



Bruges European Economic Policy Briefings

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A 'Triple-I' Strategy for the Future of Europe

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BEEP briefing n°10

January 2005

*Inaugural lecture as 'Toyota Chair for Industry and Sustainability'
at the College of Europe,
Brussels, October 13, 2004 (revised for publication)*

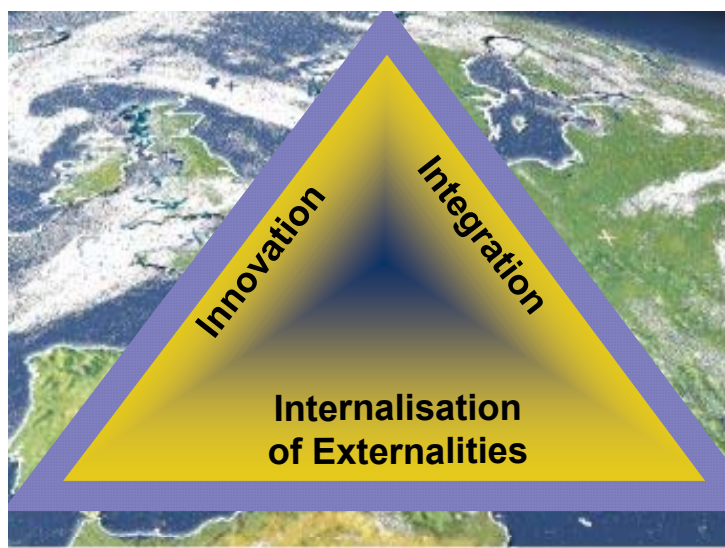
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Abstract

The paper lays down a strategy consisting of Innovation, Internalisation of Externalities, and Integration – called *Triple I*. ‘Innovation’ is seen along value chain management in a systems perspective, driven by competition and participation of stakeholders. ‘Internalisation’ refers to endogenous efforts by industry to assess externalities and to foster knowledge generation that leads to benefits for both business and society. ‘Integration’ highlights the role business and its various forms of cooperation might play in policy integration within Europe and beyond. Looking forward towards measures to be taken, the paper explores some frontiers for a partnership between public and private sector: i) Increasing resource productivity, lowering material cost, ii) Energy integration with Southeast Europe and Northern Africa, iii) Urban mobility services and public transport, iv) Tradable emission permits beyond Europe. Finally, some conclusions from the perspective of the College of Europe are drawn.

JEL-Codes: D62, F15, L51, O31

Key words: Innovation, Internalisation of Externalities, Integration, Europe



A 'Triple-I' Strategy for the Future of Europe

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1. Introduction

More than perhaps in the previous years Europe stands at a crossroads. Major factors underlying this observation can be seen in the recent process of integrating ten new Member States, in the upcoming effort to revise the Lisbon-Agenda of revitalising competitiveness and sustainable growth in Europe, and – last but not least – in the ongoing struggle to deal with climate change and other environmental concerns.

This paper has emerged from my inaugural lecture. It will lay down what is called a Triple-I Strategy for the future of Europe. Triple-I refers to

- Innovation,
- Internalisation of externalities,
- Integration.

These Triple-Is can obviously be linked to the challenges mentioned above: Innovation evidently spurs competitiveness and growth, Internalisation is a basic principle of environmental policy, and Integration continues to be essential for markets, policies and societies.

The question is: do these three elements fit together? Can they merge to a common platform for further progress? Or are they better treated separately, in order to exploit synergies within certain approaches rather than through combining them? The thesis of our paper is straightforward: A Triple-I strategy not only can be formulated based upon recent research findings – it is also urgently needed for the future of Europe. Innovation, seen from our

perspective, entails positive feedbacks for environmental policies and integration. Internalisation of externalities can – at least partly – be done at a profit at the level of individual firms. Integration is a challenge not only for heads of state and governments, but essentially a task for business cooperation and stakeholder dialogues.

Such perspective blurs the borderline between markets and states. Our Triple-I strategy rather calls for a co-evolving governance structure where citizens and business actors play a vital role.¹ One may remind French philosopher Montesquieu in that regard: “The spirit of a legislator ought to be that of moderation”.²

The present paper will give an academic underpinning for our thesis. After referring to some facts in the next section the third section will discuss recent findings on innovation in Europe. These findings will be linked to internalisation strategies seen from an industry perspective in section four. Integration will be analysed from a micro-perspective in section five. A concluding section elaborates on what possible Triple-I approaches might be useful for the future of Europe.

2. A few Background Facts for Triple-I

Compared with other leading OECD countries, Europe is lagging behind in many economic terms. Since 2000, average growth rates have slowed appreciably and innovation efforts are stagnating. The recent survey on innovation in Europe reveals that only some 44 % of enterprises can be regarded as innovative while some 56 % have not undertaken any innovation activity in the past few years.³ Such vast differences are also visible among member states. The Scandinavian states perform rather well whereas the traditional axes between France, Germany and Italy seem unable to spur innovation and growth in Europe. Because of that hampering development, the Lisbon-process attempts to revitalize European competitiveness within the next few years. The recent ‘Sapir-report and ‘Kok-report’

¹ See for a more rigorous analysis: Bleischwitz, R. (2004), Governance of Sustainable Development: Co-Evolution of Political and Corporate Strategies, in: International Journal of Sustainable Development, Vol. 7, No. 1, pp. 27 - 43.

² Montesquieu (1952) The Spirit of Laws, Book XXIX, [1748] William Benton Publisher Chicago et al., p. 262. The academic year 2004/05 at the College of Europe is under the promotion of Montesquieu.

³ CEC/Eurostat (2004), Innovation in Europe: Third Community innovation survey, Luxembourg, p. 18; see for a definition *ibid.* p. 11. See also Commission staff working paper (2003) European Innovation scoreboard, SEC (2003) 1255; OECD (2002) Science, technology and industry outlook, Paris.

formulate proposals on how economic growth can be enhanced.⁴ For economic growth to increase, the Lisbon process will particularly have to look at how trans-national policy learning and diffusion processes can be enhanced. This is the economic background for Triple-I.

Table 1: Typology of Innovators, EU 1998-2000

	Number of enterprises (thousands)	Proportion (%)
Enterprises with innovation activity	201	44
Successful innovators	186	41
Product only innovators	47	10
Process only innovators	32	7
Product and process innovators	106	23
Enterprises with only ongoing and/or abandoned innovation activity	15	3
Enterprises without innovation activity	256	56
Total	458	100

Source: CEC/Eurostat (2004), Innovation in Europe: Third Community innovation survey, Luxembourg, p. 18.

Looking at Europe from a social perspective, current income and employment disparities pose an additional challenge.⁵ Though income and employment disparities could be narrowed in EU15 in the past decade, the new Member States now widen them. Average GDP per capita in Central Europe is under half the average in former EU. According to Sinn (2004: 410), the wage differentials between e.g. Germany and Lithuania are about 10:1.⁶ If Bulgaria, Rumania and, perhaps, Turkey were to join the Union, the situation becomes even more challenging, leading to migration and new tensions between the golden triangle in Mid-Europe and the more peripheral regions. The ageing of the population gives added importance to long-term integration policies.

⁴ Sapir, A. et al. (2003), An Agenda for a Growing Europe: Making the EU System Deliver, Report of an Independent High Level Group established at the initiative of the President of the European Commission, Brussels. See for a discussion of the Sapir-report Pelkmans/Casey 2004, Can Europe deliver growth? The Sapir Report and Beyond, CEPS/CoE. Kok, W. (2004), Facing the Challenge - The Lisbon Strategy for Growth and Employment. Report from the High Level Group chaired by W. Kok, Brussels.

⁵ CEC, Third report on economic and social cohesion, February 2004, COM(2004) 107 final; Commission staff working paper (2004), The social situation in the European Union, Brussels, SEC(2004) 636.

⁶ Measured as average cost of a working hour in manufacturing industry and services in 2000, including social security system fees; wage differentials between e.g. Eastern Germany and Poland are in the order of 4 : 1; see. Sinn. H.-W. (2004), Ist Deutschland noch zu retten?, München (Econ).

Table 2: GDP per capita in selected EU 15 Member States

Member State	GDP
EL	67
PT	71
DE	100
SE	106
BE	107
DK	115
LU	194

GDP per capita in PPS in relation to the average of the EU-15 in 2001.

Source: European Commission, The EU economy 2004, ECFIN (2004) REP 50455-EN, p. 94.

The state of the environment in Europe creates further challenges. Despite some success in the areas of cleaner water and air, there are clouds on the horizon. A recent report by the European Environment Agency⁷ describes how exposed and vulnerable European societies are when climate change occurs. Most people well remember recent heat waves and flooding catastrophes. Those events are likely to multiply when ocean's surface temperatures and weather extremes increase. How the European natural heritage can adapt to these rapid changes is hard to predict. There is no comprehensive experience from human history able to teach societies what they might expect. This high-risk situation is just one reason why the environmental dimension should not be overlooked when economic and social issues are addressed.

Box 1: Selected impacts of Europe's changing climate

Economic losses resulting from weather and climate related events have increased significantly during the past 20 years, from an annual average of less than USD 5 billion to about USD 11 billion. This is due to wealth increase and more frequent events. Four out of the five years with the largest economic losses in this period have occurred since 1997.

More than 20 000 excess deaths attributable to heat, particularly among the aged population, occurred in western and southern Europe during the summer of 2003. Heat-waves are projected to become more frequent and more intense during the twenty-first century and hence the number of excess deaths due to heat is projected to increase in the future.

It is very likely that the glacier retreat will continue. By 2050, about 75 % of the glaciers in the Swiss Alps are likely to have disappeared.

⁷ EEA (2004), Impact of Europe's changing climate. An indicator-based assessment, Copenhagen. See also EEA state of the environment report and RIVM (2004), Outstanding Environmental Issues. A Review of the EU's Environmental Agenda, Amsterdam.

The projected rate of sea level rise between 1990 and 2100 is 2.2 to 4.4 times higher than the rate in the twentieth century, and sea level is projected to continue to rise for centuries.

Bad harvests could become more common due to an increase in the frequency of extreme weather events (droughts, floods, storms, hail) and pests and diseases.

Source: EEA (2004), Impact of Europe's changing climate. An indicator-based assessment, Copenhagen.

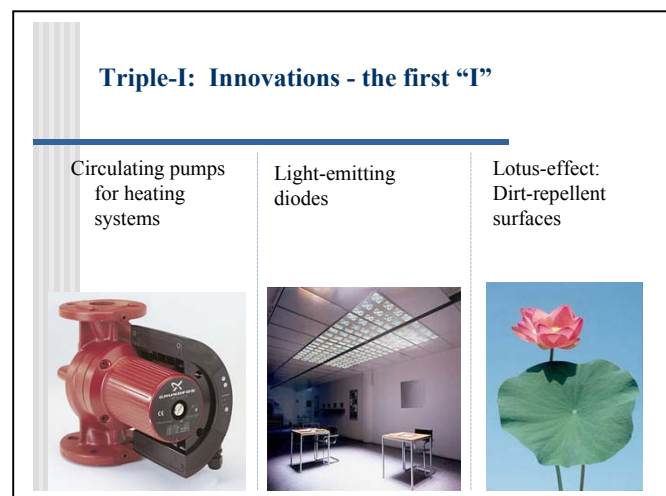
Our Triple-I strategy refers to these background facts by formulating opportunities for business, society and policies that simultaneously address the challenges ahead.

3. Innovation – the first “I”

Firms pursue innovation when they see some opportunity for profit at the horizon. The forms of innovation differ. An innovation can take the course of incremental changes where just a few parameters of a production process or of a good are improved. It can also take the course of a more radical change when new inventions allow for new basic materials or processing technologies.

Bearing in mind the proposition of significantly reducing environmental pressure while doing good business on competitive markets one can illustrate the first “I” with a few examples:⁸

- Circulating pump for heating systems
- Light emitting diodes for general lighting
- Dirt-repellent surfaces with ‘lotus effect’



⁸ See www.faktor4.org, a website by the Wuppertal Institute on eco-efficient innovations or www.faktor-x.info, a website by the Aachener Foundation. See also e.g. Weizsaecker/Lovins/Lovins (1997), Factor Four, Earthscan.

Looking at these examples, however, one can add that those examples are abundant – they are not isolated. Dutch, Swedish and German research programmes have collected numerous examples illustrating our viewpoint.⁹ Interesting for the purpose of our strategy is whether there can be a path of sustainable technology development pursued by firms for their *own* sake and whether those efforts foster integration in Europe rather than deepen existing technology gaps.

The interesting thing about these innovations is that they have not been explicitly invented as environmental technologies. Environmental benefits are rather a by-product. Most benefits emerge from cost-savings, from a smart design and from new markets. A closer look reveals that abatement costs, usually assumed to be high, can be lowered via strategic R&D and via comprehensive management over the whole value chain. Management, leadership and entrepreneurial spirit certainly are important forces for any innovation process.¹⁰

Seen from such a perspective, European integration is deepened through value chain management and forms of participation. Innovating firms depend upon cooperation with their suppliers. They also need to know what customers' and consumers' desires and wishes may look like in the next years to come. The cultural diversity of Europe as well as the heterogeneous preferences of its various societies can thus be seen as a wellspring of new discoveries.

There is an area where innovation potentials seem to be underestimated. A large, if not the largest share of life-cycle costs for manufacturing industries stems from materials – not from labour costs or taxes. German Federal Statistical Office calculates that materials cost mount up to some 43 % of overall cost in manufacturing industry.¹¹ Reducing these costs strategically is justified not only for reasons of cost savings. It might also have advantages in terms of international security, because resource scarcity has become an issue. It might also

⁹ See for Germany the so-called 'INA'-programme by the Federal Research Ministry, www.fona.de; for The Netherlands Weaver, P. et al. (2000), Sustainable Technology Development, Sheffield/UK (Greenleaf Publishers); for Sweden the 'Ecocycle'-programme, e.g. Swedish Environmental Protection Agency (2000), Dematerialisation and Factor 10. AFR-Report 240. Stockholm or www.mvb.gov.se.

¹⁰ v. Dijken, K. et al. (eds.) (1999) Adoption of Environmental Innovations. The Dynamics of Innovation as Interplay between Business Competence, Environmental Orientation and Network Involvement, Dordrecht (Kluwer); Schaltegger, S. / Burritt, R. / Petersen, H. (2003) An Introduction to Corporate Environmental Management. Striving for Sustainability, Sheffield (Greenleaf).

¹¹ Statistisches Bundesamt (2003), Statistisches Jahrbuch 2002, Bonn, p. 189.

offer opportunities for growth and employment if investments lay off materials rather than humans. Tentative econometric modelling results reveal positive effects given the assumption of 10 % material savings by the year 2015.¹²

Table 3: Macro-economic effects of reducing material inputs in Germany by 2015

Variable	Effect
Consumer prices	- 3,25
Labour productivity	7,37
GDP	9,37
Exports	0,71
Imports	- 3,16
Employment performance	760,000

Estimated with the INFORGE-Model from Osnabrück University, Scenario “Wage Competition”; calculations in relation to business as usual scenario.

Source: Meyer et al. (Fn. 11), p. 253.

In addition, some basic innovations like the emerging hydrogen economy in Europe could open further windows of opportunity for our Triple-I strategy. Hydrogen would not only lower world market dependencies, but could be produced on a renewable basis in the peripheral regions of Europe, thus addressing social and environmental challenges simultaneously.¹³

One can now draw some tentative conclusions: Our thoughts on innovation complement the Lisbon-strategy. They not only rest upon business, but also on innovative networks of firms and regions as well as on their horizontal coordination across sectors. Seen in such a context, innovation and diffusion processes yield additional positive side effects for a European civil society. Innovation policy surely is a legitimate task for the European Union. The recent attempts to reform business conditions in Europe should be maintained and strengthened.¹⁴

¹² Meyer, B. et al. (2004), Wachstums- und Beschäftigungsimpulse rentabler Materialeinsparungen, in: HWWA-Wirtschaftsdienst, H. 4, pp. 247 – 254.

¹³ In June 2004, we organized a conference on a possible hydrogen economy in Europe at the College of Europe. The proceedings and a special issue on hydrogen in the journal ‘Energy Policy’ are under review. See the presentations at www.coleurop.be.

¹⁴ World Bank and International Finance Corporation (2004) Doing Business in 2005: Removing Obstacles to Growth, Washington D.C. The report singles out the EU as the busiest reformer, referring to indicators such as simplicity of starting a company, enforcing contracts, obtaining finance, protecting investors. See also the World Competitiveness Report by the World Economic Council, which includes indicators on legal and political matters.

4. Internalisation of externalities – the second “I”

Concerning externalities like environmental degradation, our Triple-I strategy rests upon a shift in the notion of the firm in the recent academic debate. The well-known principle of internalisation of externalities as a task for states clearly can be traced back to the purpose of profit seeking through externalising costs and through free-riding. The more recent debate now refers to what Harold Demsetz¹⁵ calls an ‘informational revolution’ in the analysis of firms. Firms can be assumed to act under uncertainties and information deficits. They rely on permanent knowledge generation provided by outside sources, experiments, and internal implementation processes. Firms can also create markets from scratch, by coordinating with others along vertical or horizontal lines. In doing so, firms *need* to establish communication with stakeholders in order to learn about changing demand, developing useful goods and services, and in order to avoid stunning blows of hostile reaction.

Because of that processes there are more business opportunities in new markets than previously assumed chiefly for two reasons. First, there is willingness to pay for the provision of goods and services associated with positive side effects, such as clean water. Second, firms can gain competitive advantages by superior market knowledge and that can in the modern world include familiarity with the changing aspirations of post-materialist international clients.

On the first point, examples other than the provision of drinking water include the provision of energy efficient goods, fuel-efficient cars, insulation in buildings and related fancy equipment, or the organisation of car sharing among neighbours.¹⁶ The European “EnergyPlus” network for energy-efficient electric appliances is a further illustration for that point. Many firms develop product-service-systems in relation to their customers (mainly B2B), thus having an incentive for producing durable and high-quality goods.¹⁷ Yet other firms engage in value chain management so as to keep costs at a minimum throughout the

¹⁵ Demsetz, H. (1997) The Firm in Economic Theory: A Quiet Revolution, in: American Economic Review, Vol. 87, No. 2, pp. 426 – 429. See also Nonaka, I.; Toyama, R. (2002) ‘A firm as a dialectical being: towards a dynamic theory of a firm’, in: Industrial and Corporate Change, Vol. 11, No. 5, pp. 995 – 1009. See also the economic discussion in Nelson, R. (2002) ‘The problem of market bias in modern capitalist economies’, in: Industrial and Corporate Change, Vol. 11, No. 2, pp. 207 – 244.

¹⁶ Wubben, E.F.M. (Editor) 2000. The Dynamics of the Eco-Efficient Economy. Environmental Regulation and Competitive Advantage. Edward Elgar, Cheltenham/Northampton.

¹⁷ Mont/Lindquist (2003) The Role of Public Policy in Advancing Product-Service Systems, in: Journal of Cleaner Production, Vol. 11, pp. 904-915.

entire production chain while maintaining high social and environmental standards, - and “sell” this asset to certain clients.

On the second point, one can observe firms advancing new goods and participating with stakeholders in the evolution of new markets. Their intention is to gain learning advantages and to benefit from shorter adaptation times. Some trans-national companies (TNC’s) including chemical company BASF and the oil companies BP and Shell have started to learn from failures made during their “dirty times”. These companies now try to create new markets such as solar energy, hydrogen and new materials that relieve environmental pressure. They act in part as knowledge-based firms, combining the value-adding activities of manufacturing and services. They also communicate intensively with stakeholders from various societal groups. Japanese electronic company Matsushita Inc., for instance, has calculated both the negative externalities of their production processes as well as benefits from internalisation strategies.¹⁸

Internalisation strategies...e.g. Matsushita Group’s Environmental Accounting

In-house Economic Benefits (Unit: Mln yen)				Environmental Conservation Benefits (in physical values)		Environmental Conservation Benefits (In monetary values: Unit: Mln yen)	
Category		1-year effect	3-year accumulated	Category	Reduced amount (tons)		
Reduction effects	Reduction of energy conservation costs at business units	2,085	6,813	Environmental conservation effects in business activities	CO ₂ emissions	212	
	Reduction of waste disposal costs	598	1,680		GHG emissions (CO ₂ excluded)	-1,307	
	Reduction of water and sewerage costs	139	572		NOx emissions (Japan)	45	
	Reduction of packaging materials and distribution costs	1,000	2,864		SOx emissions (Japan)	7	
Profit on sales of resources for recycling	Profit on the sales of waste from plants for recycling	4,130 (1-year)			Controlled chemical substance emissions (Japan)	2	
	Profit on the sales of end-of-life products for recycling	291(1-year)			Final disposal of industrial waste	—	
Total		8,243	16,350		Water use	1.45 mil m ³	52
				Environmental conservation effects during product use	CO ₂ emissions ⁴⁾	606,000	
					Japan Packaging materials use	2,380	5,727
					Corrugated cardboard Expanded polystyrene	-237	—
						Total 4,738	

3) **Monetary conversion coefficients (yen/ton):**
 CO₂, 9,450; NOx, 66,315; Sox, 50,159;
 VOC, 50,090; ground water, 36;
 electricity, 23. (yen/kWh)

4) **Reduction in CO₂ and electricity costs during product use**
 are calculated based on figures of four major home appliances
 (TVs, refrigerators, air conditioners, washing machines).

Customer Economic Benefits (Unit: Mln yen)		
	Electricity	Cost
Reduction in electricity costs during product use	1,603.2 Mln kWh	36,874

¹⁸ S. Imai (2004), Matsushita Electric’s Environmental Sustainability Management, in: Bleischwitz/Kanda (Eds.), Governance of Markets for Sustainability, Japanese German Centre Berlin (Judicium Publisher), pp. 64ff.

What the giants can do is also feasible for small and medium-sized firms.¹⁹ They often have more flexibility to act as knowledge-based firms and innovators. They also can foster diffusion processes insofar as they adapt new technologies and create new products and services. Without overestimating their impact one can state that SME's are a backbone of any strategy aiming at innovation, internalisation and integration.

The case of eco-efficiency seems to demonstrate that a market evolution for certain collective goods is actually taking place. Climate protection has moved up the public agenda. Correspondingly, goods and services offering the same quality at less negative climate impact have gained ground. Also, acceptance has grown for policy measures penalizing the wasteful use of energy. Germany has experienced a reduction of some 15 % in petrol consumption in four consecutive years since 1999, and that without reduced mobility. The reason can be traced back to be a mixture of climate concerns, rising crude oil prices, eco-taxes, and the automobile industry's ability to provide more fuel efficient cars. In a similar manner, markets for renewable energies are soaring, as a reaction in part to public policy measures (internalising parts of negative externalities via remuneration fees)²⁰ and to consumer demand - and the relevant industries swiftly respond.

Of course, there is an intense debate going on about the phenomenon of "green-washing", which is often associated with such communication strategies and with participation in clubs such as the 'Global Compact' or the 'World Business Council for Sustainable Development' (WBCSD) that publicly adhere to ethical or ecological principles. Our point here is that even firms honestly adhering themselves to noble principles can commercially benefit from it, at least by improved customer relations and staff motivation – and (possibly) in terms of market share, reputation, and risk-avoidance.

Our conclusions are as follows: Internalisation strategies can – at least partly - be pursued at the level of firms and consumers. Signalling and communication strategies from those market pioneers are at least as important as directives or taxes. Policy responses therefore should try

¹⁹ Langlois, R. N. / Robertson, P. L. (1995): *Firms, Markets, and Economic Change: A Dynamic Theory of Business Institutions*, London (Routledge). See also CEC/Eurostat, *Innovation in Europe: Third Community innovation survey*, Luxembourg 2004, p. 36ff. showing that SME's hold a significant share in innovation activities.

²⁰ Assmann et al. in: Bleischwitz, R. /Hennicke, P. (2004), *Eco-Efficiency, Regulation and Sustainable Business*, Cheltenham/Northampton (Edward Elgar), pp. 69ff.

to enable those forces by setting appropriate incentives, and not to crowd them out.²¹ Emerging European policy tools such as the 'open method of coordination', the 'economic policy guidelines' and the 'regulatory impact assessment' can also be applied within such a strategy.

5. Integration – The third pillar of “Triple I”

Integration has many faces. Preponderant, of course, is market integration and monetary integration in the euro zone. In addition, one can refer to income disparities, technology gaps, policy inconsistencies, clashes among cultures, etc.²² Certainly it is easier calling for integration than realizing it. In our view it is perhaps most important to free integration from a purely political perspective. Without market integration and without a coming-together at the grassroots of society there would be no European integration at all.

The Bruges-based 'Huis ter Beurze' may help to illustrate the historic evidence of our view. In the early 14th Century in Bruges, a brave tradesman named 'Beurze' started to bring together his colleagues and competitors from all over Europe in order to facilitate transactions for the different goods. Historians tell us that this is how stock markets emerged – driven by individual initiative, aiming for marked integration and in parallel to the emergence of political constitutions!

Our Triple-I strategy primarily calls for integration through industry and citizens, enabled by legal and political incentives. This may contain the following elements:²³

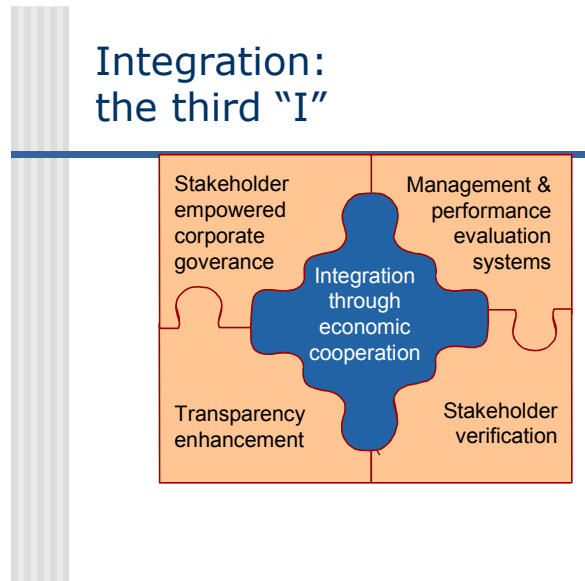
1. Stakeholder empowered corporate governance;
2. Management and performance evaluation systems;
3. Transparency enhancement;

²¹ The „crowding out“ effect has been analysed by Bruno Frey in the areas of social and environmental policies where governmental action may undermine civil or voluntary activities. See: Frey, B. (1997), *Not just for the Money. An Economic Theory of Personal Motivation*, Cheltenham/Northampton (Edward Elgar); Frey, B. / Osterloh, M. (Eds.) (2002), *Successful Management by Motivation. Balancing Intrinsic and Extrinsic Incentives*, Berlin et al. (Springer).

²² See from an economic perspective: Pelkmans, J. (2001), *European Integration. Methods and Economic Analysis*, Essex (Pearson); from an historian perspective: Gillingham, J. (2003), *European Integration 1950 – 2003. Superstate or New Market Economy?* Cambridge University Press; from a political science perspective: Wessels, W. (1997), *An ever Closing Fusion?*, *Journal of Common Market Studies*, Vol. 35 (2), pp. 267-299.

²³ See Kuhndt et al. (2004), *Responsible Corporate Governance. An overview of trends, initiatives and state-of-the-art elements*, WI-paper 139, Wuppertal Institute; Doppelt, B. (2003), *Leading Change towards Sustainability. A Change-Management Guide for Business, Government and Civil Society*, Sheffield (Greenleaf Publisher), pp. 185ff.

4. Stakeholder verification.



Commitments for stakeholder dialogues usually take concrete forms by the setting-up of 'management systems' and 'performance evaluation systems', which are about integrating demands into daily business routines. Management systems are required to review the priority action areas and to develop goals for environmental, social and economic bottom line improvements. They compile relevant tools or instruments to reach set goals, develop routines and action plans. Furthermore, evaluation systems assign responsibilities to business units, departments and personnel and, finally, review the performance of these systems.

Transparency is about the readiness of each business unit of the cooperation to reveal information on their activities. 'Transparency enhancement' aims at a healthy set-up of informal institutions among the societal actors. TNCs can make use of a diverse range of information disclosure instruments such as preparing corporate reports (e.g. so called sustainability reports beyond financial reporting), compiling site reports (e.g. pollutant release and transfer registries), making environmental product declarations (e.g. Type I, II and III eco-labelling schemes). TNCs can also take part in sustainability indices (e.g. Business in the Community) or in internationally binding or voluntary transparency agreements (e.g. Aarhus Convention, Extractive Industries Transparency Scheme).

Finally, 'accountability verification' is undertaken to further enhance the capabilities both inside a firm and in relation to the stakeholders. Transparency is not sufficient to build a

credible environment, since it indicates a one-way process. Another contribution to learning and integration is that industry communicates on its quality and social responsibility with the help of certain schemes. Accountability verification can be conducted as independent audits.

Different bodies can conduct such audits:

- Multi-jurisdictional authorities (e.g. AccountAbility),
- Financial auditing companies, by sustainability indexes, (e.g. Dow Jones Sustainability Indexes) or
- Local stakeholders such as NGOs, trade unions (e.g. Social Observatory in Brazil).

Industry can gain from those exercises in terms of reputation and improved customer relationships. They also can speed up innovation processes.

Europe, which perhaps suffers from mistrust of democracy²⁴, certainly would profit from such efforts. In a modern jargon one may call it 'Democracy Reloaded' – but it essentially revitalizes traditional European figures such as the 'citoyen' and the 'bourgeois'.

Nevertheless, those market-driven integration strategies are not an easy task. They may sharpen existing conflicts between "big business", its suppliers and its customers, in particular in the new Member States where rules for market transactions are not yet fully established or part of routine. But they map well into the determinants of capacity building and they reduce the risks incumbent in political implementation of the 'acquis communautaire'.

Looking at such integration from a wider perspective one may also see advantages beyond Europe. After all, democracy and economic progress are intimately linked – Dan Rodrik²⁵ has done a sound econometric analysis underpinning this thesis which is also essential for the future of Europe and its role in the world.

Our conclusion is indeed not that policy makers can relax and wait for integration emerging through voluntary action and institutional change driven by market participants. Rather, it calls for legal incentives to enable networks to develop between industry and citizens.

²⁴ See e.g. the Round Table report „Building a Political Europe: Abridged Sustainability Version“, chaired by Dominique Strauss-Kahn (April 2004, p. 51).

²⁵ Rodrik, D. (2000), Participatory Politics, Social Cooperation, and Economic Stability, in: American Economic Review, Vol. 90, No. 2, pp. 140 – 144. See also the analysis on the interaction between economic development, informal and formal institutions in: Ahrens, J. (2002), Governance and Economic Development. A Comparative Institutional Approach, Cheltenham / Northampton (Edward Elgar); Mantzavinos, C. (2001), Individuals, Institutions, and Markets, Cambridge MA (Cambridge University Press).

Extended producer responsibility as well as the harmonisation of reporting requirements, indicators and measurement schemes are a few approaches where policies are helpful. Our conclusion also reminds us about the necessity of further reforms of the Common Agriculture Policy and regional policies.²⁶ But the basic message remains: integration takes place at the grassroots of firms and society.

6. Some Thoughts on the Future of Europe

Europeans can still be very pleased with the achievements made during recent decades.²⁷ Politically speaking, Europe does offer an alternative to the 'Mc Donald' capitalism of the United States, the disgraceful 'cowboy' capitalism of Russia, the despotic Puritanism of the Arabian World and the rampant corruption existing in so many parts of the world. Because of its social stability, cultural diversity and never-ending coordination, Europe is a beacon of light and hope. Despite all debates and differences, the place of the European Union in the world continues to be an outstanding example for attempts at regional integration – this is, indeed, a challenging place. The European Constitution, which has emerged out of many years of conflicting views, will hopefully give these developments an additional impulse.

Our Triple-I strategy, nevertheless, allows for a few thoughts on the Future of Europe where business opportunities meet societal change and political strategies. There is no evidence for any “end of history” as Francis Fukuyama once proposed. Europe can do better. Taking into account various recent documents on sustainability,²⁸ the following frontiers can be pointed out here:

Increasing resource productivity, lowering material costs

Despite a need for individual assessments of natural resources, it seems wise to develop a strategy for increasing resource productivity. The aim of decoupling resource use from

²⁶ Not to mention the 'Cardiff-Process' of policy integration which now has submerged into the Lisbon agenda and was weakly organized.

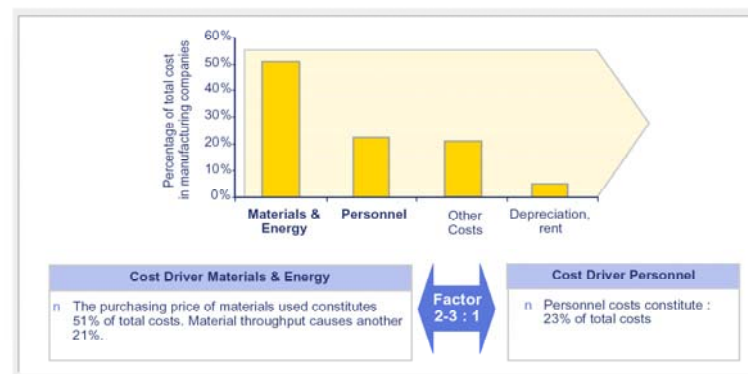
²⁷ The following section is adapted from Coffey, J. (2003), *The Future of Europe revisited*, p. (122) See also Schwimmer, W. (2004), *The European Dream*, London/New York (Continuum Publ.).

²⁸ CEC, Communications from the Commission to the Council and the European Parliament: (1) *Environment Policy Review*, Com(2003) 745 final; (2) *Stimulating Technologies for Sustainable Development: An Environmental Technologies Action Plan for the European Union*, Com(2004) 38 final; (3) *Towards a Thematic Strategy on the Sustainable Use of Natural Resources* COM(2003) 572 final.

economic growth is already well established, e.g. in the Lisbon process. Additional targets for increasing resource productivity can now accomplish this: e.g. doubling resource productivity by the year 2020. Such a target goes beyond the recommendations e.g. from the Kok-report (2004: 35f). But they help to reconcile long-term orientation and to adjust short-term lack of business attention. In setting targets, harmonized measurement methodologies are at least as crucial as legally binding commitments. One should also look at possible burden shifting to developing countries if, for instance, extracting processes are not accounted for. Nevertheless, opportunities are huge when natural resources and materials become an engine of future productivity growth. A European programme of training and learning for increasing resource productivity would – in my view – boost competitiveness of firms and regions alike.

A Possible Future Innovation Path: Material Productivity

Material throughput is a key driver the life cycle costs of products



Energy Integration with Southeast Europe and Northern Africa

Beyond the need to increase energy efficiency and the share of renewable energies within EU Member States, it is suggested to establishing a strategic energy partnership with Southeast Europe and North Africa.²⁹ For the EU, this would be more than a step towards deploying

²⁹ German Advisory Council on Global Change (2004), Renewable Energies for Sustainable Development: Impulses for 'Renewables 2004', Policy Paper 3, Berlin.

climate-relevant volumes of renewable energies; it would also be a step towards integration and renew ties with the cradle of its civilisation.

The partnership might include

- Planning and tendering a large-scale photovoltaic power plant, a large scale solar thermal power plant, and a large-scale wind farm, the energy from which can also be used to produce hydrogen;
- Planning and tendering a North-African interconnected transmission line;
- Establishing a European liaison office for domestic project partners and European investors.

Urban mobility services and public transport

The majority of Europeans live in urban areas. The new member countries have a special need for improving urban public transport systems. This goes well beyond the clean and energy-efficient cars sold by automobile companies, because it aims towards car-related mobility services. In such service systems such as professionally organised car sharing, car manufacturers might be able to test more durable and new types of cars, thereby giving quality signals to the market and learning about consumer preferences; cooperation with car rental firms also contributes to such market evolution.³⁰ Public-private partnerships (PPP) should be strengthened in combining individual mobility with public transport. This certainly has a technological component (see e.g. the European CUTE-Project where hydrogen buses are tested). But it also essentially means new forms of mobility management, mobility services (e.g. leasing cars on demand), information platforms for car sharing, etc. Lessons from PPP policies in UK, France and Finland suggest that PPP works best if there is an explicit policy commitment by national governments to involve the private sector.³¹ In the New Member States such policies are also motivated by the huge financial amount necessary for transport infrastructure – which could be lowered by efforts to reduce the number of idle cars and cars on the road, thereby making the individual car more attractive. Also the

³⁰ Mont, O. (2004), Institutionalisation of sustainable consumption patterns based on shared use, in: *Ecological Economics* 50, pp. 135– 153.

³¹ CEC, Third report on economic and social cohesion, February 2004, COM(2004) 107 final, pp. 150f.

experience by the European Investment Bank (EIB) is useful in finding PPP opportunities in urban mobility.

Tradable emission permits in and beyond Europe

The current beginning of trading emission permits can be seen as a major step towards an economic integration of environmental policy.³² Industry does not have an unanimous view on this system – but its introduction was triggered by one major oil company (BP). Further business action may help to integrate Russia in 2008 and – likely later on – the US in any climate policy regime (be it the Kyoto Protocol, any amendment to it, or a different approach). Transnational companies, including their local suppliers, can start to monitor and manage greenhouse gas emissions from their industrial sites beyond the European bubble. In doing so, they will keep an eye on potential cost savings in the use of fossil fuels. Such management efforts can also be undertaken in sectors such as chemicals, aluminium, steel, pulp and paper, etc. where emission trading is not yet fully in place or where the national allocation plans within EU Member States differ. A few transnational companies can also set up a club where emissions are monitored, and trading could be undertaken later on beyond the border of the Kyoto reduction regime. Indeed, the cost differentials to competitors notably in the US or in Far East should be taken into account and call for a step-by-step approach in line with any action. Once more one may quote Montesquieu: “Peace is the natural effect of trade”.³³

³² See e.g. Egenhofer, C. / Fujiwara, N. (2004), Completion of the EU Emissions Trading Scheme in the Emerging Global Climate Regime, Report of a CEPS Task Force, Centre for European Policy Studies, Brussels.

³³ Montesquieu (1952), *The Spirit of Laws*, Book XX, [1748] William Benton Publisher Chicago et al., p. 146.

7. Concluding personal remarks

In a conclusion, one may recall a Japanese painting from a series called “Stations of the Kisokaido”. It shows a traveller arriving at a crossroads. What is he or she likely to do? Enjoy the convenience of a tearoom? Seek entertainment in a city nearby? Or take the long and winding road across the hills? The picture leaves these thoughts up to the observer.



Being an academic, I have made my decision in favour of long-term benefits. This implies several duties and responsibilities for daily work. As the newly appointed ‘Toyota Chair for Industry and Sustainability’ at the College of Europe I am especially devoted to teaching students. These students will form the next generation of European leaders. It is important that they gain first-hand knowledge about industry and sustainability. I may add that the College of Europe is an excellent place for such an exercise. The Toyota Chair will also analyse the real activities of industry and sustainability in Europe. Together with students from the various member states and outside the EU, our chair intends to analyse and disseminate case studies, thereby preparing students for their future careers. In addition, we are going to launch a series of public lectures on research and policy topics related to our Chair. A first step has been undertaken in June 2004 with a conference on the emerging hydrogen economy in Europe.

An academic Chair is not a place to sit down but – in my view – is a platform for reaching out in new directions. Bearing in mind these tasks and the painting, I would like to finish this paper with a word from Vaclav Havel, reminding us about two further “I”s of imagination and implementation: “Without dreaming of a better Europe, we shall never build a better Europe”.

Raimund Bleischwitz

Acknowledgements

I wish to thank Jacques Pelkmans, Michael Latsch, Hans Martens, Willy de Backer, Ruben Schellingerhout for useful information and comments during drafting and reviewing my inaugural lecture. In addition, I thank Jessie Moerman for organisational support.

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