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Abstract

In this paper, we explore three scenarios for the future of the European Union, using history and reasoned imagination as guides. Our three scenarios are rooted in European contemporary challenges but draw on three ages that have shaped what Europe has become. Scenario 1 harks back to Antiquity ("the Empty Empire"), scenario 2 to the Middle Age ("Return of the City-states") and scenario 3 to the Renaissance ("Renascent Europe").

Keywords: European Union, prospects, prosperity, empire, city-states.

JEL Codes: E63, N14, O11.

Europe 30 years ago

30 years ago, Europe was almost another continent. The Berlin Wall divided peoples and minds, communism was both a shame and a threat. The social context was very unlike ours, with women only starting to enter the labour market in great numbers. The technological landscape bore little resemblance with today's: the Internet did not exist, neither did mobile phones, and there were very few personal computers. The European political project also looked very different: the EEC had nine members, the single market did not yet exist, the European Parliament members were for the first time being elected by universal suffrage and there was no single currency. Even so, certain similarities come to mind: thirty years ago, Europe was in the midst of a serious economic crisis (though it was not global and marked by stagflation) and submitted to important shocks on commodities markets. The major difference was economic growth and, most of all, the hope of social progress.

What does the future hold for Europe? The European Union is sometimes portrayed as the "old lady" of globalisation. In truth, founded in 1992, it stands as the youngest country in the world (not counting countries from the former Yugoslavia). Its destiny is thus by no means pre-ordained, but is in fact largely undetermined and uncertain.

What do we know for certain about Europe over the next 30 years? It will be affected by the stabilization and ageing of its population (like most developed countries and emerging nations: see chart 1 and 2) and by the adverse effects of climate change (box 1). A few years older, a few fractions of degrees warmer (hopefully): that's certainly important (all the more than older people are more vulnerable to climate change) but that is not much to go on when it comes to making forecasts.

Chart 1. Population growth rate (%), medium variant

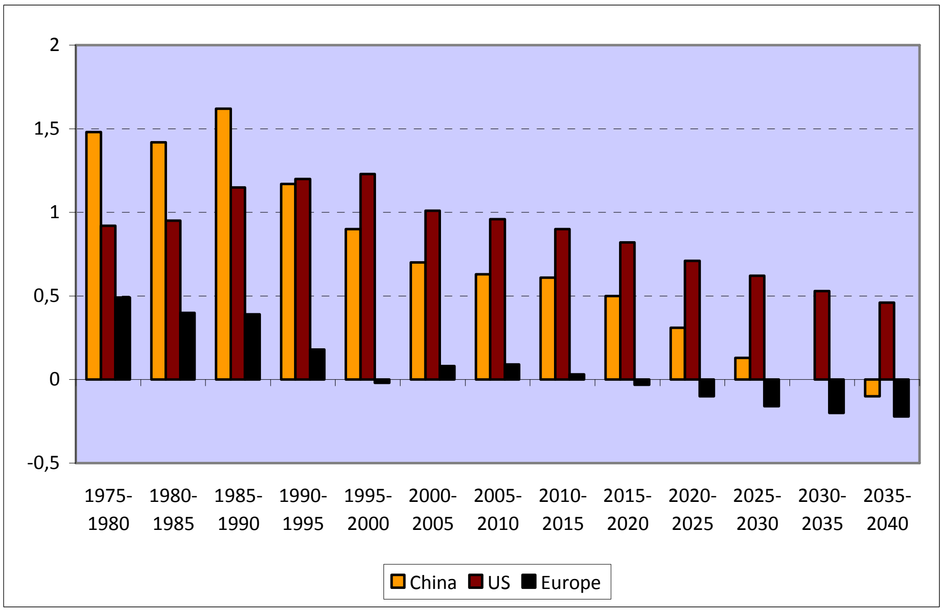
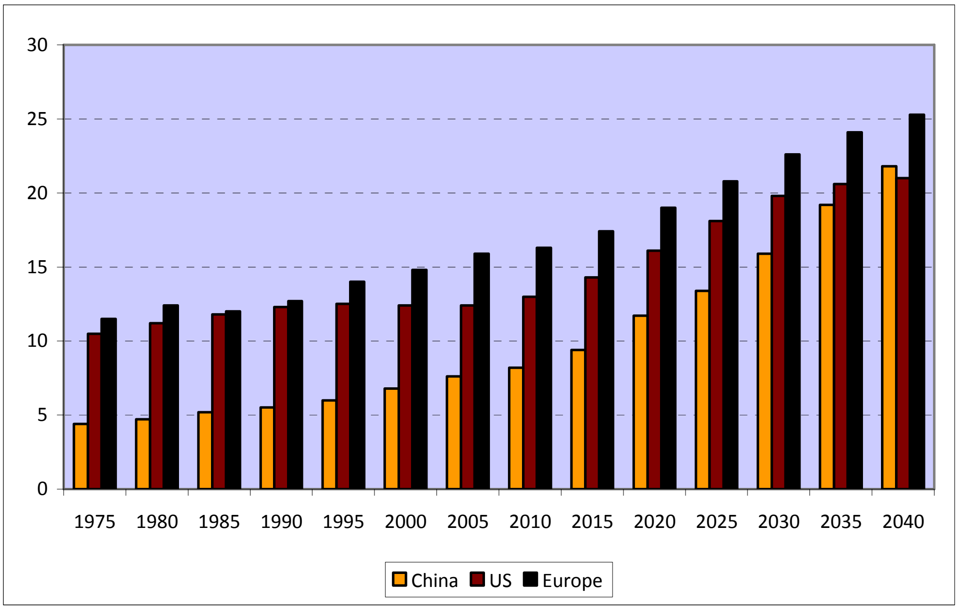


Chart 2. Population aged 65+, medium variant



Source: United Nations Division Population.

Box 1: Climate change in Europe

The average temperature has increased 1.3°C and 1.0°C for the European land area and European land & ocean area, respectively, comparing the trend towards 2008 with pre-industrial times. As such Europe has warmed slightly more than the global average (i.e. 0.9°C and 0.7°C for land and land & ocean). Considering the European land, nine of the 12 years between 1997 and 2008 were among the warmest years since 1850 in Europe with 2007 as warmest year (1.5°C higher than pre-industrial), closely followed by 2000, 2006 and 2008.

The annual average temperature for Europe is projected to increase by 1.0-5.5°C (comparing 2080-2100 with the 1961-1990 average). This range takes into account the uncertainties in future socio-economic development by including two of the IPCC-SRES scenarios (the high emissions A2 and the medium emissions A1b), and the uncertainties in the climate models. The warming is projected to be greatest over Eastern Europe, Scandinavia and the Arctic in winter (December to February), and over south-western and Mediterranean Europe in summer (June to August). The temperature rise in parts of France and the Iberian Peninsula may exceed 6°C, while the Arctic could become on average 6°C and possibly 8°C warmer than the 1961-1990 average.

Source: European Environmental Agency.

So our best guides are history and reasoned imagination to figure out Europe's futures. Our three scenarios are thus rooted in contemporary challenges but draw on three ages that have shaped what Europe has become. Scenario 1 harks back to Antiquity ("the Empty Empire"), scenario 2 to the Middle Age ("Return of the City-states") and scenario 3 to the Renaissance ("Renascent Europe").

First scenario: "The Empty Empire"

This scenario is close to what the European project looks like today. In 2009, Europe increasingly resembles an "empire of rules" in which political ambition is lacking. The EU does not regard itself as a "large" economic or geopolitical power, but presents itself as an empire of democracy reduced to human rights and market principles. In this European regime, the power of rules outweighs political power.

The paradox at the heart of this scenario is the following: Europe is over-regulated, but under-governed. The European Union, the world's leading economic power in 2009, could constitute an appropriate level of economic sovereignty within globalisation – the EU is too large to be ignored by any business, government or regional bloc in the world – but the historical conditions in which it emerged as a political entity and the institutional regime that ensued prevent it from assuming this role. National governments – the authorities invested with legitimate powers to take action for the future and to react to the unforeseen events of the present – no longer have the proper means of doing so. But the authorities possessing the means to act, such as the ECB and the European Commission, do not have the legitimacy to use them for political ends. As a result, we are left with a situation in which bodies either have legitimacy but not enough means to act or the means to act but not enough legitimacy.

Yet, it is hard to ignore that Europe has been a spectacular vector of peace and human rights using a peace through trade strategy. The South and the East of Europe have been successfully democratized through peaceful market integration (Table 1).

Table 1. The progress of democracy in Europe, 1972-2007

	1972			2007		
	Political rights	Civil liberties	Status	Political rights	Civil liberties	Status
Bulgaria	7	7	Not Free	1	2	Free
Croatia	..	..	..	2	2	Free
Czech Republic	..	..	..	1	1	Free
Czechoslovakia	7	7	Not Free	..	..	..
Germany	..	..	..	1	1	Free
Germany, E.	7	7	Not Free	..	..	..
Greece	6	6	Not Free	1	2	Free
Latvia	..	..	..	1	1	Free
Lithuania	..	..	..	1	1	Free
Poland	6	6	Not Free	1	1	Free
Portugal	5	6	Not Free	1	1	Free
Romania	7	6	Not Free	2	2	Free
Serbia & montenegro	..	..	..	3	2	Free
Slovakia	..	..	..	1	1	Free
Slovenia	..	..	..	1	1	Free
Spain	5	6	Not Free	1	1	Free

Source : Freedom House.

What is more, European norms and standards have helped to make the single market the EU's actual foreign policy, foisting the power of European norms upon producers and consumers right around the planet. A coherent argument has thus been made in various academic and policy-making circles that Europe has in fact invented a new form of power that may prove more efficient than coercion or pure force. But this seducing argument misses the important point of the economic cost of non-political Europe.

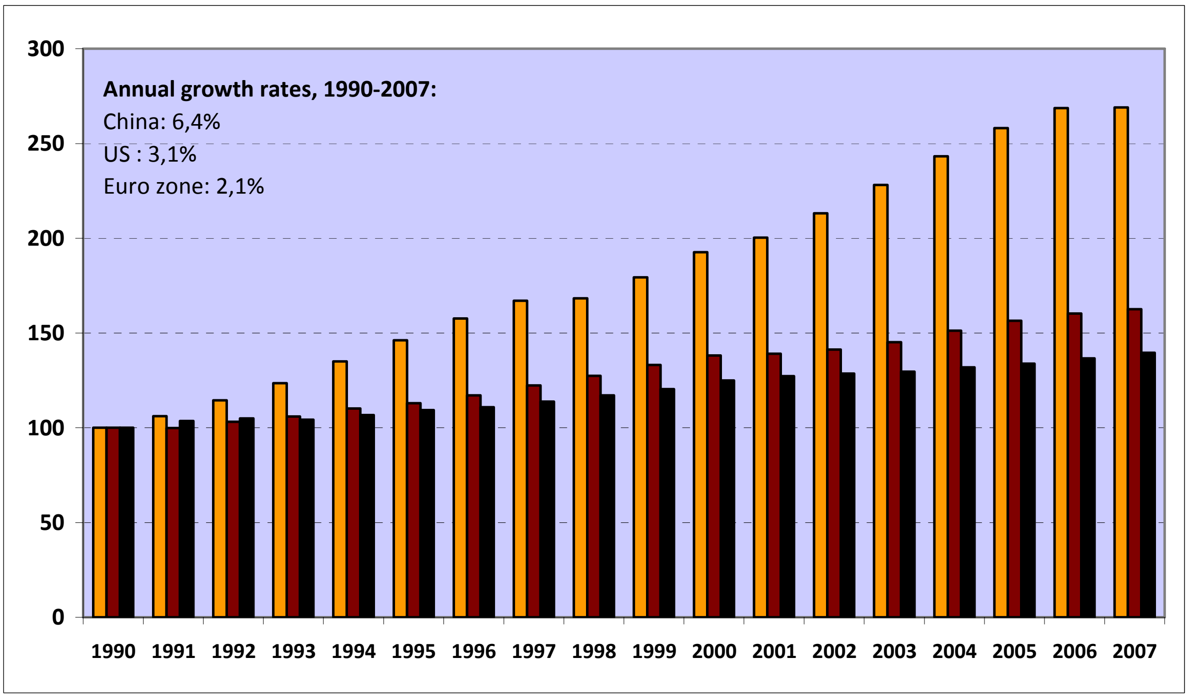
Indeed, the existence of a market democracy without politics affects the governance of the economy and thus Europe's growth and development performance. The current state of Europe's monetary Union illustrates how this risk has already materialized.

The European project is officially motivated by the goal of paving the way for a better common future for European peoples, but the Stability Pact and the ECB statutes give priority based on doctrine-based criteria to "price stability" and "fiscal sustainability", even if this means reducing governments' ability to deliver "macroeconomic stability" (restricting the length of slowdowns) necessary for growth and employment. The intermediate objectives (fiscal balance, currency "strength") are at odds in practice with the attainment of the ultimate objectives ("European public goods"), which matter the most to populations.

Economic and Monetary Union (EMU), especially through the 1990s, has lumbered itself with a "dogma-based penalty", the cost of which has been highest for the largest continental countries, which account for three-quarters of the euro zone's wealth (weaker growth and higher unemployment). In the 2000s, tax and social competition within the EU has triggered a "competitive social deflation", which gradually turns EMU into a zero-sum game. Each European nation sees itself more and more as a small country, the reference space for which is a globalized environment rather than just Europe, and thus enters into institutional competition with its neighbours using its social compact. In this system of impoverishing competition, European citizens are the primary victims, suffering through a stagnation of GDP per capita, fall in wages, increase in inequalities and dismantling of collective protections.

A very simple theoretical framework helps to understand how economic policy plays a crucial role in fostering growth. Actual economic growth is the sum of the rate of increase of labor productivity per hour and that of the number of hours worked. The latter depends on demographic, social (duration of the working week, rate of participation, etc.) and economic factors (the degree of slack in the labor market). Beside the demographic prospect, two political dimensions are thus crucial for future growth: investment (to increase productivity and potential growth) and macroeconomic management (to encourage investment and make actual growth out of potential growth). Those two economic policy dimensions of economic growth are precisely lacking in today's EU, however integrated certain markets on the continent might be. And divergence in economic momentum between the different regions of the world harbour highly significant implications over the very long term: if a growth rate of 2% leads to an eight-fold increase in income over a century, a permanent gap of 1% between two regions would lead to the wealth gap quadrupling over the same period (see Chart 3).

Chart 3. GDP per capita growth, 1990-2007 (1990 = 100)



Source: IMF.

The problem is particularly acute for the core of the EU, the euro zone, which accounts for 75% of the EU's GDP. Tax and social competition has led to "competitive social deflation" that is progressively turning EMU into a zero-sum game (the export market share won by certain countries being lost by others). At present, the euro zone presents itself as a collection of small economies competing with each other, whereas it should be one large competitive economy fostering cohesion.

The fundamental mechanism of tax competition is predicated on the mobility of tax bases and the lack of harmonisation of tax policies. Tax competition is defined as competition between national or local governments to attract the tax base into their territory by cutting tax rates. It is counterproductive if it becomes an obstacle to fairness and efficiency, i.e. if it hampers the satisfaction of present social needs and investments in the future. The principal result of the pressure of tax competition between nations, which is, according to KPMG annual survey, the strongest in the European Union, has been to skew tax regimes and thus the allocation of resources in favour of the most mobile bases – capital income, profits and large asset portfolios – to the detriment of the least mobile bases, such as unqualified labour and consumption[1]. This strategy of competition between Member States of the European Union rather than the "outside" pressure of globalisation is what has kept the decrease in tax rates going over the past decade.

The fall in corporate and high income taxation has been larger in the European Union than anywhere else in the developed world, especially in the United States and Japan (Table 2) and the dynamic has even been amplified in the 2000s (Table 3).

Table 2. Corporate tax rate, in %

	Average EU 15*		USA		Japan	
	effective	statutory	effective	statutory	effective	statutory
1987	29%	48%	23%	38%	42%	55%
1997	22%	38%	24%	39%	37%	50%
2005	21%	32%	24%	39%	28%	40%

Average EU 15 is un-weighted average of France, Germany, UK, Italy, Spain, The Netherlands, Norway, Austria, Sweden.
Data source: updates database from Devereux, M.P., R. Griffith and A. Klemm (2002) "Corporate income tax reforms and international tax competition" *Economic Policy*, 35: 451-495.

[1] Since the mid-1980s (completion of the Single market), there has been a downtrend in corporate income and high income tax rates in Europe and a progressive increase first in labor, and more recently in consumption taxation.

Table 3. Top statutory income tax rates, %

	Tax on personal income				Tax on corporate income			
	2000	2007	2008	Difference 2000-2008	2000	2008	2009	Difference 2000-2009
EU27	44,7	39,1	37,8	-6,9	31,9	23,6	23,5	-8,4
Euro area	48,4	42,1	42,1	-6,3	34,9	26	25,9	-9

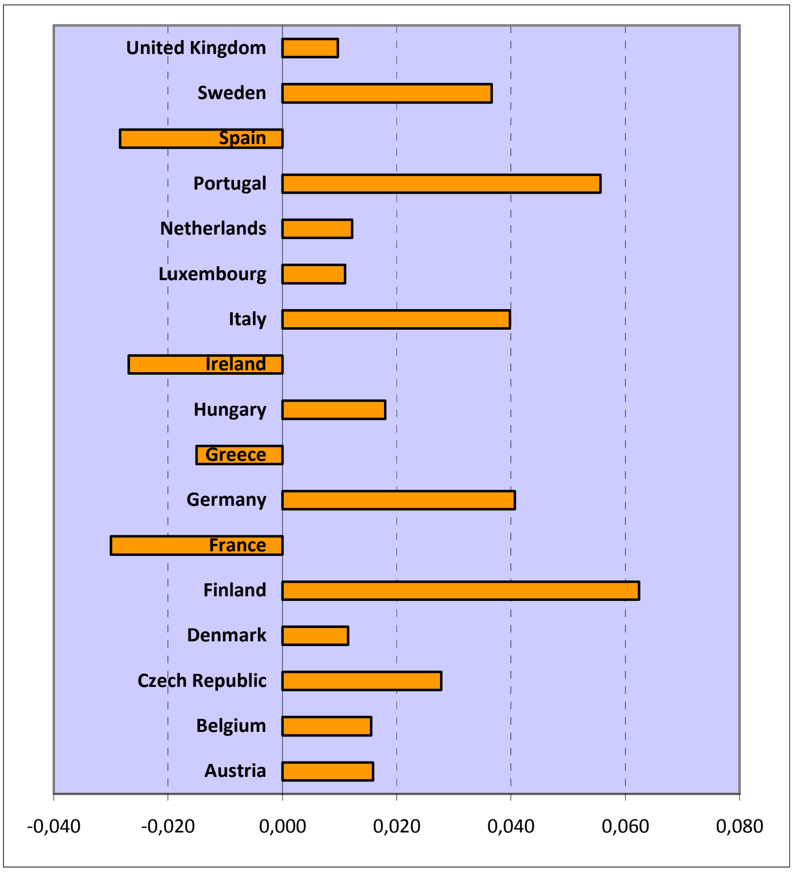
Source: Eurostat.

The political risk of the "lowest tax bidder" is high in the medium term. Governments are caught in a stranglehold between businesses playing the tax competition game, on the one hand, and the households that remain their electoral base, on the other. There is a risk that the divide between citizens and their leaders will deepen.

The challenge facing European governments going forward is thus to cooperate to raise taxes on capital, but also to transfer their taxation to immobile bases without penalising employment, notably on "earth", the oldest production factor now referring to natural resources and pollutions.

If those worrying trends of an ever looser Union were to be prolonged, the scenario of the "Empty Empire" would lead to major democratic disruptions through social disintegration. Certain aspects of this catastrophic scenario are already in place: over the past thirty years, GDP growth per capita has become gradually stagnant, income inequalities have become larger (chart 4) and the labour income share has declined (table 4).

Chart 4. Cumulative change Mid-1980s to Mid-2000s in Gini coefficient for disposable income



Data source: OECD.

Table 4. Labour income share in the EU-15 Member States, Japan and the US

	Max	Year	Min	Year
Belgium	66,9	1981	55,2	1961
Denmark	62,9	1975	56,3	2005
Germany	66,1	1974	55,9	2006
Greece	91,9	1960	57	2003
Spain	67,9	1976	54,5	2006
France	66,9	1981	56,7	1998
Ireland	71,2	1975	47,1	2002
Italy	69,7	1975	53,3	2000
Luxembourg	62,2	1977	46,4	1969
Netherlands	70,4	1975	56,7	2006
Austria	72,9	1978	55,8	2006
Portugal	87,9	1975	59,6	1969
Finland	70,3	1966	53,7	2000
Sweden	69,2	1977	55,4	1995
United Kingdom	72,2	1975	61,8	1997
EU-15	69,9	1975	57,8	2006
Japan	76,4	1975	60,2	2006
United States	65,9	1970	60,9	2005

Source: European Commission.

There is no automatic factor that will slow down this trend, on the contrary, given the extension of the global labour market, but one has to keep in mind that the problem is first European (and not global) and second political (and not "natural"). The trend in labour income share in Europe for instance indicates two sequences. The first is parallel to the gradual completion of the Single Market between the beginning of the 1980s and its partial realisation in 1993. The second period marks the full integration of emerging markets as part of globalisation from the 1990s onwards. The trend in the proportion of GDP accounted for by wages shows that the first factor, i.e. the early construction of Europe, was more significant than the second in the lowering of the labour income share.

This scenario may in the end be accompanied by the worsening in the EU of the structural environmental problems that will arise over the next 30 years, the costs of which will depend on the degree of democracy in the societies that will have to deal with them. The impact of climate change will be greatest in a Europe resembling an "Empty Empire".

In all, if the EU follows the "empty empire" path, it will become hollow and diluted in globalization.

Second scenario: the "return of City States"

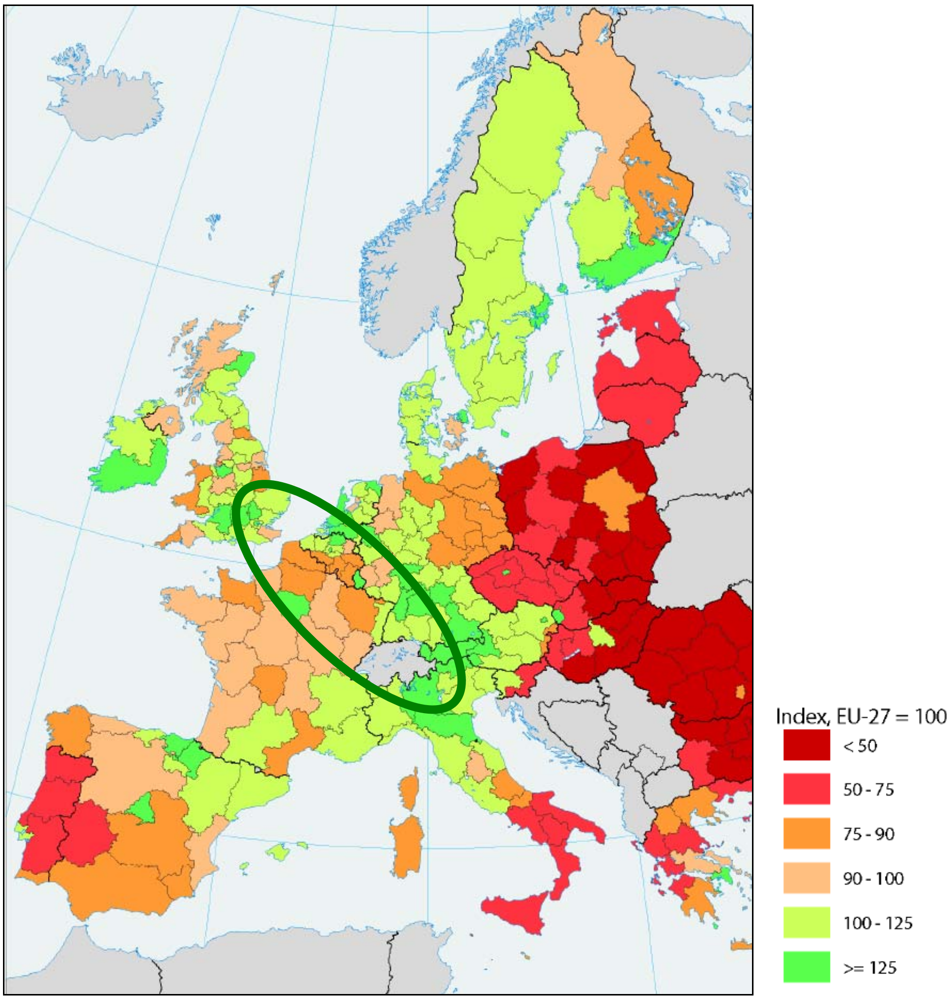
Our second scenario is not exclusive of the first, but it pictures the interplay of political and economic dynamic differently, focusing not on the dis-aggregation of national social compacts within the European empire, but on the rebuilding of local sovereignties within nations thanks to agglomeration and concentration forces. The reference here is the late Middle-Age where political fragmentation paralleled economic integration and where large unified kingdoms were the exceptions and city-states the rule (map 1).

Map 1. Unified kingdoms and City-states in 1500's Europe

Source: Euratlas.

"Europeanization" has actually led, since the mid-19th century, to a new concentration of wealth in cities (population, technology, qualified labour, services, amenities), and these agglomeration effects have been accelerated by the achievement of the Single Market in the late 1980s. Growth has thus been polarised in large metropolises with global influence, and these metropolises now operate in a network that cuts across national borders (see Paul Krugman's work on the spatial inscription of international trade). What is more, most of these EU powerful urban regions are themselves concentrated in the North East of Europe, adding to their power (see map 2).

Map 2. GDP per head (PPS), 2006



Source: European Commission.

There is a vast and robust literature on economic geography, a branch of which deals with national and regional convergence. Williamson (1965) has argued that economic development should be accompanied first by a widening of regional inequalities (as capital and skilled labor are accumulated in leading dynamic urban centers) but then by a reduction thereof due to redistribution policies and centrifugal forces (e.g. congestion costs). Yet, further work focused on the possibility that this second phase does not take place, as a spatially cumulative process takes over. As a result, disparities increase instead of being reduced.

The effects of concentration and urbanisation linked to the success of the Single Market have put European cities, some of which clearly resemble the city states of the Middle-Age in Europe (especially in Italy and the Netherlands), back at the forefront of the economic and political scene. But the very strong regional disparities that result form this new power could threaten national unity in each of the EU countries. The greater geographical disparities will mean that areas close to each other in space will live in different times. The European Union appears, once again, as submitted to the consequence of the gap between economic integration and political governance.

Actually, the EU presents itself in 2009 as a "little globalisation" where regional differences are greater than in other developed countries. According to Eurostat, GDP varies regionally much more than nationally (table 5): The gap is 1 for 3,5 nationally, but 6,3 regionally (from 40% to 253% of EU 27 average) with 41 regions now exceeding the 125% of EU 27 average level: those regions are the future city-states of Europe (table 6).

Table 5. GDP per inhabitant in PPS, 2008, EU27 = 100

EU 15 1 : 1,86*

Luxembourg	253	Greece	95
Ireland	140	Cyprus	95
Netherlands	135	Slovenia	90
Austria	123	Czech Republic	80
Sweden	121	Malta	76
Denmark	119	Portugal	75
United Kingdom	117	Slovakia	72
Finland	116	Estonia	67
Germany	116	Hungary	63
Belgium	115	Lithuania	61
France	107	Poland	57
Spain	104	Latvia	56
Italy	100	Romania	46
EU27	100	Bulgaria	40

EU 27 1 : 3,5*

1 : 2,2

London	198.8**
South East (England)	128.0
Scotland	115.9
East of England	113.6
South West (England)	110.4
East Midlands (England)	107.1
North West (England)	104.7
West Midlands (England)	103.6
Yorkshire & the Humber	102.4
Northern Ireland	97.7
North East (England)	95.1
Wales	90.4

1 : 3,36

Bratislavský kraj	148.7**
Západné Slovensko	62.8
Stredné Slovensko	49.2
Východné Slovensko	44.0

Source : Eurostat, authors' calculations.
*: without Luxembourg.

** 2006 data.

Table 6. Regional GDP per inhabitant in the EU27 in 2006
(in PPS, EU27 = 100)

The twenty highest:			The twenty lowest:		
1	Inner London (UK)	336	1	Nord-Est (RO)	25
2	Luxembourg (LU)	267	2	Severozapaden (BG)	25
3	Bruxelles-Cap. / Brussels Hfdst. (BE)	233	3	Severen tsentralen (BG)	27
4	Hamburg (DE)	200	4	Yuzhen tsentralen (BG)	28
5	Groningen (NL)	174	5	Sud-Vest Oltenia (RO)	30
6	Île de France (FR)	170	6	Yugoiztochen (BG)	31
7	Oberbayern (DE)	168	7	Severoiztochen (BG)	32
8	Wien (AT)	166	8	Sud-Muntenia (RO)	32
9	Stockholm (SE)	166	9	Sud-Est (RO)	33
10	Berkshire, Buckinghamshire & Oxfordshire (UK)	164	10	Lubelskie (PL)	35
11	Southern & Eastern (IE)	163	11	Podkarpackie (PL)	36
12	Praha (CZ)	162	12	Nord-Vest (RO)	36
13	Darmstadt (DE)	158	13	Centru (RO)	38
14	Bremen (DE)	157	14	Podlaskie (PL)	38
15	Utrecht (NL)	156	15	Warmińsko-Mazurskie (PL)	40
16	Hovedstaden (DK)	155	16	Swietokrzyskie (PL)	40
17	North Eastern Scotland (UK)	153	17	Észak-Alföld (HU)	40
18	Noord-Holland (NL)	151	18	Észak-Magyarország (HU)	41
19	Bratislavský Kraj (SK)	149	19	Opolskie (PL)	42
20	Åland (FI)	147	20	Dél-Alföld (HU)	42

Source : Eurostat.

Recent empirical research conducted by the regional Directory of the European Commission yet shows an overall reduction of disparities among EU regions. But on closer examination, this reduction is due to the fact that national convergence has taken place in the EU (catch-up has occurred for the former poorest member states). On the contrary, disparities among regions are increasing.

The further decoupling of the wealthiest metropolises and regions from other areas will threaten the unity of certain European nation states (current examples are Italy and Belgium).

Major resistance to redistribution between regions and cities could also emerge. In our "return of the City states" scenario, tax competition at European level will reduce the scope for Member States to levy taxes. On the other hand, cities are backed by local consent for tax, as local taxes are used to finance the provision of the city's public goods and to increase its amenities and appeal. Regional authorities will more and more aspire to reinvesting the benefits of their growth in their own territory. They appear even more justified in doing so as opening-up to trade causes different regions to compete with each other to host businesses and, more generally, productive resources. The prospect of predatory cities skimming off (human, environmental, etc.) resources from their sphere of influence for their sole benefit represents an extension of the risk of growing divorce between metropolises and the areas surrounding them. Political decentralisation will be driven by the market. Major European cities will be colonized by the super-rich, nationals and foreigners, with the middle classes being relegated to the periphery owing to the cost of living. The city of London is currently the most advanced example of this dynamic.

Separatist claims and demands for autonomy will also increase rapidly (current examples include those staked by the Northern League in Italy, nationalist parties in southern Tyrol, Scotland and Catalonia, as well as the plan to divide up Belgium into Wallonia and Flanders). These movements are generally based on the economic atrophy of other regions and on the social problems developing there, which is used to legitimise the prospect of separate development.

This second scenario thus poses a major socio-political threat: the effects of concentration and desertification would not prevent the continued survival of a distant urban and mixed urban/rural periphery. They may lead to the displacement of impoverished populations that have become unstable and the development of an informal economy parallel to the richest regions.

Third scenario: "Renascent Europe"

In this third, more optimistic scenario, the European identity and political project are reborn through common efforts to achieve a comparative social and environmental advantage in globalisation combining social justice and sustainable development. In short, Europe is revived by social-ecology.

The new political regime that sustains this ambition is the "Europe of public goods". "Europe of public goods" aims first and foremost at restoring the purpose of European economic and political integration by reconciling two fundamental realities of the European project, i.e. the nation state and pooled sovereignty. In this pseudo-federal system, political debate focuses on "European public goods", i.e. the goods likely to benefit all the European populations and not only one or other Member State, and on the means of producing and financing them.

What public goods could be defined at European level? Macroeconomic stability, employment, territorial cohesion, advancement of knowledge and knowledge-sharing, environmental protection, both natural and human (underpinning the concept of sustainable development), mobility, energy independence are all European public goods. National cohesion through social integration within each Member State can also be understood as a European public good, because it affords the best protection against the risk of conflict across the continent and preserves the most precious of all European public goods: peace.

These public goods would be produced from the alliance and cooperation between countries that have uniquely chosen to share their sovereignty in order to be fully themselves. The definition and provision of "European public goods", i.e. the explicit presentation and reform of the political project promoting economic integration in Europe seem much more essential to the well-being of populations and the future of the European Union than scrupulous observation of the doctrines of monetary and fiscal stability, which, at best, merely set intermediate objectives and, at worst, prevent the ultimate objectives from being reached. To this extent, a definition of shared public goods at

European level would pave the way for Europe to build itself into a large political and economic country.

The scenario of a "Renascent Europe" relies on three ambitions: the building of economic sovereignty aimed at a proactive macroeconomic policy and safeguard of the diversity of national social compacts; a growth strategy focused on "productivity-competitiveness" (upward move in qualifications and innovations) and not "cost-competitiveness" (downward scramble in social models); environmental sustainability (low-carbon growth respectful of ecosystems).

The development of "productivity-competitiveness" would rely on the coming together of Member States for a policy of cohesion-driven investments fostering higher levels of qualification and access to high-quality jobs. Fresh impetus would be achieved in social progress through the mobility of knowledge in Europe (students and apprentices) and the construction of a European labour force for the 21st century.

The challenge of new environmental and energy technologies would provide an opportunity for a pragmatic deepening of the European political union: a "European community for the environment, energy and research" along the lines of the 1951 Coal and steel Community, with the aim of becoming the world leader in ecological comparative advantage thanks to its own budget and special tax framework.

From an institutional point of view, the scenario of a "Renascent Europe" implies that the current European growth strategy, the Lisbon agenda, is abandoned, as its results are far behind ambitions and proclamations. While the objective of the Lisbon Strategy was to foster the transition to a knowledge-based economy by 2010, what we have witnessed is an actual drop in research spending in the EU (1.84% of GDP in 2006 compared with 3.3% in Japan and 2.1% in the United States). In fact, all of Lisbon goals are out of reach for 2010.

Furthermore, this would entail some important reforms. Public investment in education/training and new environmental and energy technologies should be excluded from budget deficit calculations. It would be up to the Council of Europe to determine what it considers as belonging to this category of spending, i.e. to set priorities that the EU intends to pursue in terms of spending on the future and on "European public goods".

The EU should also allow for massive investments in European infrastructure, possibly through the issuance of euro-bonds. Since it contributes to the implementation and development of the internal market and to reinforcement of economic and social cohesion, the construction of the trans-European transportation network is a public good. It represents a major factor contributing to economic competitiveness and to the balanced and lasting development of the European Union. Several projects considered crucial for developing European competitiveness and for ending the isolation of certain regions may still not see the light of day given the lack of sufficient funding. There is also a major environmental interest in completing those projects, as the transportation sector alone accounts for a quarter of total greenhouse gas emissions and these are growing rapidly (Table 7).

Table 7. Evolution of GHG emissions, 1990-2007

	UE 15	UE 27
Waste	-38,9	-33,7
Manufacturing Industries and Construction	-15,5	-21,6
Residential building	-13,6	-17,6
Commercial/Institutional building	-12,6	-18,1
Agriculture	-11,3	-20,2
Industrial Processes	-10,8	-9,9
Energy Industries	4,9	-4,4
Transports	**23,7**	**26,0**
Road transports	**24,6**	**28,7**

Source : EEA.

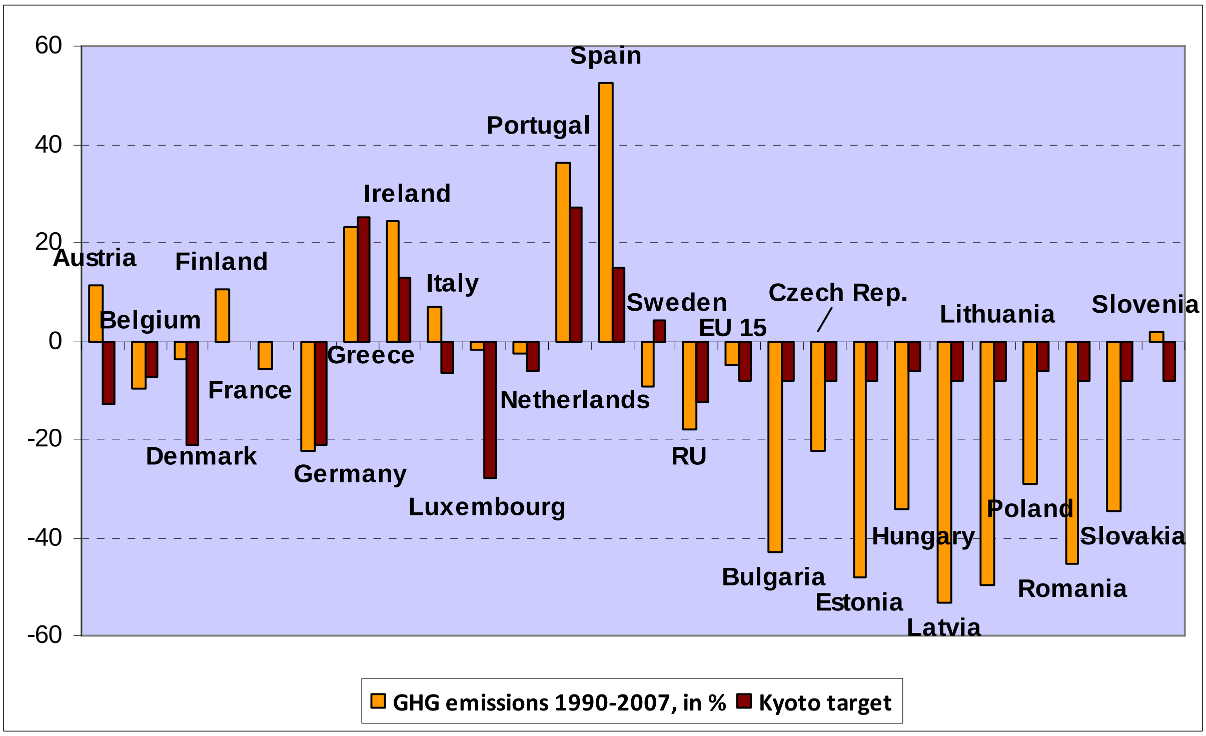
A "European Community of the environment, energy and research" would also be created. The only success of the Lisbon agenda was accidental: in the last decade, the EU did not become the most competitive knowledge economy, but the first low-carbon developed economy in the world. The EU should build on this success and become the world centre for the production of clean energies. But this is true challenge that will not come without important reforms. The EU indeed has the best performance in greenhouse gas emissions reductions of all Kyoto Protocol Annex I countries, but its performance is not as good since 2000 (Table 8). More worrying, EU member states diverge sharply when it comes to meeting their respective targets of emissions reduction (chart 5).

Table 8. GHGs excluding LULUCF, in Gg CO2 eq, in % change

	Change 1990-2000	Change 1990-2006
All Annex I	-6,9	-4,7
Annex I EIT parties	-41,3	-37
Annex I non-EIT parties	+ 8,8	+ 9,9
EU 15	-3	-2,2
US	+14,1	+14,4
Japan	+6	+5,3
Australia	+19	+28,8
Canada	+ 21,2	+ 21,7

Source : UNFCCC.

Chart 5. Greenhouse gas emissions (GHG) and Kyoto target for EU member states



Source : EEA.

The "European Community of the environment, energy and research" would pursue three closely related objectives – energy independence and thus security for Europe, the preservation and improvement of terrestrial ecosystems and human development and finally what is now referred to as "green growth". In this perspective, European taxation on carbon (both through the EU ETS and carbon taxes) should be reviewed, improved and reinvented.

The European Union has the requisite scale to complete this project and its socio-cultural model is predicated on a dual preference for social justice and the environment. This elaboration and achievement of this institution would help to reinvent the European project itself, in the very same way the 1951 Community was the institutional laboratory for the Europe that emerged from the Treaties of Rome.