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Regional Integration, Institutional Dynamics and International Competitiveness

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Zusammenfassung: Die regionale Wirtschaftsintegration schreitet in der Weltwirtschaft deutlich voran und es gibt von daher eine erhebliche Herausforderung mit Blick auf den institutionellen Wandel bzw. für die nationale und internationale Wirtschaftspolitik. Wir betrachten die Optionen der Integrationspolitik und die erkennbaren regionalen Kräfteverschiebungen im Außenhandel sowie dessen Bedeutung auch für das Wirtschaftswachstum von EU-Ländern. Schließlich wird der Zusammenhang zwischen regionaler Wirtschaftsintegration und Strukturwandel betont, denn die Entstehung größerer regionaler Integrationsräume schafft hier neue Möglichkeiten von Outsourcing und Offshoring, die wiederum zu mehr Wachstum und Beschäftigung beitragen kann. Das Zusammenspiel von regionaler Integrations- und globaler Wirtschaftsdynamik bedeutet einen verstärkten Anpassungsdruck im Standortwettbewerb und verschärften Druck internationalisierungsgerechten institutionellen Neuerungen bzw. Politikreformen.

Summary: Regional economic integration has made considerable progress in the world economy which raises new challenges with respect to institutional change and for national and international economic policy. We consider the options of integration policy and major shifts in regional gravity centers and trade dynamics, respectively; moreover, new findings with respect to the role for trade in the context of growth accounting are integrated in the analysis. We emphasize that regional integration intensifies structural change – the emergence of larger regional integration areas creates new options for outsourcing and offshoring. The interdependence of regional integration dynamics and economic globalization implies new adjustment pressure in the field of locational competition and also raises pressure to reform institutions and policy patterns in a way that is consistent with internationalization.

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1. Regional Integration as a Challenge for the Theory of Institutional Design and Economic Policy

In the last quarter of the 20th century economic globalization has made rapid progress. Trade liberalization, the removal of capital flow restrictions and an outward oriented policy in many Asian and post socialist Eastern European countries have reinforced the international network. Growing portfolio investment flows – relative to GDP – and higher foreign direct investment (FDI) and trade, shape modern globalization. In addition to this development one has witnessed the expansion of the information and communication technology which is most visible in the form of the internet and mobile telecommunications. Technological progress in the field of information and communication technology is high and has stimulated trade and foreign direct investment and cooperation among firms. Moreover, the international cooperation among the Bank of International Settlements (BIS), International Monetary Fund (IMF), World Bank and the World Trade Organization (WTO/GATT) has created an international institutional framework for trade and capital flows: Common international rules and joint organizations which support market-based transactions and open markets. Modern globalization is strongly characterized by a high share of intra-industrial trade with differentiated products; since 1985 there also have been two decades of relatively strong growth of foreign direct investment of multinational companies. Other crucial elements are digital trade and e-commerce, which raises the share of trade in services.

Parallel to modern globalization there has been an expansion of regional integration schemes such as the EFTA, the EU, the NAFTA or the ASEAN. (ETHIER 1998). Regional integration has stimulated institutional reforms in many countries, reinforced international institutional networking and also brought about some institutional convergence. Indeed, integration has been a hallmark of the second half of the 20th century and part of the integration dynamics seems to be a response to the problems and challenges of economic globalization. Out of 144 WTO member countries at the beginning of the 21st century, only Japan, Hong Kong, Macao and Mongolia had not been involved in a regional trade integration treaty. Considering Hong Kong and Macao as a part of China and taking into account that China launched a regional trade integration initiative in 2002 – with a focus on cooperation with ASEAN countries – one may state that regional trade integration is a standard feature of WTO member countries in the early 21st century (KAISER 2002; 2003).

Until 2002 there were some 250 regional trade treaties which had been notified at the WTO, of which 129 came in after January 1995; until the end of 2005 the WTO expected some 300 regional trade agreements to have come into force (WTO 2006). Thus there is a strong tendency towards regionalization of trade relations and economic relations.

In the second half of the 20th century several regional integration zones have been created: The EU started in 1957, NAFTA in 1994 (US and Canada; later joined by Mexico); ASEAN and MERCOSUR intensified regional integration in the 1990s. Economic theory has analyzed some of the critical aspects of regional integration (e.g. SCHÜLLER and THIEME 2002; CASSEL and WELFENS 2003). In particular there is the problem of achieving framework conditions in the respective integration countries that are consistent with each other. However, there are also many other issues – e.g. the problem of cooperation among small and big countries in integration clubs, the topic of economic heterogeneity in the sense of achieving convergence of per capita income and the problem of obtaining sufficient influence in shaping the global international organizations such as the IMF or the WTO (LESCHKE 2002).

Global trade is strongly shaped by multinational companies which are major players as such, but also are most important for international outsourcing – partly including outsourcing to foreign subsidiaries. About 1/3 of OECD trade is intra-company trade, that is trade within multinational companies which are, of course, the drivers of foreign direct investment. Foreign direct investment is strongly asymmetric (similar to trade relations), and indeed 75% of overall foreign direct investment flows is concentrated among OECD countries. The 1990s have however witnessed a broadening of foreign direct investment flows, as not only are China and the US leading host countries for foreign direct investment but also newly opened up countries in Eastern Europe and the former Soviet Union. There is no doubt that both rising trade and increasing foreign direct investment have contributed to real income growth in many countries; and China has been one of the most dynamic countries in terms of trade and foreign direct investment.

Trade creation effects stimulate the expansion of the international trade network and provide opportunities for private contracts between international partners. Achieving private agreements between trading partners from different regions is not always easy to the extent that different traditions and approaches to law have to be reconciled. It is all the more important that the countries involved are members of the WTO. In this respect China has made fast progress whilst Russia is trailing behind.

With growing foreign direct investment and hence increased local competition, there are impulses for institutional adjustments. Countries which pursue regional integration naturally are strongly involved in institutional adjustment designed to promote efficiency and long term economic growth. While economic integration may bring economic benefits one cannot rule out that the political system of the "integration club partners" is facing new problems and inefficiencies. Thus to analyse the dynamics of trade or integration, in combination with institutional change is an important topic for the economic theory of institutions in open economies.

Growing trade and a rising degree of economic openness will stimulate not only competition in goods markets (for tradeable goods) but also affects factor markets: Institutions concerning labor markets and capital markets will adjust. It is well known that small open economies are fast in institutional learning as their firms, politicians and individuals are aware that world market prices are given so that one could not gain from certain interventions, e.g. import tariffs. As actors in small open economies are quite aware, improving international competitiveness mainly requires optimal institutions which encourage investment, static efficiency in production in the short term and innovation dynamics in the long run. Moreover, import competition is the major driver for dynamic adjustment in the tradeable sector. Small open economies often learn relatively fast from other countries. In big countries the situation is rather different as they might want to improve terms of trade through policy interventions while hoping that other big countries will not adopt countermeasures. In such countries it is quite important that policymakers pursue strict competition policies necessary to stimulate efficiency and innovations within the large domestic market. In an integration club with small and large countries there also can be broad institutional learning and institutional harmonization if the interaction of rising trade and intensified local competition encourage international benchmarking and institutional reforms, respectively.

A harmonization of institutions can occur under the pressure of increasing trade-GDP ratios and intensified local competition, which leads to enhanced international benchmarking: Institutional arrangements which lead to superior economic performance abroad are imported or adapted with modifications. An alternative approach to institutional harmonization can be achieved through supranational economic policy which induces member countries to adopt common institutional set-ups for certain policy areas. If political preferences differ across countries supranationally induced harmonization could bring about welfare losses unless there are overcompensating dynamic efficiency gains (APOLTE 2000). From a dynamic perspective it is interesting to observe and analyze how the overlap of national economic orders in an integration club leads to a new hybrid institutional framework. To the extent that there are competing regional integration clubs the internal institutional development is not only relevant for the club but also as a signal for prospective new member countries.

From an institutional perspective an important issue is whether or not market-based relations – based on contracts – are reinforced through regional integration and to which extent there are particular problems evolving in the context of principal-agent problems (ERLEI, LESCHKE AND SAUERLAND 1999). One related aspect refers to the link between market enlargement and the rise of the optimum plant scale: Larger firms often are more difficult to manage, and governance and efficiency problems may result from this. With respect to the institutional set-up it is important to consider which type of political competition is relevant and how private property rights have been defined. Regional integration might reinforce alternative mechanisms of discontent, namely the role of voice or the role of exit; both mechanisms can reinforce the competition among jurisdictions and hence strengthen the impact of system competition. The latter has been reinforced at the international level in the second half of the 20th century (CASSEL 1996; APOLTE, CASPERS AND WELFENS 1999). Moreover, competition among regional integration clubs has created a new dimension of institutional competition. Finally, one may consider the issue of whether or not regional integration contributes to the creation of a new basic consensus which leads to a common constitution. Failure of the referenda in the Netherlands and France in 2004 have shown that the EU has rather a weak constitutional consensus.

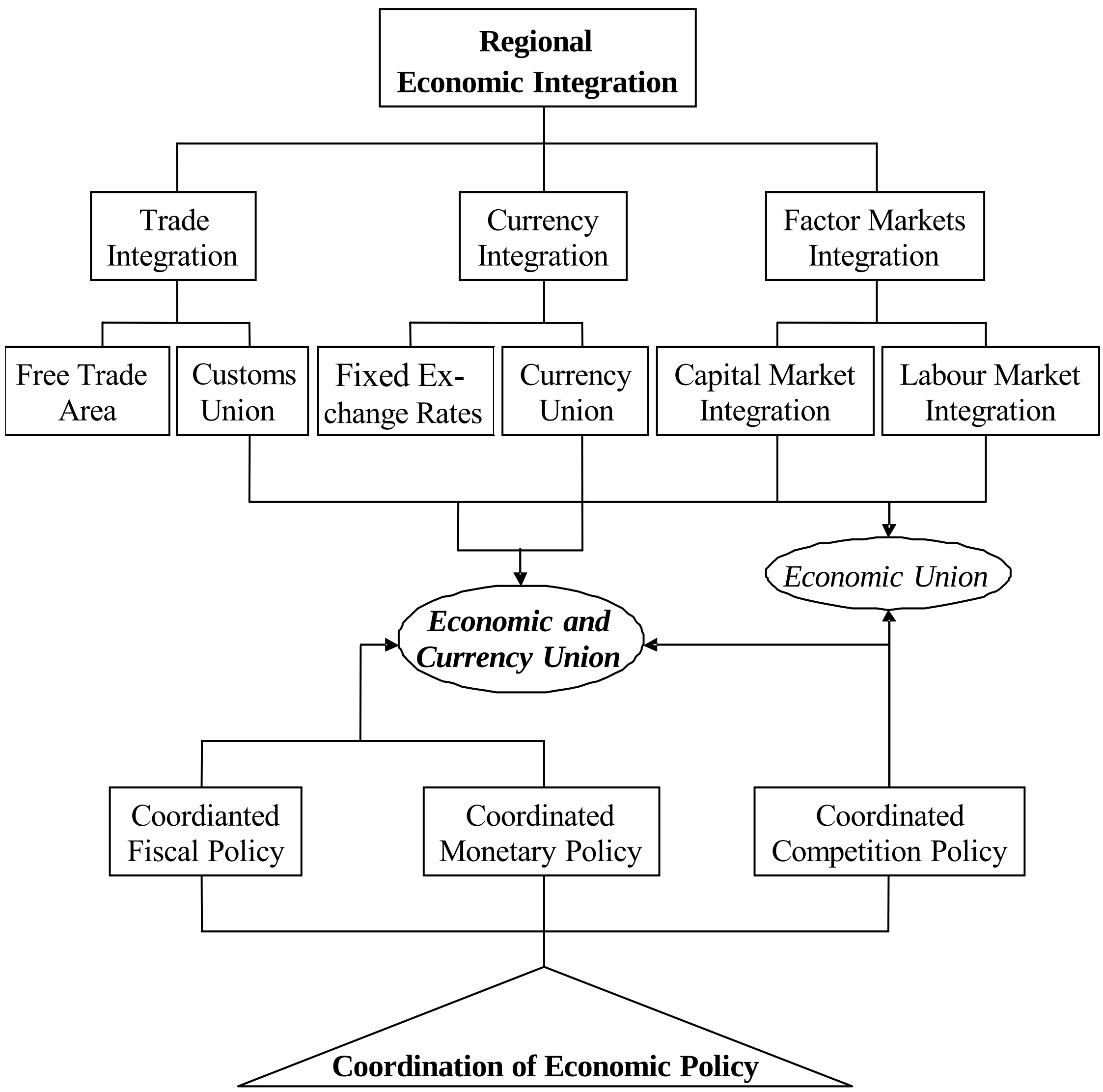
Key aspects considered subsequently refer to the stages and dynamics of regional integration on the one hand. On the other hand key issues related to international competitiveness will also be analyzed. A specific focus will be directed on the EU and the prospects for enhanced international competitiveness in the context of integration and globalization.

2. Dimensions of Regional Integration

2.1 Dimensions of Regional Integration

According to figure 1, regional integration can have different intensities and consists of various integration stages ranging from a Free Trade Zone (free intra-regional trade; individual countries have individual tariffs) over a Customs Union (free trade zone plus common external tariffs) to an Economic Union (in addition to a Customs Union there is a common framework for competition policy plus other rules relevant for economic policy, e.g. restrictions on subsidy policy). A more comprehensive stage is the Economic and Monetary Union which is an Economic Union plus a common central bank and a common currency plus full integration of capital markets – to what extent a common or strictly coordinated fiscal policy is a required element of the Economic and Monetary Union is an open issue.

Figure 1: Stages of Regional Economic Integration



Source: Cassel and Welfens (2003), p. 7

One also should note that capital market integration is only one element of regional factor market integration. Labor market integration also could be considered; in the context of the EU Single Market, established at the end of 1992, there are indeed four freedoms: free trade of goods and free trade of services plus free capital mobility plus labor mobility. Thus, the EU Single Market may be expected to bring about more competition and both static and dynamic efficiency gains. Efficiency gains as well as stronger innovation dynamics should reinforce EU firms' global competitiveness.

Among the crucial elements of regional integration is an adequate network of multilateral cooperation which can be organized within the framework of multilateral or supranational institutions or through summit meetings of the representatives of member countries. Regional integration thus implies in a strict sense that there is no unilateralism. Regarding the consistency of the international institutional framework there is a potential problem since the overlap of global institutions – such as the IMF and the WTO – and regional institutions should be organized in an adequate way. The credibility and efficiency of institutions is impaired if there is no clear division of labor and a lack of transparency.

In a broader institutional context of regional integration one has to raise several basic issues (LAWRENCE 1996; LANGHAMMER and WÖSSMANN 2002):

- Which policy areas should be organized as fields of joint responsibility and thus lead to a common institutional framework?
- In which fields does one find implicit integration pressure, namely in the sense that full integration of a specific policy field suggest complementary integration of another field.
- How can one achieve an efficient vertical division of labor between the supranational policy layer and the national policy layer?
- What is the relationship between various integration clubs, say between the EU and ASEAN or the EU and MERCOSUR?
- How does the creation of regional integration clubs affect the practical work of global institutions – say through a switch towards a joint representation at the respective organization or a generalized switch towards a uniform voting pattern of member countries of an integration club?

Regional economic integration is mainly characterized through transfer of political sovereignty towards a supranational policy layer and the fact that national identity is somehow replaced by cross-border identity. The loss of national policy autonomy will only be considered if regional integration lets expected member countries get a major economic or political net benefit. Such benefits can emerge in various forms. Firstly, firms from small member countries could get full access to a large integrated regional market, and secondly some firms could obtain market power associated with enhanced specialization and the growth of firms so that the integration area realizes favourable terms of trade effects. Finally, firms also might benefit from the larger market in the form of enhanced exploitation of scale economies. From a political perspective jointly pursuing international trade interests also could be more successful than isolated national approaches. Even relatively large countries could find it useful to organize regional economic and political relations within an integration club provided that this long term commitment helps to avoid intra-regional conflicts, creates additional economic benefits, and leads to the better pursuit of common interests at the global level.

2.2 Integration Areas

In a global perspective free trade areas are quite numerous if one considers the number of relevant international treaties notified at the WTO. However, internationally one should not underestimate the impact of the EU as a Customs Union: The rising number of member countries is one indicator, another is the fact that (disregarding MERCOSUR) other integration clubs are discussing to which extent a Customs Union could be a useful long term option of economic integration. Finally, the EU itself has more than 30 Free Trade Treaties with other countries so that the EU stands for a broader hybrid integration network which stretches beyond the 27 EU member countries (taking the second EU eastern enlargement of 2007 as a benchmark). While the EU effectively is a broader international integration club than one might think at the first glance, one has to raise the issue whether it is a stable integration area or not.

After the Second World War the creation of the EU by Germany, France, Italy, Belgium, the Netherlands and Luxembourg was a bold attempt at combining economic recovery in Europe and achieving political security. The basic idea was to firmly anchor Germany in a club of countries and reinforce economic dynamics in Western Europe. This then could be a basis for enhanced transatlantic cooperation in the field of security policy; it is noteworthy that the EU countries' common fear of the Soviet Union was a kind of integration glue for the six founding member countries of the Community. One may point out that the integration history of ASEAN basically started under the heading of regional security cooperation and only later became mainly focussed on economic integration.

The EU has organized several enlargement rounds, including the southern enlargement in the 1980s when the relatively poor countries Greece, Spain and Portugal joined the Community which was considered not only to reinforce internationalization and integration of these countries but also to stabilize their democracy (Spain and Portugal had previously experienced a long period of authoritarian rule, Greece has had a couple of years of military dictatorship). The EFTA enlargement of 1995 was the next EU enlargement round and posed no problems since the new member countries Sweden, Finland and Austria all had relatively high per capita income figures. The 2004 enlargement round by ten new member countries, including eight poor East European post-socialist transition countries plus Cyprus and Malta, looked more complicated and brought a serious challenge as the new member countries are considered as low wage countries. The ratio of industrial wage costs in Eastern European accession countries to Germany's wage costs was about 1:7 in 2004. Accession countries therefore could expect considerable foreign direct investment inflows – not least in labor intensive industries - provided that political stabilization and institutional modernization is achieved in Eastern Europe. The institutional modernization largely was automatical since new member countries had to implement the broad set of EU rules within a few years after joining the Community.

The MERCOSUR in Latin America is another attempt at regional integration in the form of a Customs Union: However, reality shows that it has developed into a kind of Free Trade Area as Argentina and Brazil have effectively suspended part of the treaty in the period of 1997 – thru 2002 because national economic recessions have translated into internal protectionism which, of course, is not acceptable in an integration club. Moreover, there is a lack of macroeconomic coordination – a problem which became visible in the context of Argentina's choice of a currency-board system (BAER, CAVALCANTI and SILVA 2002). The ASEAN Free Trade Area shows considerable integration dynamics and indeed might move from the envisaged free trade area towards a Customs Union in the long term (WELFENS, KNIPPING, CHIRATHIVAT and RYAN 2006).

Taking a look at the various regional integration clubs one may raise the question why different intensities of regional integration have been chosen. The history of regional integration – e.g. EFTA, NAFTA and EU – shows rather stable patterns in the intensity of integration. Moreover, the question remains why certain integration clubs have been successful and some indeed moved towards deepening integration over time, while several integration clubs especially in Africa have been rather unstable. Political instability and civil wars have negatively affected regional integration schemes in Africa.

Interestingly, most regional integration clubs have developed in parallel to WTO-based multilateral liberalization. After the end of the Cold War the GATT accepted not only new members from Eastern Europe but also moved towards a new status: GATT became an integral part of the global trade organization WTO, established in the context of the Uruguay liberalization round. A remarkable success of the WTO was in 1991 when China became a member country, so that the world's most populous country – and the world economy's No. 2 in terms of GDP (at purchasing power parity) – has become subject to the discipline of the global trade rules such as most favored nation's treatment and non-discrimination. If Russia should join the WTO in the medium term 95% of global trade would be covered by that institution. Hence one should raise the question, to what extent are there links between global liberalization and regional integration (LANGHAMMER and WÖSSMANN 2002). One should not overlook the fact that regional integration amounts to some external discrimination reflecting free trade within the integration area (plus trade barriers vis-à-vis third countries); member countries of GATT/WTO have to notify regional integration schemes – developing countries can refer to a special GATT waiver for those countries.

NAFTA as an example of more advanced integration has evolved from the US-Canadian bilateral liberalization club and includes Mexico. The three-country Free Trade Area has concluded a free trade arrangement with Chile in 2002 which stands for modest integration progress. The US has aimed at broader regional integration in Latin America through the FTAA. However, there has been no visible progress in this project; MERCOSUR countries and also the five countries of the Andean Community (ANDEAN) still have to be convinced that the FTAA is an attractive integration club.

The bottom line is that after five decades of regional integration there have been considerable economic changes and policy shifts whose dynamics are superimposed by impulses from globalization. Disregarding the US, China, India and Russia one may emphasize that the role of the nation state has reduced. With several integration clubs existing – such as EU, NAFTA, MERCOSUR and ASEAN - systems competition to some extent indeed will become a competition between integration clubs. Moreover, the integration clubs (and the respective leading countries in each club) will try to influence the global institutional framework; e.g. the US or NAFTA might seek the WTO to act as platform which restricts policy autonomy of ASEAN or the EU. The EU in turn could try to generate more political leverage through its neighbourhood policy which refers to Russia and CIS countries. Moreover, China could try to influence ASEAN directly or through the WTO. China and the US will have to cooperate to some extent in the Asian Pacific Economic Cooperation (APEC) which consists not only of regular political meetings but also of informal fora of cooperation within the business community.

2.3 Global Trade, Innovation Dynamics and Competitiveness

Considering the global merchandise trade – on the export side - of 10,121 bill. $ in 2005 the NAFTA was No. 1 as it recorded 1,478 bill., followed by the EU25 (only extra-EU trade) with 1,328 bill.; ASEAN recorded 625 bill., MERCOSUR 163 bill. (WTO, 2006). The average annual growth rate in the period 2000-05 reached an impressive 10% in the world, the same growth rate was realized by EU10, NAFTA recorded 4%, MERCOSUR 14%, ASEAN 9%. Germany was the world's largest exporter with $ 971 bill., followed by the US with 904 bill. (Canada 360, Mexico 213). Japan reached 596 bill. which was almost matched by the Middle East (with oil and gas as dominant exports). China exceeded Japan as Chinese exports stood at $ 762 bill.; if one would include Hong Kong the figure would be considerably higher. Even more impressive is China's export growth rate which was 25% p.a. By comparison India's merchandise exports were much smaller, namely 90 bill. in 2005 (this is close to Brazil with 118 bill.). Global services trade reached 2,415 bill. in 2005, the growth rate in the period 2000-05 was 10%. NAFTA recorded 420 bill., the EU (including intra-EU trade) 1,104; Germany's 143 bill. indicated a position clearly behind the UK with 183 and the US with 353 bill., Japan recorded 107 bill. and thus was ahead of China with 81 bill. Switzerland as a small open economy recorded a remarkable 52 bill. which shows the strong position of this country in global services trade. The high US current account deficit which has hovered above 5% of GDP in 2004-06 raises some doubts about the sustainability of global trade dynamics. A further increase of the US deficit could trigger both a sharp devaluation of the US dollar and renewed protectionism in the United States.

A specifically interesting position is the balance of payments on royalties and licence fees. According to WTO statistics global receipts in 2004 were $ 116 bill., the EU recorded 53 bill. which shows the dominant technology position of the US – and the strong global position of US multinational companies. The EU reached 36, Japan 16, China 0.2 bill. As China will improve its technological position in the long run and also create multinational companies which successfully produce abroad one may anticipate a gradual improvement of the Chinese position in the future.

Table 1: World Merchandise Trade by Region and Selected Country, 2005 (in billion US $ and per cent)

Trade / Country	Exports: Value 2005	Exports: % p.a. change 2000 - 2005	Imports: Value 2005	Imports: % p.a. change 2000 - 2005
World	10121	10	10481	10
North America	1478	4	2285	6
- United States	904	3	1733	7
- Canada	360	5	320	6
- Mexiko	214	5	232	5
South America	351	13	294	7
- Brazil	118	17	78	6
Europe	4353	11	4521	10
- European Union (25)	3988	10	4120	10
- Germany	971	12	774	9
CIS	342	19	216	21
- Russian Federation	245	18	125	23
Middle East	529	15	318	15
Asia	2773	11	2599	12
- Japan	596	4	516	6
- China	762	25	660	24
- India	90	16	132	21

Memorandum items:

MERCOSUR (4)	163	14	113	5
ASEAN (10)	653	9	593	9
EU (25) extra-trade	1328	11	1460	10

Developing economies	3443	13	3024	12
- Developing Asia	2050	13	1932	13

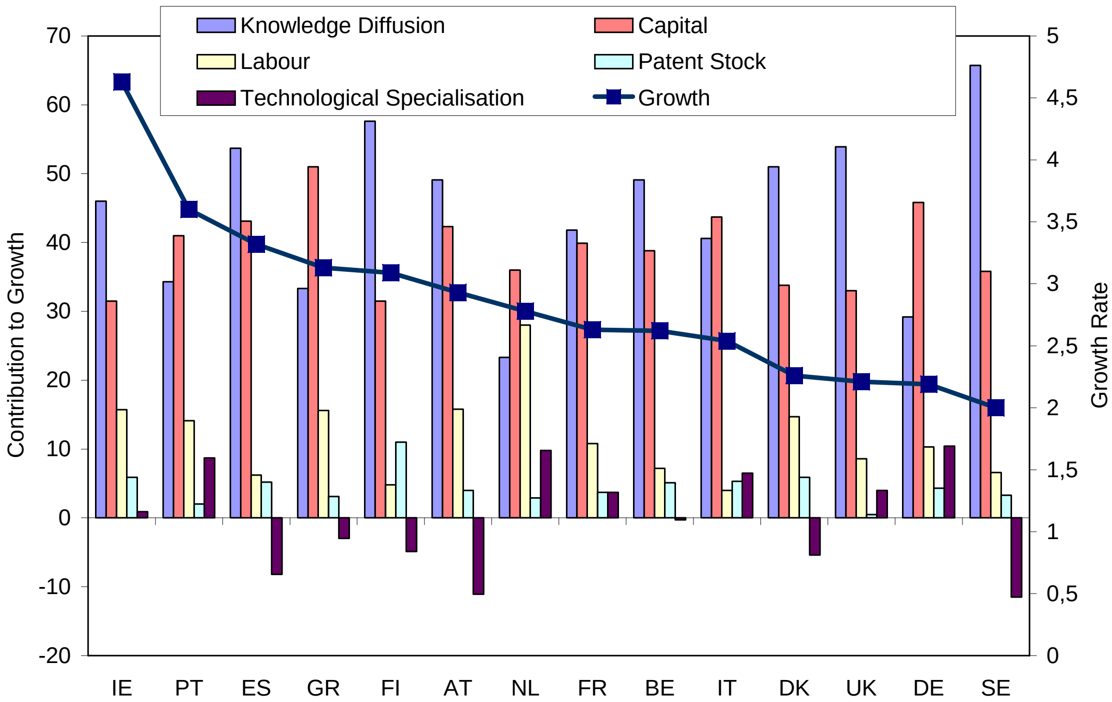
Source: WTO (2006), p. 11

While the statistics suggest that the US global trading position is rather stable while China, ASEAN and EU25 are improving their respective position one may emphasize that the technology balance figures indicate that the US is the world's dominant innovator (its net surplus in the technology balance was 29 bill. in 2004). With the ongoing expansion of multinational companies and the sustained growth of international outsourcing – this stimulates specialization across countries – one may assume that international competition in technology will intensify. With intensified Schumpeterian competition in the world economy the institutional setup for innovation activities is gaining importance. For the EU15 countries a modern growth decomposition analysis shows a triple impact of technology on growth (JUNGMITTAG 2006):

- Growth of patent stocks, reflecting the accumulation of knowledge which can be patented, shows a positive effect on output growth;
- The type of specialization is relevant for growth; there is a high relevance of high-technology specialization (dubbed technological specialization in Figure 2) for several countries;
- Knowledge diffusion also is positively affecting economic growth so that institutions which support effective and efficient diffusion of new knowledge are important for economic growth.

For Germany (DE), France (FR), the UK, Italy (IT), Ireland (IE), Portugal (PT) and the Netherlands (NL) all three technology factors had a positive impact on economic growth in the period 1969-1998.

Figure 2: Decomposition of Economic Growth in Selected EU Countries



Source: Jungmittag, A. (2006)

Therefore, the EU's international competitiveness strongly depends not only on capital formation and labor input but also on technological dynamics. Thus the EU has rightly set the Lisbon Agenda which emphasizes improving international competitiveness in a knowledge-based economy and technological progress, respectively. Institutions and policies which favour Schumpeterian dynamics are particularly important in high wage economies. However, it also is clear that it would be naïve to expect higher innovation dynamics and growth to help cure the EU's main problem of mass unemployment in the large EU countries; there are additional incentives and reforms necessary which can be adopted only at the level of EU member countries, namely labor market reforms and better incentives for education and retraining. The latter is necessary as both EU eastern enlargement and globalization bring about relocation of industry and accelerated structural change in the EU15 countries so that adequate human capital formation is quite important (CASSEL 1998; TILLY and WELFENS 2000).

As the technology factor becomes more important in international competition one may emphasize that intellectual property rights and policy measures which enhance diffusion of knowledge should be carefully considered. From this perspective the global rules set by the WTO in the field of intellectual property rights are quite important on the one hand, on the other hand this field also must be considered as quite important in the context of regional integration. As regards the latter it is noteworthy that the EU has not been able to agree on an EU patent so far; lack of agreement on software patenting also seems to be a problem in the EU. This undermines the innovation dynamics in the EU. Moreover, national economic policy can be quite important in certain technology-intensive fields; e.g. national health policy can affect alternatively important barriers or incentives for innovations in the pharmaceutical sector and thus has a considerable impact on international competitiveness (IGES, CASSEL, WILLE and WIdO 2006, pp. 275-380).

3. Regional Economic Integration and Structural Change

Regional integration dynamics and globalization are overlapping adjustment forces which result in higher trade-GDP ratios and in higher ratios of foreign direct investment to trade. To these dynamics one has to add the role of the internet and hence the role of growing information exchange in the world economy. Information costs and transaction costs have reduced which in turn has stimulated trade in goods and services. The strong fall of international communications costs and digitization have reinforced trade in digital services (WELFENS and JUNGMITTAG 2001, 2002; WELFENS 2002; FREUND and WEINHOLD 2003). From this perspective locational competition and system competition have been reinforced. The internet has become not only a major source of information and communication, it also is obvious that it offers for many services a truly global market. At the same time it has created new opportunities for global outsourcing so that vertical international production networks could gain importance. While outsourcing in industry is one important aspect of international competition one should not overlook that there also is international insourcing, namely that mainly OECD countries – plus India – have attracted long term services contracts with firms all over the world: Digital services increasingly can be exported.

The European Commission has been the driving force in liberalization of telecommunications: Opening up national markets for fixed-line telecommunications the EU has indeed unleashed – supported by adequate national regulation – an enormous progress in telecommunications in the sense that prices have fallen, innovations have mushroomed and thousands of newcomers have entered the market. Ex-monopoly operators have lost market shares in the EU countries, at the same time they have started to invade the respective home market of the main competitors so that there is an enormous intensification of competition. The EU is the world's leader in mobile telecommunications; and digital convergence plus high innovation dynamics in information and communication technology (ICT) have strongly contributed to growth in most EU countries. As regards EU accession countries the Commission has launched specific programs to support digital modernization in Eastern Europe, and for the overall Community the EU has adopted the i2010 project which aims at stimulating the expansion of ICT. One should note that telecommunications is not only important for voice telephony and internet services for private households, rather the more important aspect concerns the fact that digital services are intermediate inputs in all sectors of the economy; and the internationalization of many sectors are shaped by the availability of broadband networks and advanced software.

The implications for economic policymakers are clear: A consistent set of supranational and national rules for telecommunications is important for economic dynamics. Setting adequate incentives for investment and innovation in the telecommunications sector has a special relevance since in a networked economy availability of fast telecommunications networks is a major platform for adjustment in industry – read outsourcing – and also shapes the opportunities in the field of digital trade and services, respectively. A modern economic policy should thus carefully develop institutions and set rules which nurture high innovativeness and sustained competition in the digital sector: The information order is an important element of the overall institutional framework. For high wage countries in the EU this challenge is absolutely crucial with respect to international competitiveness.

As regards structural change we do not only expect a rise of the share of value-added in services and higher services exports in EU15 countries which largely reflect the comparative advantage of high wage countries – particularly Germany, France, the UK and Benelux countries – in technology and skilled labor. According to the *Heckscher-Ohlin-Samuelson* model we expect a rise of trade between EU15 countries and Eastern European accession countries where the latter will specialize strongly in unskilled-labor-intensive goods in the medium term. This effectively implies a higher supply of unskilled labor in Western Europe as imports from Eastern Europe represent embodied unskilled labor in many cases. The fall of relative prices of standardized goods will reinforce in Western Europe the pressure in favor of specializing in fields of knowledge-intensive and technology-intensive products. The high unemployment rates in the large countries of the Euro area could further increase. This challenge will not only occur if interindustrial trade within Europe should expand but also if vertical intra-industrial trade should increase: Intermediate goods production in Eastern Europe will grow – often produced in a labor-intensive way – while Western Europe will specialize on the production of final goods which are human-capital intensive or technology intensive. The accession countries may also hope to benefit from a medium-term expansion of industry as rising per capita incomes in combination with relatively low wages create favourable supply side and demand side conditions for the manufacturing industry. The theoretical analysis of DÖHRN and HEILEMANN (1992) suggests such an adjustment trajectory and the economic developments of the period 1995-2005 indeed are largely in line with such a pattern in Eastern Europe.

As workers in the manufacturing industry in the EU15 countries are more strongly unionized than in the services sector the decline of manufacturing in western Europe might go along with social unrest unless the overall growth rate can be raised so that the aggregate unemployment is stable or falls over time. This also could lead to a revival of economic protectionism in Europe. As the EU is facing rapidly rising imports from Asian countries in several labor-intensive sectors – such as leather, shoes, textiles – there also is some risk that Asia will suffer from European protectionism. At the same time one may emphasize that both US and EU producers of technology-intensive goods have a strong interest to better enforce intellectual property rights in the world economy.

Regional integration in the EU which will consist of 27 countries as of 2007 will remain one of the driving forces of institutional reforms. The EU Single Market naturally reinforces economic competition in Europe and to some extent can nurture improved global competitiveness: e.g. with Porsche assembling of one of its cars in Leipzig in Eastern Germany – while importing the body from the Slovak Republic – the famous car manufacturer can improve its price competitiveness in global markets. In a triangular trade perspective some sectors thus stand to benefit from regional integration and EU eastern enlargement, respectively: all those sectors which are strong exporters to North America and Asia should benefit from similar intra-regional outsourcing dynamics. Other tradeable sectors facing intensified global competition will have to shrink or upgrade production and raise productivity simultaneously. As regards relatively new sectors – such as biotechnology and nanotechnology – Germany is well positioned only to some extent; while expansion in infant technology-intensive sectors takes many years it is obvious that there should be high long term growth prospects provided that innovation dynamics, human capital formation and provision of venture capital are organized in a consistent way. The EU has emphasized in the Lisbon Agenda that member countries should raise the ratio of R&D expenditures to GDP to 3% by 2010, but all large EU countries are behind this target ratio. Sweden with a ratio of 4% is the over-achiever in this field.

Put simply, the EU27 countries are facing serious policy challenges. In the EU accession countries institutional settings will have to be brought fully in line with the Acquis Communautaire, the set of political and economical EU rules relevant for all member countries. High wage countries in the Euro area – facing since 1999 the new constraints of a common currency and the European Central Bank's monetary policy strategy plus the rules of the Stability and Growth Pact – face considerable problems in labor market reforms, in the field of innovation dynamics and modernization of the telecommunications sector. As regards the latter it is interesting to note that Scandinavian countries and The Netherlands typically show superior indicators in many fields. It seems that small open economies often are faster in recognizing new economic opportunities. For the Federal Republic of Germany as a large economy – even larger after unification – there is a broad challenge to seriously not only discuss reform opportunities and requirements more intensively, but to also study the lessons from successful EU partner countries. While adjustments in social security reforms and labor markets have been adopted in Germany in the decade after 1997 one may emphasize that the interplay of globalization and regional integration dynamics raise the required speed of institutional reforms and policy innovations (APOLTE 2006). For Germany as a traditional co-leader in EU politics – jointly with France - there also remains the challenge to seize the opportunity of

Germany's EU presidency in the first half of 2007 to push for more consistent reform efforts also at the EU level. It will be interesting to see whether e.g. in the field of EU banking supervision and EU technology policy (this naturally must include a strong emphasis on information and communication technology) the German presidency will be able to generate new momentum.

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