A SUPPLY-SIDE STRATEGY FOR PRODUCTIVITY, COMPETITIVENESS AND CONVERGENCE FOR THE EU AND THE CEECS

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Introduction

The issues of competitiveness, employment and convergence are at the forefront of economic debate. In Europe, particularly, the economic integration of the European Union (EU), the convergence between the European South and North, and between Europe and the Central and Eastern European Countries (CEECs), is arguably the single most important challenge it faces.

Despite the unquestionable potential benefits from integration for both the CEECs and Europe, integration may not come without cost. A problem facing Europe today concerns convergence between the European north and south. One can hardly escape the question of whether the integration of the CEECs - including the enlargement of the EU to include these countries - will facilitate or hinder the process of convergence. A related question is whether and to what extent government policy towards the supply-side of the economy can influence the process of integration and enlargement, preferably in a way which simultaneously achieves convergence between the CEECs and the existing EU, but also importantly within the existing members of the EU.

Given the at least theoretical possibility that integration between the CEECs and the EU may hinder convergence between the current European north and south, it becomes crucial to address the issue of devising and implementing supply-side strategies (SSSs) at the European, member state, and CEECs level which achieve improvements which render a particular member state better off, without, however, reducing the welfare of other member states and, preferably, which even close the 'gap', i.e lead to convergence.

In view of recent developments in the theory and practice of SSS, we also address the question of whether *institution building* can be (part of) such an approach to SSS. The importance of institutions and firm clusters is widely recognised in the economic literature, and it is important to enquire as to whether (and how) these may contribute to the type of SSS required for convergence.

There are four major strands of economic literature relating to our concerns: the theory of international trade and (regional) convergence; the theory of foreign direct investment, transnational corporations and competitive bidding; the theory of SSS, the theory of firms clusters and that of institutions, institutional change and economic development.

In brief, we suggest that integration and inward investment need not lead automatically to convergence. Supply-side measures may assist, but they need not benefit all parties involved (groups within and/or between countries) and also their short term effects may differ from the medium and long term effects.

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This raises the need for a *criterion* which, if satisfied, leads to first best outcomes (it improves the welfare of all in the short and long run) and also leads to convergence. We suggest *productivity* to be the best approximation we have to such a criterion. We then move on to analyse the nature of supply-side strategy which can lead to global productivity, competitiveness and convergence, paying attention to the role of clusters, institutions and institution building.

In Section II we critically assess existing literature and debate on international trade, foreign direct investment (FDI) by TNCs, 'competitive bidding' and convergence. Section III provides a model of competitiveness and (the determinants of) productivity. Section IV, addresses the issue of supply-side strategy. Section V discusses the role of firm clusters and institution building within this framework. Summary and concluding remarks follow in Section VI.

International Trade, Foreign Direct Investment and Convergence

Going back to Ricardo's 'comparative advantage theory', it was widely believed until recently that trade between countries can be beneficial to all parties involved, provided they specialised in products where they faced the least comparative disadvantage. Few exceptions for protectionism were allowed, notably in cases of 'infant industries'.

In more recent years the 'static' comparative advantage theory has been attacked on various grounds. First, the economic development of Japan has been based on *building* competitive advantages (dynamic comparative advantage theory) rather than relying on existing ones. This raised questions concerning the appropriate policies of both the EU (notably the 'south' of the EU) and the CEECs. Importantly it raised concerns about the implications of such potential policies for all parties involved. See Pitelis (1994).

A second attack on the 'Ricardian perspective' has come from the 'new international trade theory'. The traditional theory of international trade is based on the assumption of perfectly competitive markets. Under this assumption, markets can allocate resources efficiently without state intervention. However, more recent developments in the theory of international trade explicitly recognise the existence of imperfectly competitive markets and increasing returns. Under these conditions, it is possible that countries with high-return industries can do better than others, raising the possibility for strategic trade policies by governments. Such policies can take the form of subsidies, tax reliefs and, more generally, protectionism. In the face of imperfect markets, government action in support of some firms - the activities of which, for example, generate *positive externalities* (e.g. research and development useful to other firms, customers, suppliers, etc.) - can generate *systemic benefits* which can justify such intervention. On the other hand, support by governments for individual firms could alter the expected pay-offs in respect of undertaking an action for these firms, for example, by increasing their expected profits. This can assist domestic firms to compete with rivals on better terms and (thus) possibly deter foreign firms from competing. The result can be higher market shares and profits for domestic firms.

As Krugman (1986: 13-14), a leading proponent of the new ideas, points out, "once we begin to believe that substantial amount of rents are really out there, it becomes possible, at least in principle, for trade policy to be used as a way to secure more rent for a country ... Common sense and mathematical theorising confirm that subsidies or protection can in fact be used to encourage external-economy-producing activities". He concludes that "the extreme pro-free-trade position ... has become untenable" (p 15). However, Krugman is cautious about actual policy, given the difficulties associated with identifying strategic sectors and the possibility of government failures and of retaliation by other governments (see, in particular, Krugman, 1983; 1994). An implication may be, as Hazard (1989)

observes, the pursuit of a rule of conditional co-operative trade initiatives, which will discourage rival countries from free-riding against a committed free-trader.

The new theory of international trade has further implications for the issue of convergence and the potential cost of enlargement. It is widely recognised that imperfect competition can result in adverse effects, namely an uneven distribution of the benefits from trade, including the possibility of some countries being net losers (see Krugman, 1989). This uneven distribution of benefits can come about through the existence of excess returns in imperfectly competitive industries. Countries with high-return industries can benefit at the expense of others. Although the possibility of some parties suffering actual losses is small, according to Krugman, the *conflict over the division of benefits* is important. It can lead to *strategic trade policies* (European integration itself conceivably being such a policy against third parties) to secure national advantages in oligopolistic industries. Indeed, all parties concerned could in principle become worse off if they all pursued such policies.

Further problems identified by Krugman include *adjustment costs* and *income distribution* problems, the latter arising, for example, when trade leads to increases in unemployment in some countries. Moreover, Krugman suggests, such problems are likely to be accentuated as a result of enlargement. The original EU member states were very similar, with trade being mainly intra-industry. Such trade is characterised by small adjustment costs. Enlargement has given rise to inter-industry trade, with a more conventional specialisation in labour-intensive, low-technology production, on the one hand, and high-technology, capital- or skill-intensive industries on the other. This is likely to be associated with substantial adjustment costs, and implies the possibility of significant costs in terms of unemployment for some partners.

An important force in the process of integration is foreign direct investment (FDI) by transnational corporations (TNCs). In principle, TNCs can create markets, transfer technology, management skills, entrepreneurship, international networks and culture. TNCs can be a vehicle for industrial restructuring, for privatisation and generally for economic reform and integration. FDI may also have undesired effects: to the home countries, the host countries, but also the firms involved in FDI and/or 'competitors' (including TNCs) in host countries. Perceptions of potential undesired effects can be a hindrance to the process of integration[1].

The theory of FDI and the TNC involves Hymer's (1976) original (PhD) thesis on ownership advantages and conflict reduction as a (*market*) power induced reason for TNCs. Hosts of related oligopolistic interaction theories and 'global reach' theories have developed these ideas, including Vernon's (1966) product life cycle theory and later developments; see Vernon (1979). The internalisation theory has emphasised transaction costs related market failures, notably in intangible

[1] More generally, the issues involved here concern the role of TNCs and FDI in economic development of home and host countries in general and of Europe in particular; related to this is the role of FDI and TNCs on international competitiveness of the EU and/or the CEECs; their impact on subsidiarity and convergence; the role of government policy in achieving its objectives through FDI and TNCs, and the related link between TNCs, nation states and international organisations such as the EU; the benefits of FDI to TNCs and host country enterprises, namely competitive and corporate strategy; and the conditions facilitating compatible SS strategies by countries and business strategies by firms. This is not straightforward. The multiplicity of the actors involved and the complexity of the relationships point to the need for an analysis which makes explicit, firstly, the standpoint one is adopting, namely the home nation, the 'host' nation, the foreign TNC, the local firms; and whether in the short run, or in the long run. Importantly, all these standpoints may be satisfied simultaneously, but they need not be. Most useful, therefore, is to be able to identify conditions, mechanisms and institutions that can favour the first best scenario, enhancing the welfare of all involved. Our aim should therefore be to help Europe, help the CEECs to devise strategies for FDI that lead at the very least to Pareto-efficient welfare improvements. To this end a theoretical analysis-framework highlighting issues and conditions favourable to the success at the desired objective is essential. This is attempted in the next Sections.

assets, such as know-how, managerial skills etc, which can be avoided by internalising (international) markets. See Buckley and Casson (1976), Williamson (1981). Dunning's (eg 2000) eclectic theory or paradigm, most recently recast in terms of Ownership, Location, Internalisation (OLI), points to an integrative framework which views all these factors mentioned as important for the process of FDI. Detailed exposition of these and other theories, including resource-based, distributional and macroeconomic considerations, are discussed by their main proponents in Pitelis and Sugden (2000).

In general, these theories point to efficiency (transaction costs reducing and productivity enhancing) and inefficiency (market power enhancing) aspects of FDI and TNCs.

Looking particularly at the impact of FDI on home countries (our concern here being the EU and the CEECs), the literature is mixed. In their concern with *international competitiveness*, popular authors and management gurus, such as Krugman (1986) and Porter (1990) have assumed a one-to-one correspondence between a country's firms (TNCs) and international competitiveness. Porter has gone as far as proposing outward investment as *the* measure for national competitiveness. However, others, notably Dunning (1992) have questioned this link. In some cases, outward investment has been seen as a factor contributing to 'deindustrialisation' and the 'relative decline' of countries such as Britain. See Coates and Hillard (1986), Cowling and Sugden (1987) and also Pitelis (1991, 1994) for critical surveys[2]. In a carefully argued paper, Dunning (1992) makes a convincing case and provides a critical summary of the literature and arguments for the idea that outward investment need not always be beneficial to home countries. The crucial thing is to identify the conditions for, and types of, investments which enhance welfare.

Similar considerations apply for the case of inward investment. In general, such investment can generate employment, transfer technology and skills, and have beneficial impact on productivity and balance of payments. See e.g. Dicken (1992). Particularly in CEECs, additional benefits can relate to the transfer of entrepreneurship, culture, marketing and strategic management, a vehicle of restructuring and privatisation, increased competitive environment for local firms and, importantly, *all these in a package* (Buckley and Ghauri, 1994; Radice, 1994). All these would point to the essential need for attracting FDI in CEECs. However, Dunning's (1992) careful account also highlights numerous instances where inward investment can harm the 'host' economy. These are particularly evident if one distinguishes between short run and long run effects. While in the short run, for example, it is arguably the case that any FDI particularly in today's CEECs can only be beneficial, in the longer term it may have harmful effects. Such effects, Dunning notes, include the possibility of TNCs competing out of existence a local competitor with higher overall domestic value added per-resourse used. Importantly, FDI may also preclude the consideration of potentially alternative paths to development for CEECs[3].

The problems of potential long term effects from FDI may be accentuated by virtue of the increasing bargaining power of TNCs vis-à-vis states, related in part to their locational flexibility of operations.

[2] Work by Iammarino and Pitelis (2000) on outward investment by Greek firms in CEECs, is a case in point. Should such investments be seen as a sign of competitiveness and relative to whom - CEEC enterprises or advanced countries' TNCs. Is such investment beneficial for Greece? The same questions apply for the case of the EU as a whole.

[3] In concluding his analysis, Dunning observes that

"In answer to the question: will foreign inward and outward investment improve the competitive advantage of host or home countries?, the answer that is too frequently (but justifiably) given by economists is 'it all depends'. The most (but this should not be belittled) an economist can do is first to set out the conditions under which, and the ways in which, domestic or foreign TNCs are likely to benefit national competitiveness (either in an industry or in an economy) in the short and/or long run; and second, to indicate what might be done (and at what cost) to optimise the impact of outward and inward investment (and associated activities, for example, strategic alliances) on that competitiveness" (p 165).

This problem has been noted by authors from different perspectives and traditions, notably Vernon (1971) and Kindleberger (1984). It is arguable that today's relationship between TNCs and states (including the EU) is one of 'competitive bidding', namely countries and regions having to compete in order to attract FDI, by means of offering 'best deals' to TNCs. See ul Haque (1990). In such a game, countries with better overall infrastructure (including the institutional framework) may fare better. 'Strong' states, moreover, could bargain from a better position, a case in point being past threats by MEPs to withdraw support from car manufacturers were they to proceed with transferring production to India and China[4].

To summarise, imperfect competition and strategic trade policies, as well as competitive bidding by states to attract investment by TNCs are all factors which, in principle at least, may operate in ways that hinder convergence within Europe. The effects of these factors could be more pronounced if the EU chose to adopt protectionist policies which insulated 'its' TNCs from outside competition. Such (fortress Europe) policies may tend to create 'sleepy giants' within the EU who will focus their operations on the captive European market. This may create (facilitate or simply not ameliorate) a tendency for deindustrialisation of the Union as a whole. Furthermore, a fortress Europe may tend to increase the incentives for strategic trade policies of European states and also for intra-EU competitive bidding to attract investment by European TNCs. This may result in a deterioration of the position of the relatively worse-off in the Union (who will have a weaker bargaining position), thus hindering the process of convergence.

The question raised now concerns the extent to which, and how, the EU, its member states and the CEECs, can help to avoid such potential problems.

Arguably, the CEECs are not in a good bargaining position. Problems relate to uncertainty, unclear rules of the game, bureaucratic constraints, inadequate infrastructure (physical, human and institutional), non-existent or conflicting laws, delays, problems related to the implementation of reforms and restructuring, including privatisation, work culture, and potential political instability. Furthermore, CEECs do not boast better infrastructure and industrial performance than most middle-level developing countries nor have a central government which 'absorbs' two to three times their GNP. On the other hand, most CEECs are, with few exceptions, better educated, medically cared for and housed than even the most prosperous developing countries. See, eg Dunning (1994).

A big advantage CEECs possess is their huge emerging market. The creation and nurturing of this market is a fundamental incentive for the EU, the TNCs and the CEECs to devise policies which allow for the smooth realisation of this objective. However, the objectives of states, the EU, the CEECs and the TNCs (EU and CEEC) and local enterprises need not coincide. This renders essential the deriving of feasible strategies for the EU and for the CEECs, ideally compatible with corporate strategies, all leading to Pareto-efficient outcomes.

[4] Competitive bidding can take place, and be fierce too, even within a country, a notable case in point being Britain (especially Scotland and (vs) Wales). See *The Economist*, June 8-14, 1996, "Inward Investment Bribing for Britain". This is likely to be true. It is observed today that the key to competitiveness is to produce goods which are better, cheaper and are produced faster and more flexibly. Labour costs considerations lose part of their importance (see for example Best and Forrant, 1996). This may tend to reduce the attractiveness of lower labour costs to TNCs vis-à-vis other factors. As lower labour costs are typically the characteristic of relatively less-developed countries, the emerging new 'rules of the game' may tend to remove a source of competitive advantage from such countries. This, moreover, may tend to reduce their bargaining power vis-à-vis TNCs. Overall, these factors may tend to imply fewer investments by TNCs in such countries and/or more 'bad deals' over such investments.

The state of play on the role of FDI in the integration of the CEECs at the moment can be described as a wealth of theory and a paucity of evidence. Given the significance of the issue at hand, a substantial literature exists on the topic of FDI and integration in general, and also more recently for the CEECs in particular. However, the complex set of problems relating to collection and interpretation (including comparability) of data, has limited the process of empirical investigation if not the very process of FDI and integration itself. This is highlighted by the fact that by the mid-'90s CEECs with a total population of more than 400 million had attracted FDI stocks comparable to those of small European countries such as Ireland, Norway and Austria.

To summarise and conclude, FDI by TNCs need not automatically lead to convergence. If anything, in an era of competitive bidding, the opposite could be true, i.e. cumulative success on the one hand versus cumulative failure on the other. It is critical in this framework to address the issue of the potential role played by the government and (in its interrelationhip to) (the private sector) in preventing this outcome, and instead facilitate policies which could lead to global Pareto efficiency.

Competitiveness, Productivity and Convergence

Despite the long standing and increasing interest in, and the continuous discussions concerning competitiveness, there is no generally accepted definition of it. From the many definitions of competitiveness that have been suggested the best known is probably the one adopted by the OECD. According to the OECD, competitiveness is the degree to which a state can, under free and fair market conditions, produce goods and services which successfully pass the test of international markets while at the same time maintaining and increasing the real incomes of its citizens in the long run. This definition is rather limited but also vague. For example, may a country not be interested in its performance in the absence of fair and free markets? Must we only be interested in the *real* incomes of citizens? Among the many definition to be found in the literature, Porter (1990) suggests the substitution of the notion of national competitiveness with that of firms and/or sectors. Within this framework, he adopts the view that a country is competitive when a concentration of competitive firms and sectors exists on its territory. The criteria with which to assess their competitiveness are, according to Porter, the direct investments abroad made by such firms and/or sectors. An important problem this definition poses is that the competitiveness of firms is not necessarily translated into an improvement of economic welfare within the country itself. A typical, although possibly extreme, case is that of Great Britain. This country is the basis of seven of the ten most successful EU multinationals (Kay, 1993). Despite this fact, its relative position in terms of per capita income has declined over time[5].

The emphasis on real and/or per capita incomes may be a symptom of economic narrow-mindedness. An improvement of (per capita) real income can reflect an increase in the unequal distribution of income. On the other hand, it is recognised by many economists today that some not strictly economic criteria can better reflect the total welfare (of the citizens) of the country. One important such criteria is life expectancy.

In this paper, and on the basis of the above, the definition we adopt is that competitiveness is the improvement of a subjectively defined welfare indicator for a country, over time and/or in relation to other countries. This definition avoids some of the problems of other definitions. However, it does not solve the problem of (how to choose) a generally accepted welfare criterion. A well known problem of Welfare Economics is the difficulty in making interpersonal comparisons of welfare and in finding a way of aggregating individual (or community) welfare functions into a social welfare function. Given

[5] Second in 1950, 7th today among OECD countries, on the basis of *per capita* income. See Kitson and Michie (1996).

that the preferences of people, countries, communities, regions, firms, etc., can differ, it is necessary to refer to some criterion whose improvement tends to imply an increase in the welfare of all, at least in absolute terms. In other words, we need a criterion which can lead to systemic benefits, which leads to a positive- (and not zero- or negative-) sum game. Our suggestion here is that this criterion could be the (total) *productivity* of an economy[6]. To the extent that an improvement in productivity is not achieved solely through an increase in the duration and/or intensity of labour, an improvement in competitiveness tends to improve total economic welfare, through an increase in efficiency. Such an improvement tends to have systemic benefits which can filter out to the whole of the domestic and/or international economy on condition that the country improving its competitiveness is not in a position to increase (and abuse) its monopolistic power as a result of this increase.

The above two conditions are neither trivial nor necessarily probable[7]. They raise potential government competition policy issues to which we shall return later. For the moment it is sufficient to note that, despite its imperfections, this indicator, i.e. productivity, appears to be the best tool we have at our disposal. It is no coincidence that a number of researchers and international organisations, attribute a significant importance to it[8]. Furthermore, it is not by chance that per capita income (which can be considered as the macroeconomic near-equivalent of productivity) is often considered as an indicator of competitiveness.

Despite the recognition of the role of productivity as an important determinant (and/or indicator) of competitiveness, there has been less progress in the analysis of the determinants of productivity[9]. Such an analysis is both useful and necessary as it could lead to the discovery of the subjects and the possible ways and means to influence these factors positively, in order to improve productivity and competitiveness.

There are many factors which could affect productivity, either positively or negatively. Thus one should concentrate on the most important ones and/or those which appear to directly affect productivity and not indirectly, i.e. through other (direct) factors. On the basis of these criteria, we adopt the following as the main determinants of productivity: firstly, human resources; secondly, technology and innovation; thirdly, unit cost economies; fourthly, infrastructure. Furthermore, these factors operate both in a macroeconomic framework and an institutional one. As a result, macroeconomic policy and the institutional framework can also affect productivity. The model of the determinants of productivity is shown diagrammatically in Figure 1.

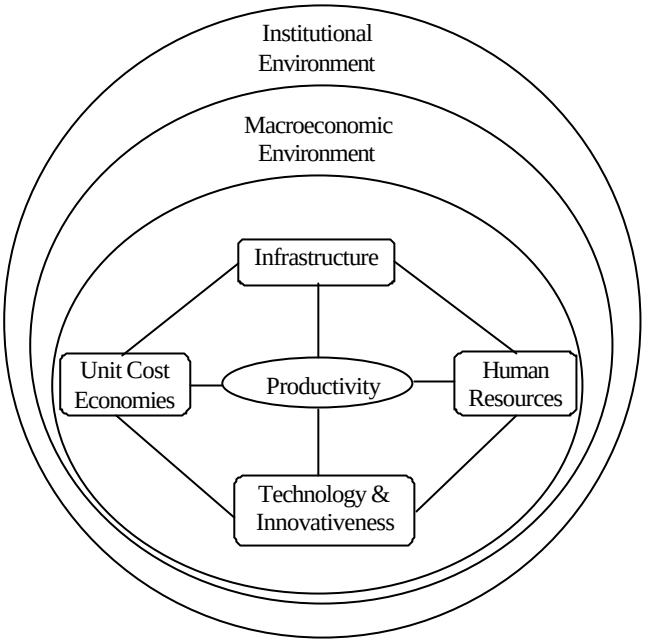
Figure 1. The Productivity - Competitiveness Wheel

[6] The precise definition and measurement of labour productivity and especially of capital productivity is not devoid of problems. However, such problems are beyond the scope of this paper. For discussion and data, see EU (1996) and Nolan and O'Donnell (1995). For comparative data on labour productivity, see EU (1996: Table 1, p. 4, Competitiveness Report).

[7] There is an extensive discussion in economic theory on the relation between efficiency and (monopoly) power in the market. See Pitelis (1994) for an overview.

[8] For example see Krugman (1994), Porter (1990), European Commission (1996).

[9] For discussion see EU (1996a) and EU (1996b).



Human resources, firstly, include all the people involved in the production process: workers, entrepreneurs and administrative staff, mainly managers. The quantity (working hours, intensity) of labour is important, but more so, the quality. One of the most important themes in political economy is the observation that in the production process one does not buy work, but working potential. The inducement to work is a more complex matter which requires, among other things, the existence of incentives and disincentives (carrots and sticks). It follows that the quality and intensity of work does not necessarily affect productivity positively, as, for example, when it reduces incentives and thus the quality of work[10]. Furthermore, workers are not the only human resources. The quantity and quality of entrepreneurs and managers are extremely important determinants of productivity, given their ability to manage and mobilise other employees. Furthermore, they also influence productivity autonomously, through their contribution to the production process. This contribution is universally acknowledged today as being extremely important[11].

An issue related to the coexistence of groups in the production process is the question of their relations - in other words, the problem of industrial relations - and more generally of the 'business climate'. Through incentives, disincentives, strikes, etc, the quality of employment relations can act as a catalyst on productivity[12].

A second important determinant of productivity is technology and innovation. The latter refers to anything new, that is to say, new ideas, products, forms of organisation, administration of human resources, stocks, etc. The role of technology and innovation is one of the most researched topics in economic theory. Both are universally acknowledged as important determinants of productivity (see,

[10] The importance of the human factor is universally acknowledged today as an important determinant of productivity, see Nolan and O'Donnell (1995) and below.

[11] For example, 'the entrepreneur' constitutes the most important figure in the production process in the Schumpeterian and Austrian approach to economics. See for example, Ioannidis (1992) for an overview. The importance of the role of managers was initially emphasised by Penrose (1959), and is almost universally accepted today. According to Penrose, the quality and quantity of managers is the main factor limiting the rate of increase of the size of a firm. See Pitelis (2002) for more.

[12] See the analysis by Nolan and O'Donnell (1995), who also outline a particularly interesting discussion on the role of employment relations in productivity and competitiveness.

for example, European Commission, 1996, for an overview), thus we shall not further discuss this topic here.

A third determinant of productivity are unit cost economies. These are economies of scale, of scope, of growth, of learning, of time, transaction cost economies and external economies. Generically, we can term them 'transformation economies'. They affect productivity positively by increasing the efficiency of the production process as a whole. The importance of their role is recognised in all economic theory and in strategic management (see, for example Best, 1990; Best and Forrant, 1996).

The fourth important determinant of productivity is infrastructure and wealth producing resources. The terms usually refer to both material and intangible infrastructure and resources; here we focus on the former. In this category, telecommunications, transport and energy are important. Intangible infrastructure usually relates to human factors and issues concerning public administration. Wealth producing resources also usually refer to both human and other resources. The material considerations refer to underground and overground (e.g. climate) resources, and also to the geographical position of a country or region. These factors, namely the material infrastructure and the wealth producing resources, affect the cost and the efficiency of the production process as a whole, and are universally recognised today. See, for a recent example, European Commission (1994), (1996) and (in relation to productive resources) M. Porter's (1990) well known work on the competitive advantage of nations.

These four, and in our opinion, main, factors affect productivity both autonomously and through the influence each has upon others. For example, both infrastructure and technology and innovation affect unit costs. In addition, infrastructure can also affect innovation and vice versa (e.g. mobile telecommunications). Both through their mutual influence and independently, all these factors affect labour and capital productivity in important ways, and thus also the competitiveness of firms and countries as a whole[13].

Competitiveness (and productivity), however, are also influenced by macroeconomic policy and the institutional framework. The view adopted here is that macroeconomic policy produces mainly short term results, whereas in the long run the most important factor is the productive base of the economy (see e.g. Porter, 1997). We simply note that such a policy must be in accordance with, and friendly to supply-side policies (for more on this issue see Michie and Pitelis, 1998, and also below).

Finally, a factor whose influence embraces all the others is the institutional framework. This refers to the role of the state and public administration and constitutes one of the main interests of economists of all schools. Despite many clashing views there is a consensus that the state, its policy, the legal and regulatory framework, the size, quality and efficiency of the public sector and the ability to enforce laws, all influence the factors we have referred to. They also influence the competitiveness of the economy as a whole, mainly, though not exclusively, through their influence on transaction costs. From the enormous literature on this topic, a typical view is that of Douglass North (1991), the economics Nobel prize winner, who claims that institutions constitute the main explanatory factor for the development and underdevelopment of countries[14].

The usefulness of the analysis of the determinants of productivity and competitiveness consists, among other things, of its ability to answer certain important questions concerning both the agents and the means of influencing productivity and competitiveness. As far as the agents are concerned, it is clear that labour, firms and the state all play a very important part. For example, the state influences not only the institutional framework and infrastructure of a country, but also its business climate, employment relations, etc. Thus, the issue is not whether the state should intervene, but what is the best possible

[13] For the importance of the role of infrastructure see EC (1996).
[14] For overviews of this literature, see Pitelis (1991, 1994), among others.

way to do so. As far as the issue of the extent and intensity (and thus cost) of labour is concerned, this constitutes a subset of the factors influencing competitiveness. Given its potentially negative correlation with incentives, it also influences the quality of the work produced[15]. This observation leads to the conclusion that consensus on the issue of productivity is possible and useful, to the degree that productivity is not mainly achieved (preferably not at all) through an increase in hours worked and/or the intensification of work.

It is worth emphasising that this is the direction in which that the enormous existing literature on the role and importance of the human factor is tending towards today (Pitelis 2002). Furthermore, the literature recognises the existence of a 'high' and a 'low' road towards competitiveness (the former through an emphasis on innovation, the latter on the intensification of work) and places special emphasis on the first road (see, for example, Best, 1990; Humphrey and Schmitz, 1995).

An increase in productivity, however, can lead to an accumulation of market power and/or be accompanied by price collusion[16]. This can hinder the positive effects of productivity (it also negatively affects distribution between firms and consumers) and lead to a reduction in efficiency and productivity in the medium run through a reduction of the competitive pressures on firms, which constitute an important incentive for innovation. Thus, (the consensus for) the existence of a regulatory framework (competition policy) is also necessary, a framework favouring market contestability, and thus not allowing the accumulation and exploitation of oligopoly power in the market (and more generally in the economy-society, through, for example, acquaintances, 'intertwined interests', etc).

Real convergence can be attained through a differential increase in productivity and (thus) competitiveness. In the medium term, there is no other way. Macroeconomic policy can only contribute in the short run. A nominal convergence can contribute to macroeconomic stability, by putting things into place. However, it is insufficient, virtually by definition[17]. The attainment of nominal convergence by all parties implies a comparative advantage for no-one. This emphasises the importance of supply-side policies for productivity, competitiveness and convergence.

(Supply-side) Strategy for Productivity, Competitiveness and Convergence

The implementation of (supply side) policy measures is the responsibility of government, for example in this case the (countries of the) EU and the governments of the CEECs. The role of government in general and supply-side strategies (SSS) for development in particular has historically been a highly debated subject in economics and management. See Shapiro and Taylor (1990). In recent years, debates on SSS have become topical in partial response to the arguable success of the Far Eastern economies to implement strategies which facilitated growth; see e.g. Dutt et al (1994). In both the case of Japan (see Dunning (1994), and the 'Four Tigers' and Pitelis (1994)), the exploitation of the benefits from technology transfer, often through FDI were crucial. These economies moved gradually from import substitution to export promotion, to high-return, advanced technology sectors (supported by high wages) to a nurturing of local enterprises, themselves emerging TNCs. The state has played an important role in the process, by pursuing created comparative advantages and by focussing on managed competition (mainly domestic) and managed trade, including protectionism. Recent theories of

[15] We note that we are not adopting the view that the extent, intensity and cost of labour do not influence productivity, but that it is not a clearly important factor (especially if one considers the incentives problem) except possibly in some sectors (based on unskilled labour) and then only ceteris paribus (assuming that all the other factors are present and are of a degree which is satisfactory and/or comparable to other countries).

[16] I am grateful to A. Pseiridis for pointing this out to me.

[17] It may also hinder real convergence - see Michie and Pitelis (1998) for a discussion on this issue, which goes beyond the scope of this paper.

international trade (Krugman, 1986) and analyses of 'New Competition' (Best, 1990) and the 'Competitive Advantage of Nations' (Porter, 1990) appear to have provided some theoretical support for the Far Eastern perspective. Moreover, such debates have revived interest in SSS, including governments' attitudes to FDI and TNCs. See Cowling (1990), Cowling and Sugden (1992), Pitelis (1992, 1994).

The terms "industrial policy" (IP), "industrial strategy" (IS), "competitiveness strategy", and more generally supply-side strategies have acquired substantial currency in recent years, particularly since becoming linked with the topical concerns of 'international competitiveness' and 'deindustrialisation' (see for example Pitelis, 2001). Logically, competitiveness and/or deindustrialisation can, at the most, be sufficient conditions for (the need for) SSS, but they are not necessary. SSS need not be concerned with competitiveness and/or be used in countries which experience no symptoms of deindustrialisation. However, as Krugman (1994) has aptly observed, concern with competitiveness can provide urgency and popularity to the notion that somehow government policy in general and SSS in particular can help to enhance the country's international competitiveness. Given their wide use, the terms SSS, competitiveness and deindustrialisation are often taken for granted today. However, there is no widely acceptable definition for any of these, this being particularly true for IP and IS. We do not intend to provide an account of existing definitions here, but rather propose our own, which is going to inform the rest of the discussion.

Industrial policy in its more general sense can be any type of government policy which affects industry. This would clearly encompass all types of government policy, including macroeconomic. While the latter may strongly influence industry, here it will be taken as the background against which IP can be applied. In this setting we can define IP as the government policies intended to affect industry directly and specifically towards achieving a particular objective. Usually this objective is the increase in consumers' per capita incomes. Within the context of IP, *competition policy* will be taken to be that subset of IP which is exclusively concerned with the degree of competition in industry. Industrial strategy will be taken as the existence, or otherwise, of a well-thought out and reasonably consistent and coherent set of industrial policies (along with the required resources and mechanisms for implementation) which aim at the realisation of a long-term objective concerning industry in particular and, through it, the nation more generally. Lastly, competitiveness strategy and SSS are measures aimed at improving the determinants of productivity of a country.

One way in which growth can be effected is through international trade. The international competitiveness of a country can be defined as the degree to which this country can improve on an index (subjectively chosen) of national welfare in a sustainable way, in the international arena. Government policy in general, and SSS in particular, may influence competitiveness positively or negatively, which highlights the importance of the link between SSS and the nature of a nation's attitude to trade. An erosion in a country's relative standing could be the result of a decline in manufacturing employment or output, which is not explicable purely in terms of a country's 'maturity' or of a change in its trade specialisation. This can be defined as '(negative) deindustrialisation'. See Rowthorn and Wells (1987).

Based on an extensive coverage of the existing theory and international experience on IS and SSS, it has been suggested that a country could potentially behave opportunistically, adopting a Machiavellian approach (see Pitelis, (1994)). In particular, a nation state may improve its relative standing if it gains at the expense of others (in a zero-sum game world) or if it receives a larger share of the benefits of growth (in a positive-sum game world). It is possible, and has been widely observed historically, that nation states can *unite* behind such an objective. For example, the analyses of Bowles et al (1983, 1986) suggest that US post-war growth might have been based on a growth accord between US capital and labour. Similarly, the wide consensus between social groups, or put differently, the

corporatist nature of, for example, Japan, the 'four tigers' and Germany, could be seen as a factor contributing to growth.

Assume for the moment that the EU, for example, decides to adopt such a strategy– one which need not aim exclusively at enhancing productivity, but may generate distributional benefits. Such a strategy could incorporate the following elements: firstly, build the institutions and mechanisms which guarantee acceptance of the objective of growth - given distribution (consensus) between partners with potentially different interests, notably TNCs, labour and the state (personnel); secondly, given consensus (e.g. corporatism), adopt suitably modified policies of selective protectionism, managed trade and controlled liberalisation, while relying on domestic firms; thirdly, make sure that her competitive firms, notably TNCs, are playing the game, i.e. investing at home, repatriating profits and, more generally, abide by the rules of the accord in behaving nationalistically; fourthly, play the competitive bidding game with foreign TNCs in order to attract them away from rival sites/nation states; fifthly, support (clusters of) small and medium sized enterprises (SMEs) in order to exploit their relative advantages and the synergies between them and large firms, and potentially provide a pool of domestic competitors for existing TNCs and a source of new knowledge and potentially new TNCs; sixthly, provide suitable and stable institutional and macroeconomic environment and policies, appropriate infrastructure, including investments in 'human capital' (skills, education, training) and support for R&D, particularly of the type favouring (any) targetted sectors and firms; seventhly, ensure that any benefits from growth are distributed fairly within the nation, to ensure co-operative 'industrial relations' and thus a favourable business climate.

This strategy would apply in the case of the EU. For a country within the EU, some of these policies - such as protectionism and managed trade - are severely constrained. However, it is possible for a country within the EU to attempt to receive a disproportionate share of the possible benefits accruing to the EU from the above policies, for example by seeking exceptions assisting its firms (allowed in exceptional cases by the EU) and applying R&D policies in a way which discriminates in favour of its own firms and sectors targetted for support, and/or by seeking exceptions from rulings (such as the Social Chapter) which would allow it to receive a disproportionate share of inward investments[18].

This Machiavellian scenario bears close resemblance to not only what has already happened in Japan and the Far East, but also in many Western countries throughout their history (see notably the Congress of the US OFTA, 1992 report; Shapiro and Taylor, 1990; Forrant and Best, 1996). There are various demands that, suitably modified, such scenarios are adopted in the West to face the problem of competitiveness, as we have already discussed. Interestingly, critics of such demands focus primarily on the theoretical and/or practical difficulties of applying these in the West (see for example Norton, 1986) and never questioned the very *objective*.

However, one could question the *objectives* of the Machiavellian scenario for reasons not only of ethics, but also of long-term interest, including sustainability; see Pitelis (1994). These relate to international distributional considerations. Failure by less-favoured regions to converge could generate problems for developed countries too, through, for example, inability to repay loans, but importantly by not facilitating the process of global productivity, and (therefore) wealth increases. From a dynamic perspective, the main issue is how to generate wealth, compared to how to redistribute it. Arguably a SSS should have this as a prime concern. This takes us back to the productivity-increasing measures discussed in the previous section.

A SS strategy should try to encourage inter- and intra-firm competition so as to nurture conditions favourable to the creation of new ideas, techniques, products, processes, organisational and institutional

[18] For more on this, including more possibilities of this type, see Pitelis (1997).

forms, and should, moreover, exploit for this purpose the information-providing (and enhancing) attributes of economic organisations, notably markets, firms, states and people at large. A strategy of this type should provide incentives, support, mechanisms and institutions for achieving productivity and competitiveness.[19] Necessary conditions include addressing state "capture" by sectional interests (Pitelis, 1994) - in part through striving for conditions of contestability in private and (up to a point) political markets[20] - and a plurality of institutional and organisational forms, including, for example, support for (clusters of) SMEs; see below.[21] Pluralism can also enhance the generation and use of new knowledge (see e.g. Simon, 1991, on the co-ordinating efficiency of organisations).[22]

In line with our discussion, adopted measures should strive to help the EU to help the CEECs to help the private sector, including the TNCs, to devise strategies which are feasible, consistent, sustainable in terms of distributional (and environmental) considerations and beneficial to all parties at least in the long run. This may well not be possible in all cases, or even in most. A notable case in point is the apparent contradictory pressures CEEC governments receive from international organisations, such as the IMF and the World Bank (to privatise, liberalise and open their economies to international trade) and some TNCs (which sometimes request monopolistic access to markets and related protectionism as part of a package which will attract them in the region). Devising feasible, consistent, sustainable strategies which nurture dynamic efficiency and enhanced welfare is therefore a *challenge* we need to tackle[23].

The exact measures that need to be taken to achieve global Pareto efficient welfare improvements and convergence can vary according to the conditions prevailing in every country. There is a need for international co-operation to make sure that (inter)national policies are not inconsistent and mutually offsetting. In this framework, any policy which improves productivity is useful. Such policies can be *horizontal measures* (such as tangible and intangible infrastructure, education, skills, technology and innovation, public sector efficiency improvements etc.). The need to ensure competition also suggests the need to support SMEs. In order to achieve economies of transformation, often related to large size, there should be measures facilitating the 'clustering' of SMEs. See Best (1990), Best and Forrant (1996). 'Clusters' of SMEs can also be a potent source of indigenous development for LFRs, countering a dependence on TNCs. Technology transfer through FDI should be pursued in conjunction with 'clustering'.

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[19] Such ideas draw on the works of Schumpeter (1942), Hayek (1945) and Penrose (1959). Recent appreciation of their ideas can be seen in the literature on the "endogenous growth theory"- see, for example Aghion and Howitt (1988), and.Fine (2000) for a critique.

[20] There can be too much contestability in public sector markets, in that it can increase the dependence of politicians, bureaucrats etc. on pressures by organised interest groups, leading to regulatory capture.

[21] Seen in this light, EU recognition of the need for education and skills, technology, infrastructure and support for SMEs should be welcome. Similarly welcome are steps to reduce state involvement in certain cases to the extent that this favours contestability (reduced centralisation) of the market for government.

[22] Supply-side strategy need not be in line with competitive strategy (see Pitelis, 1996). When this happens, governments can be called onto undo what firms do. Wherever possible, this is best avoided. This is particularly true given that firms, including TNCs, are most directly involved in the process of integration and do so for their own benefit - as the Prince of Wales business leaders' forum observed in adverts throughout the national press in Britain in reference to CEECs:

> "The key trend which links ... 'corporate citizens' is a strategy enhancing their core business in emerging markets, not traditional corporate philanthropy or altruism. ... The stakes for international companies operating in the region are high."

[23] Within this framework, an important decision for CEECs is their *route* to development and integration. Available routes include for some commentators the *neoliberal path* akin to Western-type policies, the *protectionist path* and the *state developmental path*; see Radice (1994). Other, notably Dunning (1994), available models include the *developing country model*, the *reconstruction model* and the *systemic model*. These scenaria suggest potentially different rules for, and attitudes to, FDI. The choice will depend, among other factors, on the prevailing special conditions of the economy in hand. This necessitates detailed country case study analyses.

A third way through which the above can be achieved is through the support of firms' policies to achieve 'optimal size' (subject, however, to this being done through efficiency and innovation, not market power motivated strategies). The role of 'optimal size' in the historical development of capitalism is far too well documented to require further discussion here (see for example Chandler, 1986).

Horizontal measures, optimal size, and clusters of SMEs are linked to the competitiveness wheel through the determinants of productivity. Indeed, to varying degrees, all four positively influence the four determinants of productivity, in rather straightforward and too obvious ways to require further elaboration. Worth noting, instead, is the derivation of policy measures from first principles, namely a model of productivity and competitiveness. This hopefully addresses a major problem in theory - the absence of a generally agreed upon framework from which supply-side policy measures can be derived[24].

Regional Clusters and the role of Institutions and Institution Building

As already noted, the size of firms and the organisation of industry are two important factors that impact upon the determinants of productivity. Historically, the quality of firm infrastructure, human resources, technology and innovativeness, as well as the existence of unit cost economies, were all felt to be positively linked with large size and oligopolistic industry structures. Indeed the history of capitalism was felt to be the history of large firms, operating in oligopolistic industries. See e.g. Chandler's, 1990, *Scale and Scope*. This book exemplifies the concept of declining unit cost economies through economies of scale and scope in large, growing firms.

In more recent years there has been a realisation that advantages of large size can be achieved by smaller firms, operating in less oligopolistic, more competitive environments, but in the form of networks or clusters. Clusters represent agglomerations, usually of SMEs, with horizontal and/or vertical linkages, intra- and/orinter- sectorally, usually within a specified geographical dimension, in a facilitative institutional setting, which compete and co-operate (co-opete) in (inter)national markets. It has been found out that the aforementioned characteristics of clustering, can lead to increased firm and regional competitiveness by impacting positively on the determinants of productivity. For example, clusters promote innovation, the quality of human resources, firm management and organisation, and also reduce unit costs (mainly through external economies, economies of learning, transaction costs and diversity economies) but also economies of scale (through co-operation), usually attributed to large size.

Clustering is related to another very topical issue: location. In recent years, there has been a revival of interest in locational factors in explaining both agglomerations such as clusters, and innovative activities. See, for example Krugman (1988). The new literature provides reasons why local proximity can help clustering. One such reason is that knowledge generation and transmission can be facilitated by geographical proximity. See Audretch (1998).

A way in which regions and countries have often tried to acquire competitive advantage, is through inward investment by transnational corporations (TNCs). John Dunning (1998) has, for many years, been a rather lonely champion of the role of locational factors in explaining the spatial choices by TNCs. In recent years his patience has been rewarded by the recognition afforded to the role of location (see also Porter, 1998). It is arguable that clusters are a better alternative to inward investment and, related to this, large size. Clusters are less mobile, characterised by competition, and generally are

[24] Here we limit ourselves to general policy measures or dimensions, without going further into specific actions. The derivation of operational measures from the above framework is possible, but beyond the scope of this paper.

more closely embedded in the local community. In addition, clustering and inward investment are linked. As explained in Pitelis (2000), regional clusters can be a factor attracting inward investment.

It follows from the above that geography, clustering and inward investment can be interrelated and lead to a virtuous circle of regional development.

The policy implications from the above are that countries and regions should try to achieve and maintain competitiveness through combining the inter-related benefits of clustering, inward investment and large size. To do this, clusters need to be identified and facilitated. Large size should be promoted through mergers and acquisitions when conditions for clustering are absent. Inward investment should be attracted and embedded within the regional context, through active measures.
There is no need to focus on particular industries or sectors. Competitiveness, through productivity improvements, can be acquired in every industry or sector. It is mainly a matter of firm strategy, including clustering. Having said this, one cannot build on nothing. One has to build on foundations, preferably strong ones. This requires an analysis of the competences and opportunities, as well as the weaknesses and threats of a region.

In the context of the 'Future of Greek Industry Project' (Pitelis *et al*, 1997) we identified such foundation in various sectors of Greece – in particular; wine, furniture, textiles, marble, metals and software are among the activities where strengths were identified as well as a basis for clustering. As explained, facilitating clusters, in such and other activities, can help enhance productivity and competitiveness. Importantly, improving the conditions for entrepreneurship more generally helps both local firms, sectors and clusters, and promotes the attraction of inward investment. In general, activities that are chosen by the market, are characterised by the existence of history and competences, and are, or can be, knowledge-intensive and can be prioritised.

Facilitating clustering, "optimal" size, and attracting inward investment requires involvement from both the private and the public sector. Infrastructure, the legal and institutional context, education and health - even culture and attitudes- depend largely on government actions. The government may also help in facilitating clustering. However, it cannot be an entrepreneur. The best the government can do is to provide an environment supportive of entrepreneurship. This means a stable macroeconomic environment, clear rules of the game, transparency, efficient bureaucracy, a level playing field and no corruption, and more generally, a supportive institutional context, to include institution building.

The institutional environment encompasses and affects all determinants of productivity[25]. As North (1991: 98) observes, "the central issue of economic history and of economic development is to account for the evolution of political and economic institutions that create an economic environment that induces increasing productivity". Also, the analysis of institutions and institutional change "offer the promise of dramatic new understanding of economic performance and economic change" (North, 1991: 111). This is particularly important for the 'south', for countries experiencing problems of institutional sclerosis, notably Britain, and for the CEECs. It is interesting to note that, in his 1991 Nobel lecture on 'The Institutional Structure of Production', Coase refers twice to Eastern Europe, as follows: "These ex-Communist countries are advised to move to a market economy and their leaders wish to do so, but without the appropriate institutions, no market of any significance is possible" (p. 229) and "It makes little sense for economists to discuss the process of exchange without specifying the institutional setting within which the trading takes place, since this affects the incentives to produce and the costs of transacting. I think this ... has been made crystal clear by what is going on in Eastern Europe today" (p. 233).

[25] The other factor, the macroeconomic environment, falls outside the scope of this particular paper. Suffice it to note here that macro policies should be supply-side friendly.

Examples of institutional measures include the delineation and enforcement of property rights, a regulatory environment which promotes healthy competition, and a pluralism of organisational forms and ownership structures, which exploit existing and generate new knowledge. Most important is also an attempt to promote attitudes, values and culture generally conducive to dynamic competitiveness through innovativeness, thus to productivity, growth and convergence. Evidently all these are easier said than done. A way through which these can be achieved is by the government assuming the role of a catalyst by identifying and implementing, in close co-operation with the private sector, changes proposed by those nearer to the action, e.g. the private sector itself. Such *bottom-up* policies exploit dispersed knowledge and also promote subsidiarity and democracy. Exact actions, however, should be based on an analysis of each particular case. This is beyond the scope of this paper, but the following methodology can be proposed[26]. Firstly, a consensually agreed upon theoretical framework. Secondly, an audit of the external (international) environment. Thirdly, an audit of the internal (national) environment. Fourthly, deciding the *direction* of the strategy. Fifthly, its dimensions. Sixthly, the required actions. Seventhly, addressing the issues of prerequisites, resources and mechanisms for implementation. Eighthly, *feasible* actions. Ninthly, control-evaluation, and tenthly, new actions for implementation.

To conclude, a new supply-side strategy should focus on the nurturing of institutions, mechanisms and organisations which foster dynamic efficiency, productivity and growth. Our analyses point to the importance of competition facilitated through a plurality of organisational and institutional forms as a *sine qua non* for the realisation of such policies. In our epoch, this entails support for new and potential competition and a focus on dynamic competitiveness through innovation.[27] The development of firm clusters can be a potent means of achieving these objectives.

That increases in productivity and competitiveness will, ceteris paribus, lead to global welfare improvements is self evident. That it will lead to convergence is less self evident, yet straightforward. It is the CEECs which suffer disproportionately from the lack of institutions which provide incentives for productivity enhancements. Accordingly, improvements on this front in CEECs can be proportionately larger than in countries which have already established an institutional setting conducive to productivity and growth. This can lead to proportionately higher rates of growth and thus to convergence.

Concluding Remarks

Recent developments in the theories of international trade and (regional) convergence, supply-side strategy, regional clusters, institutions and institutional change and notably their links, seem to cast new light on our important concerns here and seem to provide some promise towards the possibility of developing a strategy of integration and convergence whichwill maximise the net benefits to all parties involved.

Such a strategy involves a focus on productivity, dynamic efficiency and competitiveness through the nurturing of a pluralism of institutional and organisational forms, the development of clusters and the building of institutions and incentive structures that lead to reduced transaction and transformation costs and, thus, productivity, growth and convergence.

[26] This is based on the author's own experience with policy-making in Greece, where he has co-ordinated the "Future of Greek Industry Project", a consensus-based, bottom-up industrial strategy, orchestrated by the government and supported by the major social partners.

[27] This need not exclude (threats to) protectionism both in support of such players and as a means of ensuring fair and open trade.

Overall, in their complex interrelationships, the exploitation of knowledge through the existence of a plurality of institutional and organisational forms, the benefits of competition also arising from these (and appropriate competition policies) the related amelioration of the problem from state capture, technology (and skills) transfer through FDI, and the parallel exploitation of the benefits of clustering, can lead to both global Pareto enhancements and convergence. Exact policies would vary from country to country. It is argued, however, that if seen in the required perspective, as suggested here, they will tend to lead to the desired outcome, global integration, growth and convergence.

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