiers, such as within the product market, a labour ‘bottle-neck’ exists as an imperfection that denies the EU the capacity to tap the full potential of its rich labour resources.

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1. Introduction

The success of the European Union can help pave the way for addressing the questions surrounding regional integration in Asia and other parts of the world. In this context, lessons can be learned from the European Integration process that is premised on the concept of a community integrated by common ideas shared by nation states. The fundamental driving force behind the European Community is to strengthen the economy through competition, cooperation and solidarity. Through economic integration, Europe has witnessed rapid expansion of investment by multinationals, speedy technological progress augmented by inter-company transfers and transactions creating a stronger foundation for growth and development.

This paper highlights and analyses the main prerequisites and conditions which propelled the idea of implementing the Single Market program in Europe. It also attempts to explore the measures that have been undertaken and their necessity in the accomplishment of a Single European market.

Therefore, objectives of the current analysis stem from the arguments and issues discussed and consequently to give relevant conclusions. Pros and cons of the Single Market for the European Union have been assessed via employing the mathematical modeling approach.

2. Is Economic Integration Desirable?

Many empirical studies show that economic integration permits the exploitation of economies of scale once it has been created amidst the countries where each has relative comparative advantage. Producers have lower costs per unit of output if they are serving a large Community market, rather than individual national markets. A large market also has more scope for competition between producers; for example, France, Germany and Italy each have one or two dominant car manufacturers - but the Community market as a whole is served by numerous competing manufacturers (Goodman, 1990).

The legal foundation of the Community single market is the 'four freedoms' - free movement of goods, services, labour and capital - set out in the EC Treaty. In an effort to realize these freedoms, and to enable market forces to operate freely, the

Community has developed a framework of rules. These cover (for example) specifications for products and services, public procurement regulations and minimum rates of indirect tax.

In a single market consumers are free to make purchases across national frontiers, and (unless specific prohibitions apply) companies can exercise an 'arbitrage' function, buying goods in one member-state for resale in another. These transactions, known as 'parallel imports', are potentially important in combating segmentation of the single market between countries. In general, restrictions on sales across national frontiers are contrary to the Community's rules on competition, although sellers sometimes argue that market segmentation is unavoidable, and justified, as long as the single market has multiple currencies with exchange rates that are liable to fluctuate.

Integration of national economies into a single market involves adjustments, which can be painful. This is because economic restructuring in response to increased competition can lead to unemployment. As part of the single market 'package', the Community has provided financial resources to ease adjustment, and to improve the competitive position of economically disadvantaged regions (De Giustino, 1996).

In many respects the creation of a common market was from the beginning a prime objective of the European Community, and it was seen as the key to increased prosperity. The original EEC Treaty in 1957 specified a transitional period of between 12 and 15 years, during which the common market was to be progressively established. However, the economic climate of the 1970s - the recession following the oil shocks of 1973 and 1978, and the high rates of inflation and unemployment - led the member states to focus on domestic economic problems rather than on market liberalization (De Giustino, 1996).

However, improvement of the economic situation in the 1980s revitalized the process of economic integration, which was beginning to be seen as the means for sustaining the economic recovery so far achieved and for fostering further growth. In 1985 a new Commission, under the leadership of Jacques Delors, took office and began to devise a program necessary for the achievement of the Single Market. A White Paper was produced, stating that unification of the market will be completed in 1992, and identifying 282 policy measures which would be required to achieve this. It happened thirty five years after the Treaty of Rome was signed. For the creation of the single market two elements are necessary: (a) elimination of barriers to trade of commodities, services and factors of production; and (b) a common rules system of competition (Swann, 1993). The following discussion reviews the progress made towards the single market before enactment of the Single European Act.

3. What is behind the Single Market?

By 1972, at the end of the transitional period, the Community had enjoyed mixed success. Tariff barriers were fully eliminated between member states in 1968, but non-tariff barriers persisted and proliferated. One observer in the mid-1980s characterized modern trade restrictions as 'an arsenal of measures which are semi-concealed in the most diverse rules and regulations'. This 'arsenal' included technical and trading standards, customs formalities, purchasing requirements, sale and advertising restrictions, financial controls and subsidies, all of which were used to discriminate against imports, or to support exports (Swann, 1995). As it is know from the theory trade restrictions can to a certain extent be alleviated by demand-side measures, so as to allow purchasers to buy freely from suppliers in other countries. Actually this freedom is ensured in the European Community by the principle of mutual recognition (which is examined below), under which products (and services) lawfully marketed in one Community country may normally be sold elsewhere in the Community.

Nevertheless, supply-side action was also required to prevent national authorities from restricting the market access of imports from other member states. Discrimination against imports is in practice difficult to combat, since it is often disguised by technical complexities (such as technical and safety standards, quality controls, health and environmental standards, and standards of consumer protection), and the discrimination is indirect. The governments that implemented these measures usually claim that they were necessary to protect the well-being and quality of life of the citizens. In these circumstances the Community had to act, to ensure that legitimate protection was maintained, while eliminating the element of trade restriction. This objective was achieved through harmonization.

4. Harmonization and Mutual Recognition for the Sake of Prosperity

Mutual recognition and harmonization measures are designed essentially to provide a 'level playing field' for competition across the single market (Artis and Lee, 1994). It should be emphasized that the purpose is to eliminate artificial restrictions on competition, so those regions of the Community may exploit to the full their natural advantages. Limits on competitiveness arising from different resource endowments would remain, and indeed would be intensified; for example, cultivation of grapevines in Northern Europe will remain exposed to competition from southern regions which enjoy the advantage of a warmer climate and hence lower costs.

Most of the legal framework for the single market was in place by the end of 1992. The response in terms of increasing competitiveness and economic restructuring will unfold in the years to come. It has been thought that the development of the single market would lead to an acceleration of economic growth, and hence to increased prosperity for the Community's citizens.

The European Union can be a single market only if there is freedom to sell goods and services between member states. On the other hand, a totally free and unregulated market system is an impossibility: the provision of goods and services is always subject to regulations, which serve many purposes - for example, to achieve technical standardization, to safeguard property rights, and to protect consumers and the environment. So the Community single market is achieved not by eliminating regulation, but rather by preventing its misuse. The problem then is to ensure that member states pursue legitimate objectives in a way that does not obstruct or distort trade within the Community. The solution in many instances has been to require that member states recognize each other's regulations - so for example a product accepted as meeting safety standards in one country is deemed to meet the required standards in other member states. This rule is known as the principle of mutual recognition, and also as the country of origin principle, because member states must recognize the validity of the product standards of the country in which the product originated. Under this system it is clearly not possible for member state to use safety regulations to restrict imports from elsewhere in the EC, because imported goods need only conform to the requirements of their country of origin. Such mutual recognition does of course imply a need for mutual trust; and where necessary this can be reinforced by the adoption of Community-wide standards.

The basis for the doctrine of mutual recognition is Article 30 EC, which provides that 'quantitative restrictions on imports and all measures having equivalent effect shall... be prohibited between member states'. This prohibition was given very broad scope by the Court of Justice in the 1974 Dassonville judgment, which states that 'all trading rules enacted by member states which are capable of hindering directly or indirectly, actually or potentially, inter community trade are to be considered as measures having an effect equivalent to quantitative restrictions’.

There is consequently a general presumption that a product lawfully sold in one member state may be marketed throughout the Community. This was affirmed by the Court of Justice in the Cassis de Dijon judgment (Case 120/78), which held that Germany could not prohibit the sake of the French liqueur merely because the alcoholic strength was below the minimum specified for German liqueurs. Since mutual recognition derives directly from the Treaty, its effect does not depend on Community or national legislation. It may be invoked in legal cases brought by private parties, even if the Commission takes no action (although as 'guardian' of the Treaties the Commission clearly has an interest in ensuring that the principle is respected) (Barrass and Madhavan, 1996).

Mutual recognition, as expressed in the Cassis de Dijon doctrine, can be effective in countering the more blatant forms of non-tariff barrier within the Community; but member states legitimately restrict imports and exports if this is necessary to implement national policies with respect to certain specified objectives. The EC Treaty (Article 36) defines these objectives as: public morality, policy or security; protection of human, animal or plant health; safeguarding of cultural heritage; and protection of industrial and or commercial property.

Where mutual recognition or deregulation is not sufficient, action at Community level is necessary to permit freedom of movement. This may take the form of legislation, or objectives may be achievable by mutual agreement between the parties involved. In general the process initially entails a harmonization of national provisions. Reconciliation of systems that are often very different is naturally not without problems, and the development of the necessary measures frequently entails substantial expert studies and wide-ranging consultations.

When harmonization is achieved through Community legislation, the Community acquires a role in - and sometimes exclusive responsibility for - development of policies in the area concerned. This is usually because the necessary policy instruments can operate only at Community level; for example, the single market has acquired the harmonization of environmental and safety standards for vehicles, and any future modifications to these standards will be brought about by revision of the relevant Community legislation. For this reason we can say that the single market has been a powerful force in extending the policy responsibilities of the Community.

5. Act to Push the Idea Ahead

Development of the single market was greatly facilitated by the Single European Act (SEA), which came into force in 1987. This Act made a number of corresponding amendments to the EEC Treaty. The Community's legislative processes were accelerated with the extension of qualified majority voting in the Council. Article 100a of the revised Treaty extended the Co-operation Procedure (with qualified majority voting in the Council) to legislation necessary for the establishment and functioning of the internal market, so that one or two countries could not block legislative Proposals which enjoy substantial support among member states and in the European Parliament. What is important in SEA is, that it set a target date - the end of 1992 - for adoption of measures necessary to establish a single market. The single internal market is defined as 'an area without internal frontiers in which free movement of goods, persons, services and capital is ensured in accordance with the provisions of the Treaty' (Article 7a EC). This deadline was generally very successful in ensuring that the Council enacted the legislation needed to operate the single market.

Most of the Community's single market legislation originated with the program set out in the 1985 White Paper on the internal market (European Commission), which constituted a framework for legislative Proposals necessary for completion of the internal market. This was designed to give a new impetus for the achievement of a common market - the objective to which the Community had ostensibly been committed since 1957 (Coombes, 1994).

6. Lifting the Barriers

Three types of barrier were identified, i.e. physical, technical and fiscal. The removal of these barriers was preconditioned for achievement of a single market. To find out how these bars the integration process and the way towards free movement of goods, services and factors of production, we will have to briefly examine each of them and see what measures have been taken for their elimination.

6.1. Physical Barriers

As the White Paper observed, 'the customs posts, the immigration controls, the passports, the occasional search of personal baggage... to the ordinary citizen are the most obvious manifestation of the continued division of the Community'. Frontier controls also imposed 'an unnecessary burden on industry, flowing from the delays, formalities... and handling charges ... adding costs and damaging competitiveness' (European Commission, 1985:9).

It can be stipulated, before 1992, frontier controls between member states essentially served two purposes: tax collection, and a 'policing' function to enforce regulations controlling movements of people, goods and money. The specific functions of customs controls included:

- application of national import restrictions;
- enforcement of national import quotas for products originating in non-EC countries;
- collection (and reimbursement) of tax and agricultural levies;
- checking of road transport licenses and of compliance with regulations governing transport of dangerous substances;
- collection of trade statistics.

Customs controls were discontinued at the end of 1992, in accordance with the deadline for achievement of 'an area without internal frontiers' (Article 7a EC). Customs controls are no longer enforced at frontiers, and their original objectives are now achieved by other means. The Commission strongly emphasized the importance of the complete removal (rather than merely lightening or simplification) of physical controls at frontiers. This was to some extent a matter of symbolism: the removal of frontier posts was 'the clearest sign of the integration of the Community into a single market.[6] More fundamentally, it was seen as a guarantee of the integrity of the single market: the White Paper noted that 'the maintenance of any frontier controls would perpetuate the costs and disadvantages of a divided market' (European Commission 1985: 9).

The following tasks had been put forward to reach the relevant objectives:

1. To simplify administrative checks and move them away from borders. This will have the additional effect of rendering national quota restrictions inoperable.
2. To eliminate all internal frontiers and controls by 1992, for people and capital as well as for goods and services. An interesting by-product of this is likely to be a reduction in the accuracy of statistics on trade flows, the balance of payments of nation-states and national income.
3. To phase out Monetary Compensation Amounts and introduce mutually recognized health certificates for agricultural trade.
4. To develop a common transport policy. This would end transport 'quotas', introduce agreed safety standards to eliminate frontier checks, and allow hailers to operate freely throughout the Community.

As a result all the responsibility has been shifted to the Community level and it means that the primary inspection is made where the goods originate, in order to certify that it complies with a Community standard. This kind of certification is then recognized in all member states.

6.2. Technical Barriers

Achievement of a single market was heavily dependent on the reconciliation of differing national regulations, standards and specifications. One consequence of these differences was segmentation of markets, which tended to deprive consumers of the benefits of competition between producers and to increase the costs of manufacturers and suppliers of services. Technical barriers also impeded mobility of labour and capital: workers found that qualifications obtained in their own country were not recognized elsewhere, while the movement of capital was constrained by national regulations governing financial markets and foreign exchange transactions. Under technical barriers we assume, legislation, standardization and testing requirements.

It was necessary to eliminate these barriers as they impeded the overall integration process in the EC. The solution in such a situation was in using the instruments of harmonization. Typically, this involved the formulation of standards which would be valid throughout the Community. This procedure involved acceptance of an agreed Community standard rather than standards adopted independently by member states. To this effect the Commission as a main body in proposing the Community law offered measures for accelerating the process of single market. Specifically, the Commission has the following aims in respect of this:

1. To adopt Community-wide standards for health and safety, for food, pharmaceuticals and electrical goods, for example.
2. To create a common legal framework for cross-border activities by enterprises to encourage joint projects (the European economic interest grouping), and reform intellectual and industrial property law by creating a Community framework for patents, trademarks and copyright.
3. To create a common market for services by adopting common rules and making supervision as a task of the government of the country where the service company is situated. Basically, the following are envisaged:
    (a) the deregulation of insurance, banking and other financial services;
    (b) the creation of an integrated European securities market, with liberalized and linked stock exchanges;
    (c) the deregulation of all modes of transport, notably air travel;
    (d) the development of common standards for 'new technologies' to facilitate the growth of this sector on a Community level; and
    (e) the creation of a 'European-wide audiovisual area' with common standards of transmission and reception of television and radio programs, including satellite broadcasts.
4. To remove exchange controls.
5. To establish the equivalence of qualifications, i.e. a situation whereby member states recognize diplomas, degrees, and other qualification awarded in other Community countries, thus promoting the free movement of labour (European Commission, 1997).

Omission of the provision of equivalent labour market regulations leads us to assume that there are still critical barriers to labour mobility, which results from divergent regulations in member countries. This is crucial where demand of one side is supposed to be linked, by the idea of integration, to the supply of other part.

6.3. Fiscal Barriers

As a main source of a state budget, all Community member states levy excise taxes and value added taxes (VAT). Excises are charged on the sales of specific products, while VAT is a general tax on the sale of goods and services. The adoption and implementation of VAT is governed by a series of Directives dating back to 1967, pursuant to Article 99 EC, which provides for the approximation of indirect taxes to the extent necessary for the functioning of the single market.

According to the theory VAT is a tax levied on the sale of goods and services. Where transactions are confined to a single country, sellers (other than those who are exempt) pay the tax, but are able to reclaim VAT paid to their own suppliers. However, in the case of cross-border transactions the supplier reclaims any VAT paid in the exporting country, and the purchaser must pay the tax in the importing country. This is known as the 'destination principle' because tax liability is incurred only in the country of destination.

Another type of tax in international trade is excise. The main excise taxes are those levied on alcoholic beverages, tobacco and mineral oils. Commercial trade in these products is taxed on the destination principle: exports are exempt from tax in the exporting country, and subject to the full excise tax of the importing country when sold to the final consumer. Products obtained for personal use (and not for resale) are taxed in the country of purchase.

The problem which arose in creating the single market was the variation in rates of taxes in member states (Artis and Lee, 1994). In 1993, following the removal of frontier controls, a 'transitional regime' was introduced for VAT, where the destination principle is retained, so that tax continues to be refunded on exports. The Commission originally pursued the approximation of VAT and excise rates so that they were sufficiently close to avoid distortions of trade, diversions of trade and effects on competition. Some of these arrangements could occur instantly while others would be delayed. Moreover, completion of the internal market was to be a gradual process. In spite of various obstacles the idea of a single market has set in train a process of economic restructuring, as producers and consumers react to new opportunities. On balance, substantial long-term economic gains can be anticipated, from acceleration in economic growth and the dissemination of new technologies. The removal of barriers between member states also set in motion a process of farreaching economic change within the Community. A weakening of segmentation between national markets stimulates the process of integration, and thereby leads to a restructuring of economic activity. In a large single market, the consumer benefits from increased competition between sellers, and from realization of economies of scale through the locational concentration of productive activities. Some producers will benefit from increased competitiveness while others will suffer. It is because of fierce requirements of the single market where competitive advantage and skills of feeling the market rules will enable to stay in. Thus among regions of the Community, those with uncompetitive industries would undergo the great restructuring, but would also have the most to gain in the longer term. The less prosperous member states in particular require Community assistance to compete in the single market, and are receiving aid from structural funds and cohesion funds, which widely used by the Community. By the same token, countries that are at present disadvantaged by poor infrastructure and uncompetitive industries have the most to gain when these obstacles are removed.

7. Model

The economic environment in the EU as discussed earlier is given in a mathematical framework captured in 84 equations below. The equations fall into 7 blocks, which represent prices, money, aggregate demand, the external block and domestic markets, labour and the fiscal sector.

A distinguishing feature of this model is the assumption of an integrated system for the production of goods and consequently the demand for labour. This model assumes, on the other hand, that supply of labour from the member countries are subject to mobility constraints. The production is intimately linked to demand. The demand-determined market for goods triggers the signals for producer-reaction, which in turn sets the level of goods to be produced. The market is an aggregated one, which is reasonable in lieu of fact that prices for goods and services are the same across borders. Any price difference would be abolished via arbitrage. Hence the perceived demand for goods is the combined demand of multiple economies. Production levels to meet these requirements will determine the level of labour input.

In the model, demand for export, as well as domestic demand, are derived endogenously. This then sets levels of production, which must be generated over time. Assuming a Cobb Douglas production function and given an exogenous capital stock, the need for labour can be determined. The labour supply however, is a function of birth and mortality rates of the individual countries. Although some level of integration is attempted, the existing situation suggests that labour mobility is restrained. Due to this, the labour market is segregated in terms of political, geographical, linguistic, cultural and technical boundaries.

One of our key agreements is the fact that when economic boundaries collapse, and the goods market is aggregated, an impediment to the achievement of the EU's full potential in the production arena would be the stilted mobility of one critical input, which is labour.

It may be argued that another factor of production, which is capital, moves within a relatively borderless European Union. However, production is essentially a combination of multiple inputs, including labour. There must be recognition of the fact that the labour market imperfections could comprise a bottleneck in the economic progress of the EU.

8. Price Block

The model assumes integrated markets for goods and services. Capital moves within a borderless market but labour supply movements are restricted. Some degree of wage disparity also exists between the 15 economies.

(Note that the symbols used are defined in the brackets. Definitions are not repeated. Number subscripts refer to the individual countries given as 1….15).

(1) $Pg_1 = Pg_2 = \; .. \; Pg_{15} = Pg \rightarrow$ goods market (prices given by the CPI)

(2) $P_{S1} = P_{s2} = \ldots P_{S15} = P_S \rightarrow$ services market (prices as given by the SPI)

(3) $P_{L1} = f(CPI_1, LS_1)$ (nominal wages, CPI and labour supply)

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(17) $PL_{15} = f(CPI_{15}, LS_{15})$

Since the labour supply is seen to determine the money wage, nominal wages appear on the left-hand side. Apart from the labour supply, the consumer price index is also regarded as another independent variable.

(18) $Pk_1 = Pk_2 = \ldots\ Pk_{15} = P_\kappa$ $\rightarrow$ Capital market (interest rate)

Our earlier arguments assume that the goods and service markets have relatively easy cross-border access, which is reflected in the equations. Similarly, physical barriers, as discussed above, do not restrict capital but impose constraints on labour supply movements.

9. Money Block

One money exchange rate is assumed.

Then,

(19) $e_1 = e_2 = \ldots\ e_{15} = e$ = Euro currency with exchange rate per US dollar

and

(20) $Md = f(-i/r, + EGDP)$ Money demand (money demand, interest rate, European GDP)

Since the interest rate is assumed exogenous in the integrated single market, it may be employed as a policy tool by the European Central Bank. This leads us to,

(21) $i/r_1 = i/r_2 = \ldots = i/r_{15} = i/r$ (European interest rate)

Also, as the money market equilibrium, we have

(22) $Md = Ms = M$ (money market)

10. Aggregate Demand

In this case consumption is positively correlated with European GDP, population and negatively correlated to prices of goods and services.

(23) $C = f\,(+EGDP,\ +\ Pop,\ -P_g,\ -P_s)$

Investment is negatively dependent on the interest rate, positively dependent on lagged investment and positively correlated with the total production of goods, that is

(24) $I = f(-i/r,\ Qg,\ +\ I_{t-1})$ (real investment, gross production for the European Union, lagged investment)

11. External Block

Export of goods from the European single market environment as a whole is correlated positively with world GDP, the exchange rate and is negatively correlated with the ratio of prices for goods in the European market to prices for goods in the world market, which is,

(25) $Exg = f\,(+WGDP,\ +e,\ -Pg/Pg_w)$ (European exports, real exchange rate, ratio of European CPI to the World CPI)

Total exports $Exg_1 + Exg_2 + \ldots. + Ex_{G15} = \ Exg$

Also,

$Exs \ = \ f(+WGDP,\ -Ps/P_{sw})$ (export of services real, ratio of European service price index to World service price index)

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(27) $Img = f\,(+EGDP,\ -\ P_{gw},\ \ -e)$

Imports of goods to European single market is assumed to be positively correlated with European GDP and negatively dependent on world price of goods, and the exchange rate:

(28) $Im_s = f\,(+EGDP, -P_{sw}, -e)$

(29) $Img = Img_1 + Img_2 + \ldots + Img_{15}$ Total imports of good, real

(30) $Ims = Ims_1 + Ims_2 + \ldots + Ims_{15}$ Total import of services, real

12. Domestic Market

Domestic demand for goods is a positive function of European GDP and negatively correlated to the ratio of domestic prices of goods to world prices of goods, which is,

(31) $Dg = f\,(+EGDP, -Pg/Pg_w)$ (domestic demand for goods)

and the domestic demand for services is

(32) $Ds = f\,(+EGDA, -Ps/Ps_w)$ (domestic demand for services)

12.1. Total Production

The total production is the sum of domestic sales of goods and export, as in,

(33) $Qg = Dg + Eg.$ (total production of goods)

Dg differs from consumption in that the former refers to domestically produced goods, sold in the domestic market, whereas the letter, which is consumption, refers to total household consumption inclusive of imports.

Output of services is not evaluated here because data on the domestic production of services is not easily available for all European Union member countries.

13. Labour Market

Analysis of the labour market will be based on a Cobb-Douglas production function, whereby production of goods is demand determined and capital is exogenous. Demand for labour will be derived from the output of goods divided by capital, using appropriate perimeters.

In logarithmic linear form, the logarithmic of labour is analyzed as the difference between the logarithm of production multiplied by an appropriate coefficient efficient and the logarithm of capital multiplied by the ratio of exponents.

Production is determined in the European Union Single market, as the sum of its local and external components and derived in the previous section.

(34) $Q_g = L^{\alpha} K^{\beta}$;

(35) $L_d^{\alpha} = Q_g / K^{\beta}$

(36) $\alpha \ln Ld = \ln Qg - \beta \ln K$;

(37) $\ln Ld = 1/\alpha \ln Qg - \beta/\alpha \ln K$

Gross European production,
labour demand,
real capital formation

(38) $U = Ls - Ld$ (unemployment)

(39) $Ls = Ls_1 + ... + Ls_{15}$ (total labour supply)

Technology is partly embodied in manpower because of the skill factor. The technical barriers, referred to in an earlier segment, are translated to mean the segmentation of labour. This is seen in an exogenous labour supply pool, which is not necessarily in equilibrium with an endogenous demand for labour. A distinct argument of the model lies in the segmentation of the labour market. Labour supply that does not match the demand for labour triggers disequilibrium in the overall labour market, which consequently spreads out to the goods and services markets. Thus an important implication would be the possible contagion effect on a previously equilibrated markets mainly via the internal labour regulations and relevant policies of member states.

14. Fiscal Policy

(40) $G_1 = f(i/r, G_1(-1), DGDP)$ (Government expenditure, lagged Government expenditure, change in GDP).

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(54) $G_{15} = f(i/r_{15}, G_{15}(-1), DGDP_{15})$

(55) $T_1 = f(GDP_1, E_{x1})$ (taxes)

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(69) $T_{15} = f(GDP_{15}, Ex_{15})$

(70) $T_1 - G_1 = S_1$ (Surplus)

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(84) $T_{15} - G_{15} = S_{15}$

The equations given represent the ideas embodied in the theoretical part of the paper. Although, fiscal barriers are supposed to be gradually abolished for the efficiency of the single market, they still remain divergent in the individual states. Which consequently, leads us to the assumption that each country, despite their willingness to launch single market, has mechanisms of collecting the taxes which are distinct. This in turn determines the government expenditure and following that, surpluses and deficits of the respective countries are defined separately.

15. Conclusion

The economic benefits of the single market for the Community, which serve as driving force in economic integration can be concluded theoretically in a way that resources would be made more productive, with increases in consumption and investment, mainly through the following effects:

- Cost reductions resulting from an exploitation of the economies of scale;

- Increased competition, leading to enhanced economic efficiency;
- Cost reductions arising from industrial restructuring to exploit the comparative advantages of member states;
- A flow of innovations, new processes and products, stimulated by the single market.

However, it is important to underline that, although an accelerated economic growth in the single market is due mainly to a realization of economies of scale, with liberalization and deregulation of trade within the Community, there are still some hindrances which hamper the full realization of single market potential.

The creation of the single market was regarded as the source that boosts the effectiveness of the supply side of the economy. This improvement in the supply-side is supposed to lead to an increase in aggregate demand via an increase in real purchasing power, increase in investment, and improvement in competitiveness of the EC relative to rest of the world.

The paper also focuses on labour market fragmentation as one possible barrier towards the complete integration of the EU. Whilst all member countries have gained mileage (albeit in different degrees) from the integration process, the formation of the labour demand is not necessarily consistent with the manner in which labour supply evolves.

Hindrances to labour mobility imply that the supply in individual countries will depend on internal factors (such as wages) which are rarely the same across borders.

The arguments expressed suggest that supply of labour becomes “internalized” with respect to member economies while labour demand stems from an effectively integrated goods market and is thus “externalized” with respect to individual countries.

On the other hand, the single markets exist for goods and services, their demand arises from the combined needs of an integrated economy. The trigger effect, which emanates from the goods/services markets, determines the amount of labour input in order to support the productive activity. Consequently, disequilibration possibly in the labour market could lead to unemployment in one member country with, ironically, labour shortage in yet another, all occurring within the same EU.

Although, an integrated market is undoubtedly advantageous to its members, inconsistencies in the supply-side will prevent a full exploitation of the single market system.

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