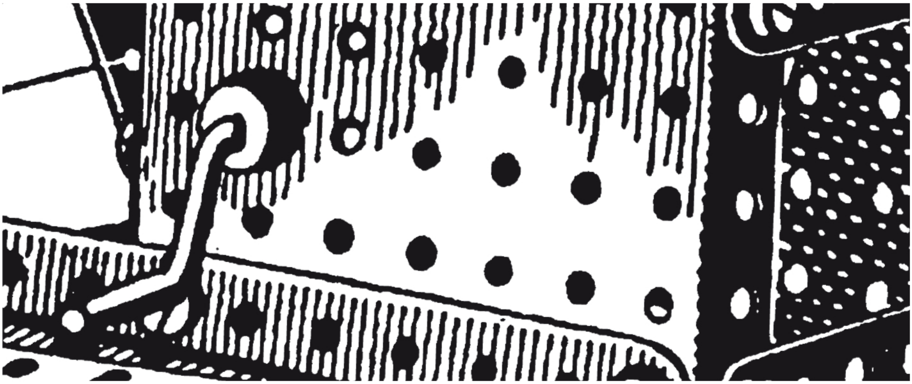

Fair, Robust and Sustainable. A Recipe for Europe's Growth

Equa, robusta e sostenibile. Una ricetta per la crescita dell'Europa

Edited by • A cura di

Claudio De Vincenti

Foreword • Prefazione

Massimo D'Alema

FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES
FONDATION EUROPÉENNE D'ÉTUDES PROGRESSISTES

Italianieuropei

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Foreword
Massimo D'Alema

As I write these lines, Europe is facing its most serious challenge since the launch of the European integration dream by the founding fathers in the early 1950s. This crisis, in the worst-case scenario, might put into question even the very existence of the European project.
It is in the context of this bleak state of affairs that European progressive forces are confronted with the most demanding test: rethinking and revitalising old paradigms, approaches and instruments of the Left, while preserving and reinforcing its traditional values – such as social justice, equality and solidarity –, in order to develop a common strategy aimed, on the one hand, at overcoming the financial and economic downturn that has hit the euro area and, on the other, at re-launching growth in the European continent. This is indeed a hefty task. Yet it offers great opportunities for renewal both for the European progressive political parties and for the EU institutional framework. Also, it is a responsibility that we cannot afford to postpone further.
Throughout 2011, we have witnessed the helplessness of the European leadership, which has clearly shown its limits in tackling the sovereign debt crisis. European Centre-Right governments have not only belatedly responded to it, but they have been unable to formulate a proactive strategy. They have guiltily neglected for too long the elaboration of a common debt policy and of a plan for restoring growth. As it is indisputable that the debt crisis – which at present affects some EU member

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states, entailing serious contagion risks, and is thus questioning the survival of the euro itself – cannot be solved without implementing a comprehensive plan for stimulating the economy; excessive fiscal austerity, in fact, might trigger recession in additional eurozone member states.

Hence, it is a fact that the result of this irresponsible behaviour of the European leaders has been the deepening of the crisis.

New common European mechanisms are currently in the process of being introduced and implemented with the aim to remedy the old anomaly of the European Union, which the current crisis has exposed once and for all: the asymmetry between a monetary union with its strict financial burdens on the one side, and the virtual lack of a true economic union and of the means for pursuing the clear common objective of boosting growth on the other. Together with the Europe 2020 Strategy, launched by the European Commission at the start of 2010 in an attempt to compensate the shortcomings of the Lisbon Strategy, these new instruments are yet to prove their feasibility and value.

However, as will emerge in the following sections, these new instruments will not be enough to restore Europe's economic growth. They must be accompanied and supported by a wide-ranging package of measures to halt financial speculation and reduce the costs of the sovereign debt, by the issuing of eurobonds and the introduction of a tax on financial revenues – both aimed at financing a broad programme of investments in strategic infrastructure, green economy and innovation. Moreover, they ought to be complemented by forms of regulated liberalisation, which might act as an incentive and attract the use of private capitals for the realisation or development of those infrastructural networks that are essential to re-launch the growth of the European Union member states.

The redistribution of wealth is another factor of growth, which is too frequently either forgotten or considered by some observers as being even paradoxical. The financial crisis that broke out in 2008 has uncovered the inconsistencies of those theories, supported and spread by the neoliberal thought, according to which the existence and the preservation of inequalities significantly contribute to the economic growth of a country by reinforcing phenomena of capital accumulation and consequently encouraging investments. As highlighted in one of the essays of this book, such theories are, to say the least, fallacious. And, in fact, one of the direct consequences of inequalities in developed countries is the exclusion of indispensable social groups (women, young people, residents of backward areas, etc.) from the labour market and production activities.

Over the last three decades, Western economies have been generally characterised by the increasing concentration of wealth in the hands of a small elite: the richest have become even richer, whereas the poorest have become poorer. In such circumstances, it is essential to intervene in order to reduce as much as possible the existing inequalities in our societies – by supporting education, reforming welfare and pension systems, reducing precarious forms of labour. At the same time, it is crucial to increasingly consider investments in human capital no longer as expenses that will not produce wealth, but by contrast as a key factor of growth.

From this viewpoint, the Italian case is exemplary: 80% of internal revenues derive from employed labour. However, a more in-depth analysis suggests that employees as a category only receive about 40% of the GDP. Furthermore, in Italy the crisis has taken very harsh features. And in the last months of 2011, the extent to which the future of this country and the destiny of the European Union are inextricably interwoven has become apparent.

Of course, the Italian situation has its own peculiarities. The rhetoric of the Right was supported by the assumption that through deregulation the country would undertake a path towards robust economic growth and wealth, that setting the “animal spirits” free would create a favourable environment for entrepreneurship and encourage risk-taking. Instead, the outcome of years of Right-wing governments has been the spreading of corruption and abuse, the reinforcement of corporative behaviour, and the dramatic increase of public expenditures. These are all well-known old problems, which however the administration of Right-wing parties, with their populist approach, have largely aggravated. To illustrate this, let us focus on a few data. At the beginning of the 2000s (when the cycle of Centre-Left governments was coming to its end), public expenditures amounted to 46.2% of the GDP. A decade later they had increased by about seven points.

The Italian situation today needs a radical cure, which must address the traditional corporative structure of Italian economy – an obstacle to innovation and economic dynamism – and at the same time foster the basic values of social justice.

The sovereign debt crisis, in Italy as elsewhere in the European Union, poses all these problems with a renewed urgency. The lesson that we must learn from the economic downturn is that no country can face these new challenges alone. Only a renovated commitment to the process of European integration, strengthened European institutions, and a new European economic government supported by reinforced European political governance can respond to these complex questions.

What we need is new political cohesion. However, this task cannot be entrusted to the present conservative Franco-German axis, if it continues to display such a strong bias towards purely selfish national interests and is only capable of proposing and imposing fiscal responsibilities and sanctions. The EU cannot just live on austerity.

Indeed, Europe is suffering from a lack of solidarity. As former German Chancellor Helmut Schmidt recalled in his inspirational address to the 2011 SPD congress, Germany has the duty to fill that void, a duty that Angela Merkel seems to forget.

Progressives across Europe must come together now. They must draw a new plan for re-launching the European project based not on the usual lowest common denominator but on a broad common vision, resisting the temptation of nationalistic entrenchments.
This book, which includes contributions by some of the most authoritative experts on infrastructure development and welfare reform, sets out to address the crucial and topical question of European growth from transnational perspectives. It is a valuable and ambitious project, proposing policies and solutions that – taking into due account the differences between cultures, backgrounds and experiences – could be adopted by the EU member states in order to encourage that qualitative leap Europe is waiting for.

Introduction
Claudio De Vincenti

With the dramatic tensions over the sovereign debt of some euro area countries, emerged in the financial markets in 2011, the tangles of the process of European integration, exacerbated by the 2008 economic and financial crisis, came to a head. The member states' diverse ability to react to the crisis led to a split which, for some of them, exposed the negative consequences of the structural fragility and/or the high public debt accumulated in the past. Today we are faced with a challenge that threatens not only the solidity of the single currency but the future of the overall construction of Europe. An entire phase of the integration process has come to an end, that in which the establishment – still incomplete – of the Single Market was not accompanied by an adequate coordination of economic policies, aimed at the overall growth of the continent and at the convergence of the member countries' economic and social systems. The European Union is thus now faced with the unavoidable need for a qualitative leap in the process of integration, supporting the single currency with a more general capacity to govern economy and social progress. This need is not just about the solidity of the European project, it concerns the very role of Europe in the world: the time has come for Europe to assume the responsibility for acting as an engine of international growth, putting its economic potential and its heritage of culture and civil and social rights to the service of a larger scheme of development for itself and others.
Some initial steps have been made in recent months, from the greater coordination of economic policies outlined by the Euro-

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Plus Pact to the establishment of the European Financial Stability Facility (EFSF) to face the sovereign debt crisis. And it is in this context – in which a more robust and supportive European governance seems to be emerging – that we should include Europe 2020, the strategy «for smart, sustainable and inclusive growth» if, as Giuliano Amato makes clear in the opening essay of this volume, we want this governance to be backed up by effective tools. The strategy sets ambitious targets for the Union and its member states, in terms of increasing employment rates, investments in research and development, education, the fight against climate change and against poverty. But to achieve them, we need to go beyond the open method of coordination (OMC) – analysis of the situation in each member country, benchmarking, and recommendations with no legal force – which represented the fundamental limitation of the Lisbon Strategy, of which Europe 2020 aims to be a more effective review and update. The problem to solve – only hinted at but not resolved in the Commission document – is that of the shift from the mere intergovernmental coordination of a number of national policies to collective European action entrusted to the common institutions of an increasingly integrated Europe (Commission, Council, Parliament). What is required is a stronger European governance that must introduce legislative pillars, where today there are only guidelines, and which is able to make use of Union budget resources as a leverage.
The policies necessary for fulfilling the general objectives of the 2020 Strategy will be put to the test in a variety of contexts. In this volume, we focus our attention on two of the most important ones: the development of trans-European infrastructure networks and of welfare policies. In both cases, we face two major obstacles. The first is budget constraints, today made particularly stringent by the need to recover from the expansionary fiscal policies required to contain the effects of the 2008 economic and financial crisis. The second is the cultural

conditioning still exercised by “conventional wisdom”, which tends to rely solely on the self-regulatory virtues of the market and to consider the current size of the welfare state in Europe as a burden – in fiscal and regulatory terms – hampering economic growth.
The essays collected in this volume are concerned primarily with these two obstacles. They provide analysis and suggest policies promoting the role of active public intervention to govern and regulate the markets, making government resources – limited by the need to reduce debt – the lever to encourage a more comprehensive reallocation of public and private resources that, through the market, should develop services crucial to the quality of life and competitiveness of the European economic system.

The issues at the heart of the book are outlined in broad terms in the two introductive essays, the first by Andrea Goldstein and Céline Kauffmann on the financing of infrastructures and the second by Nathalie Morel, Bruno Palier and Joakim Palme on social investment.
Starting with a survey of the massive investments required to renew and complete the infrastructures of the EU countries, the first essay emphasizes the need to mobilize entrepreneurial capacity and attract private capital, channelling savings, inside and outside the area, towards the strengthening and development of the infrastructural networks. Moreover, Goldstein and Kauffmann clarify the conditions to ensure that such involvement takes place: a qualitative leap in the ability of the Union and the individual member countries to introduce rational, multilevel governance and establish a strong, coherent framework of market regulation that – through a system of clear, stable rules – guarantees the economic and financial sustainability of the projects. In this framework, there is a need not only for a better planning of projects to lower their costs, but also for ade-

quate tariff systems and the use of fiscal instruments to contain negative external factors and promote positive ones.
The second essay highlights the role of social investment as a growth factor of a knowledge-based economy, where productivity and development depend on the quality of human capital and its efficient use. In this perspective, the European Union and the member states are called upon to increase investment in human capital, through education and lifelong learning, social security institutions, and the network of services to individuals, so as to promote the various positive external factors that are essential to achieving social cohesion and strengthen the economic growth potential. The setting is that of a welfare system that aims to promote skills *ex ante* and not only to compensate for adverse events *ex post*, to put everyone in a position to earn their income through active participation in the labour market and improve the quality of their work, to reduce the intergenerational transmission of poverty and enhance that of knowledge.
The issues so outlined in the two introductive papers are then investigated in the following essays with the aim of suggesting specific policies for the sectors that make up the two focus areas – infrastructure and welfare – into which the book is divided.

"Networks and Infrastructures: Connecting Europe for Sustainable Development" concerns the issue of energy, transport and telecommunication grids, which constitute the infrastructural framework that is essential to complete the Single Market and free its growth potential. From this point of view, as observed by Michele Grillo in his essay, the energy sectors – electricity and gas – are in many ways emblematic of the project for the establishment of the European Single Market and of the difficulties in its implementation. For a long time, the key role of interconnection infrastructures, also for the purposes of market liberalization, has been underestimated in the EU's setting out, which focused – with the first (1996-98) and second directives (2003) – on ensuring a level playing field and Third Party Access to networks. It is only with the recent Third Energy Package that the need to overcome bottlenecks in network interconnections is being dealt with, by proposing to strengthen the separation between network operators and service providers and the coordination among regulators. According to Grillo, however, this step is necessary but not sufficient to carry out investment strategies in networks which are consistent with an integrated and competitive market: the positive externalities which cannot easily be internalized, and the need to have, for competitive purposes, an excess of infrastructure capacity compared to demand, raises the issue of the public control of energy network companies and, ultimately, of a network enterprise having intrinsically the nature of a "European public company".

As part of the construction of the Single Market, the European Commission has aimed from the beginning to promote the trans-European transport system – particularly the high-speed railway – acknowledging that individual states do not have sufficient incentives to invest in an international transport network, whose benefits are enjoyed only partially by the single countries. The survey of the literature on the environmental and economic impact of the high-speed network, proposed by Chris Nash in his essay, suggests, however, that we should not indulge too much in rhetoric. We should rather try to combine a greater selectivity in choosing projects of trans-European interest with national investments aimed at building an extensive internal transport and logistics network free from bottlenecks. European funding is justified (apart from the areas to be supported by structural and cohesion funds) only for works that involve significant cross-border traffic and significant economies of scale. As for the high-speed railway, European efforts should focus on routes characterized by large volumes of passengers, the only ones that are economically and financially sustainable. For the others, EU funding must be directed towards the upgrading of existing lines and the enhancement of other means of transport.

In recent decades Information and Communication Technologies (ICT) have had a strong impact on productivity and growth of the major developed economies. This, as explained by Cosimo Dolente, Claudio Leporelli and Pierfrancesco Reverberi, is a "general purpose technology", whose contribution on the one hand is likely to continue for a long time, and on the other is not fully internalized by private actors. This provides public intervention with a solid theoretical foundation, reinforced by the need to avoid the digital divide and its effects on social inequality. The authors derive a series of policy proposals from their analysis. The development of Next Generation Networks (NGN), which emphasizes the key problem of investment promotion, requires a strong governance role of the regulatory authorities. Taking into account current budgetary constraints, public resources should be allocated to low residential density and low-income areas, by means of policies supporting public and private demand (for those who might be excluded from the service due to their insufficient purchasing power) and infrastructural supply (development of networks in high-cost areas). In other areas, the allocation of public resources, through the participation in – or financing of – private projects, only makes sense if private enterprises are slow to implement appropriate programmes autonomously.

A cross-cutting issue in all these areas – and in others, such as water and waste management, which have not been addressed here because they go beyond the issue of Trans-European Networks – is that of environmental sustainability. The definition of green economy formulated by the United Nations Environment Programme perfectly expresses the purpose and tools of this approach, which aims at reducing environmental risks while improving equity – within and between countries –, promoting GDP and employment growth, supporting the central role of policy makers. However, as noted by Alfredo Macchiati in his essay, environmental reconversion is an extremely intricate task. In this regard, the discrepancy between the ambitious goals set by the European Union and the limited resources deployed is emblematic. The fact is that, beyond the rhetoric, the green economy is not a win-win-solution: we must be aware that no green economy can be built without charging for pollution or the excessive exploitation of natural resources – for example by means of taxation or tradable permits – and that the use of subsidies should cover only new technologies, not consolidated ones, if we do not want to distort the market and waste the resources needed to achieve our objectives. In short, in promoting the green reconversion of the economy, the European Union and the member countries are confronted with a challenging problem of reallocating resources.

"Equity and Growth: Ideas for a New Welfare" starts with an analysis of the risks linked to the increase of inequalities in advanced economies and in Europe, and then moves on to deal with four main areas of intervention to attack inequality and strengthen social cohesion: the development of a system of services for families and individuals; the challenges faced by the European health systems; the contradictions of the labour market deregulation processes; and the construction of a pension system at a time of population ageing.
Starting from the rising inequalities in income over the last twenty-five years, Vito Peragine proposes an analysis of its implications for social cohesion and economic growth from the perspective of equality of opportunity (EOp). This approach distinguishes between inequalities due to exogenous circumstances, beyond the individual's control (such as gender, family or race), and inequalities due to factors of personal responsibility, i.e. those under the control of individuals. The former (which account for up to 50% of the current inequalities in Eu-

ropean countries) are ethically unacceptable, and must be prevented (*ex ante*) or at least compensated (*ex post*). Moreover, they tend to accumulate over time, undermining social cohesion and hindering growth, since they produce inequality traps that keep a significant share of the population on the edge of the market and production. And this, then, is a field in which the Europe 2020 Strategy must prove its worth, by promoting selective redistributive interventions on those factors that cause exogenous inequality: education, services, healthcare, and social security.

The spread of temporary employment, changes in the work organization that accentuate the conflict between work and family responsibilities, the increase in the number of dependent elderly people, and changes in the structure and composition of households are all factors that affect the lives of families and individuals and lead to a growing demand for services. In her contribution, Jeanne Fagnani argues that we are witnessing a shift of the boundary between those services the family performs internally and those for which it must rely on external, public or private providers. Consequently, the issue of building a comprehensive, efficient network of services, sustainable and adapted to new needs, will play an increasingly important role in the economic and social policy agenda. The most advanced examples of integrated, flexible services, which have been introduced in some European countries, show the way forward: a new relationship between public intervention – which organizes the services network – and public entities, non-profit and for-profit private companies that provide services within a market framework. Market must be governed by the public authorities, in order to ensure that families have access to adequate, affordable services and are supported in their purchasing power (vouchers of varying value according to economic circumstances), and to qualify and protect the workers involved.

Even the health systems in Europe are today facing new challenges: more advanced health demands from citizens; the growing financial stress, that requires increased efficiency in network design and in the organization of services, and therefore more effective, complex governance; and the interdependence emerging between national systems. In her essay, Naomi Chambers compares the response to these challenges of the two main European models – the Bismarckian and the Beveridgean models. The former offers more choices, but the latter is better able to provide integrated and coordinated care, especially for patients with long-term illnesses. In any case, in both models reforms are being introduced that focus on schemes of managed competition among providers in a quasi-market framework regulated by public authorities, while maintaining (unlike the US) universal coverage. Creating the right incentives and ensuring multi-level governance still continue to be problematic, however. Regardless of the model used, there still remain significant disparities among European countries in terms of the efficiency and effectiveness of health systems in responding to these challenges. What is thus needed is a European strategy that pushes towards convergence on best practices.
The contradictions in the process of labour market deregulation are the core of the analysis proposed by Andranik Tangian. He sees the flexicurity approach – more flexibility of employment accompanied by increased social security – as a variant within the neo-liberal approach. The concept of flexicurity is then closely scrutinized: the main normative argument – that flexibility improves the performance of the economy – does not yet seem to be supported by convincing empirical evidence, and there are doubts that flexibility can be made truly compatible with security. The author carefully reconstructs the evolution of the European debate on the issue, from the mid-1990s until its inclusion as a cornerstone of the Europe 2020 Strategy,

and recognizes that the Dutch and Danish experiences – a shift from job security to employment security through the reduced protection of jobs, a comprehensive, effective system of welfare measures, and active requalification and re-employment policies – have given significant positive results. But he also notes that among the European partners, there is not yet an operational consensus regarding the instruments to effectively reconcile flexibility and security, but only a rhetorical one.
More positive considerations on flexicurity are contained in the essay by Elsa Fornero, who links the reforms of the labour market to those of the pension system: greater flexibility in labour relations and a closer link between pension benefits and contributions are a necessary but not sufficient premise for raising employment and activity rates, especially among young people, women and the elderly. The precariousness of jobs and the risk of inappropriate treatment in old age are due not only to defects in the design and implementation of reforms, but mainly to the stagnation which has characterized European economies for years. The essay focuses on the adjustments to be made to state pension reforms, while praising – from the point of view of individual incentives and financial sustainability – the shift from Defined Benefit (DB) schemes to Defined Contribution (DC) systems, particularly the so-called NDC (Notional Defined Contribution) system based on actuarial equivalence between contributions and benefits. Income security in old age depends primarily on length of working life and on the time profile and continuity of earnings. Hence the importance of establishing effective obligations and incentives to extend working life, introducing gradual retirement schemes, and improving older workers' employability. It will also be necessary to integrate DC systems with social protection schemes funded through general taxation, such as notional contributions for periods of unemployment and maternity, and the guarantee of basic pension levels.

Taken together, the essays collected in this volume show, in spite of the differences due to the variety of topics discussed and the views of the authors, an approach to economic and social policy that, in contrast to "conventional wisdom", sees public intervention as a catalyst for a development of markets aimed at achieving shared goals of civil progress: public governance, planning and market regulation capabilities are a prerequisite for the development of the infrastructure networks that Europe needs and of quality social service systems which meet the needs of an advanced society.
With regard to infrastructure investment, design of the rules and promotion of competition are essential to create a stable market framework in which entrepreneurial skills can express themselves and extensive private financial resources may be involved. But not only this: the remarkable externalities that are linked to infrastructure development require a planning policy that translates them into incentives able to internalize externalities in the private agents' behaviour and into investment strategies of market-oriented public network operators. As far as welfare policies are concerned, it is necessary to develop the European Social Model, combining social rights with individual incentive systems and regulated market mechanisms that confer greater power of responsible choice on citizens. This means a social safety net that supports job flexibility and self-determination with regard to life plans (work, maternity, retirement); a system of services for individuals and families that meets their demands and supports their purchasing power using public resources; and a healthcare system based on universal coverage of citizens and competition between providers in terms of results, assessed and regulated by a public body.
In both fields, infrastructures and welfare, budgetary resources – taking into account the needs of fiscal consolidation – should use their leverage for the mobilization of private resources, triggering multiplying effects on the financing of investment

and the demand for services. There of course remains the need for a change in direction of European macroeconomic policy, aimed at reabsorbing trade imbalances – expansion of domestic demand in countries with a trade surplus and consolidation of public budgets in countries in deficit – in order to exploit the expansive potential of the Monetary Union. It is also clear that the above-mentioned leverage would have expansionary effects in itself and, above all, by removing infrastructure bottlenecks and enhancing human capital, would create the supply-side conditions for stable, sustained, long-term economic growth.
To achieve this, we need – returning to the issue we started with – a stronger, more coherent governance of European economic and social policy.
Only a European planning and regulatory design – within an open, competitive Single Market framework – can unlock the infrastructural development of the area as a whole, exploiting externalities and strengthening its funding. On the latter issue, there are two main problems to be resolved: fundraising on international markets by issuing eurobonds aimed at financing Trans-European Networks, according to the approach originally proposed by Jacques Delors; and the reinforcement of the role played by financial institutions with a public mission – European Investment Bank, Caisse des Dépôts et Consignations, Cassa Depositi e Prestiti, KfW (Kreditanstalt für Wiederaufbau) – in creating the conditions for infrastructure investments to take off (both through equity financing and debt financing on terms that facilitate the involvement of private financial resources).
In terms of welfare policies, it is time to go beyond the open method of coordination, supporting the benchmarking of general performance indicators with co-funding intervention targeted at specific intermediate goals, deemed to be of priority importance by the EU, in order to promote convergence in the supply of services to the population. This means creating, with-

in the European budget, a fund dedicated to social policies and designed to co-finance national and local programmes according to an incentive mechanism similar to that already used for investments financed by the structural funds. The programmes to be funded must display specific observable and measurable targets in terms of welfare services, targets whose fulfilment responsibility univocally pertains to the governments involved, so that the issue of European co-funding may be made strictly conditional on the actual achievement of the results.[1]

In conclusion, the integrated Europe is called upon to draw up and promote a strategy for the governance of the market that opens up new prospects for economic growth and civil progress for European citizens.

NOTES

[1] Some examples of targets suitable for the purpose: the incremental number of children attending kindergartens and child/assistant ratio; similarly, the number of dependent elderly people receiving care at home; the acquisition of advanced health technologies and the creation of hospital departments able to use them.

Reshaping Europe to Relaunch Growth

Giuliano Amato

From the Lisbon Strategy to Europe 2020

The Lisbon Strategy has been largely misunderstood from its very beginning, which resulted in a negative impact on its success rate. In referring to it, its objective has almost always been stated in the following terms: over the span of a decade (from 2001 to 2010) the European Union would become «the most competitive and dynamic knowledge-based economy in the world». As this primacy has never been even remotely achieved, it was suggested that this Strategy was destined to fail. As a matter of fact, though, this was not the objective sanctioned in March 2000 by the Lisbon European Council. Those words had indeed been written down, but they were taken out of context, as the complete passage reads: «(…) the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion».
The challenge for the European economy was not to become the most competitive in absolute terms, but to become the most competitive without compromising on social cohesion – in fact, corroborating it. This extremely European challenge was even more ambitious, but it has to be noticed that it should be measured on the basis of a series of parameters that go beyond competitiveness and innovation.
We owe this clarification to the authors of the Lisbon Strategy and their outstanding efforts, but it does not rule out that, ten years on, it was more than reasonable for the European Commission to take stock of the limited results, the shortcomings and obstacles that have come about, and the objectives that

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have emerged with time. It was in the wake of this recognition that the Europe 2020 Strategy was launched by the Commission and subsequently approved by the European Council. The usefulness of this Strategy is not in question: the issue is whether the way in which it deals with the novelties is adequate and sufficient.
The evaluation on the focus of the objectives is positive, which is unsurprising given that, among its many specialties, the European Commission stands out for its capability of foreseeing challenges and future scenarios (although we shall see infra that this is not the case for the ways and means to be employed in view of such challenges). In this context, the Lisbon objectives have not been abandoned: on the one hand they have been fine-tuned, and on the other they have been integrated with indications of flagship initiatives. These point out the urgent issues that must be addressed today, projected towards a «smart, sustainable and inclusive growth» (a sophisticated display of adjectives…).
These initiatives include those seeking a "knowledge-based economy", through the creation of more favourable conditions for research and development to access necessary financial resources, improving the quality of the education system and opportunities for young people in the job market, and boosting the digital agenda for Europe. The additional initiative on energy efficiency for Europe is to be developed through renewable energy and the modernisation of the transport system. There is the promise of a comprehensive and conscious industrial policy that would operate alongside the environmental sustainability of the industrial sector and strengthen the competitiveness of our industries on the global market. There are also initiatives to benefit workers, such as training activities and employment mobility, and those against poverty and social exclusion.
The objectives and more specific projects linked to these initiatives are well known, including those involving common infra-

structures, such as the shared European electricity system, as well as the desired result of interconnecting national grids. I shall however leave other contributions in this publication to address these programmes in greater detail. It is more interesting for the scope of this essay to understand the reasons behind the obstacles to the objectives of the Lisbon Strategy, in order to evaluate the extent to which the European Union is able to overcome them in implementing its updated strategy.

At present, we have a different understanding of the obstacles than we did before 2008. From that year, in fact, the economic and financial crisis has had a severe impact on European growth and the ability of European countries to innovate economic activities and increase employment opportunities. Yet it would be a mistake to attribute to that economic earthquake those weaknesses that had already been identified and that can be traced back to insufficient governance. At the time, the decision was to rely on the open method of coordination (OMC), which was provided with a formal procedure that set out not only an order, but also a specific weight for each phase. This however was not sufficient to eliminate the structural defects, namely the intrinsic and inescapable asymmetry between the definition of certain public interests and objectives as European common goods and the responsibility for the implementation policies left to each individual state. Coordination based on analysis of each situation, benchmarking, non-legally-binding recommendations did not solve this asymmetry: in fact, it restated it.

Basically, for some years (probably since the Maastricht Treaty in 1992 – the turning point in this regard) a number of common pursuits had been entrusted no longer to the common institutions of an integrated Europe, but to a cooperative Europe consisting of intergovernmental functions and procedures. The Lisbon Strategy, which affected the policies and decisions that had generally remained a domestic responsibility of individual states (economic and industrial affairs, education and employ-

ment, social institutions and services), was bound to stumble here and consequently suffer from the same weakness.
At present, although we do have a new strategy and are facing a downturn in public finance that alone threatens its survival, we still face this weakness. If we analyse the general crisis that hit us and the resulting financial downturn experienced in various countries, we soon realise that the lack of effective common European answers to both financial and economic differences was a contributing, and perhaps a determining, factor. As noted by some (for instance Jean Pisani-Ferry), the assumption «It's all fiscal» has no actual basis. Moreover, the situation in which the conditions for growth and those for paying off public debt are sought requires both conditions to be corroborated and sustained by a European governance that is more effective than the one set out in the Lisbon Strategy. Is the Europe 2020 Strategy aware of this? And in any case, would it be possible to do so?
In its opening paragraphs the Europe 2020 Strategy states that a «stronger economic governance will be required to deliver results». And in fact, there has been something more, not in that document, but in subsequent decisions of the European Council (especially in the meetings held on 24-25 March 2011) under the pressure of the economic downturn. With the European semester, for instance, we have already experienced a preventive coordination of economic policies, which we did not see previously. Additionally, the documents that must undergo the strict common tests set out in the Stability and Growth Pact, now must contain, together with financial commitments, concrete reform programmes. Conversely, the recommendations directed at individual states will concern remedies to the economic budget deficit, as well as macroeconomic imbalances.
However, if we realistically observe the current situation of the European Union, it does not appear to be much better than it was three years ago, when the difficulties encountered in the

implementation of the Lisbon Strategy were combined with the economic and financial crisis, which brought about negative consequences for GDP and employment rates. This time weaker economies in the European Union face the risk of collapsing, and we are still fighting the prospects of a general crash, which might call into question not only the new strategy, but the survival of the euro itself. The question is: why is this happening? Because of the disproportionate growth of public debt, which was initially limited and which a stronger and timelier governance could have prevented. And because of the fear of possible contagions, which, at present, the first stages of a stronger European governance policy of solidarity are trying to counteract. Engaging with each chapter of the 2020 Strategy, examining the various initiatives that it sets out and suggesting elements to improve its own prospects of success is useful. But even more than the Lisbon Strategy, the risk of failure remains unless we succeed in handing it over to more effective institutions and governmental procedures than those currently available. The route to do so reflects what the European Union seems to be doing at present to face the sovereign debt crisis.

The key issue for the Europe 2020 Strategy was mentioned above in relation to the open method of coordination. I believe that it would not be possible to do any better in an attempt to strengthen it, including the provision of sanctions for member states that do not act upon the recommendations directed at them and thus on the obligations undertaken. Actually, an insurmountable difference remains between the coordination of a plurality of domestic policies and the adoption of a single common policy. This is a difference of players, of legal and political force of the acts they adopt, and of clear consequences for the third parties to whom those acts are addressed.

The most macroscopic example, which is also easy to understand, is that of the sovereign debt crisis, marked by the market surges against the government bonds of weaker member states. Due to these surges those bonds are decreasing in value; to finance themselves, affected states have to pay growing interest rates and their debt is becoming impossible to repay though available means, and thus potentially face bankruptcy. Nonetheless, this debt – even that of the more serious cases – is rather modest if compared to the whole European Union or the eurozone. The consolidated debt of Greece, Portugal and Ireland constitutes less than 7% of the entire eurozone GDP and less than 9% of its total debt. Subsequently, of course, even Italy entered the risk zone: a far weightier country, with an even graver debt. However, the debate seems to focus solely on Greece's difficulty in repaying its debt as the underlying cause of the risks for the entire eurozone. Does this make any sense? Of course not, but this risk will remain until the protection of common goods is left to the endurance of each individual state as opposed to the Union. This is the key point: the *hic Rhodus* of our governance, which has raised much hesitation.

Following the European Council meeting of 21 July 2011, neither Greece nor Portugal nor Ireland were left to their own devices and the existing financial facility created for countries experiencing difficulties was activated in their favour through the lending and issuing of secured bonds by the stronger states. This is not the collective guarantee that many have suggested, for which government bonds would be substituted by eurobonds (to be repaid by the member states for whom they are issued). Nonetheless, it demonstrates that presenting weaker states not as the sole debtors might give some confidence to the market.

We are thus on a path that has led us away from immediate risks, although we have not yet been able to reach the desired aims, namely the collective assurance of all as opposed to the separate security which every state gives according to the quota of help it offers. This is the shift from the *plures* to the *unum*, which, consequently, would have a much stronger force than that offered by the sum of the individual ones, and thus would be cheaper for one and all. But each EU member state is afraid of losing its own control. And when fear prevails, we give up on the desired results.

The parameters set out in the Europe 2020 Strategy are not excessively strict, and it would be incorrect to believe that, in order to mitigate the shortcomings of the open method of coordination, every necessary power must be transferred at European level. This is not the case, but a more systematic approach similar to certain financial measures, as occurred last May for the strengthening of the Stability and Growth Pact, would be preferable. The Stability and Growth Pact traditionally fell under intergovernmental coordination, in the framework of rules and sanctions set out directly and exclusively in the Treaty and an annexed protocol. When governments decided to give it new rules and made intergovernmental decisions, they also agreed that the best and quickest way to bring these rules into effect was to turn them into community regulations. Thus government budgets (rightly) remained a domestic responsibility, but some key rules concerning national budget (on the volume of expenditure, the balance between expenditure and revenue, the annual debt absorption) were not left to single acts of implementation at domestic level with a mere common vision, but were imposed through European regulations with immediate and direct applicability.

The Europe 2020 Strategy and its flagship initiatives are to be read and analysed in light of this example in order to understand the extent to which it can be transferred to them and for which aspects. In the Strategy, when the need for a «stronger economic governance» is mentioned, it seems like the traditional open method of coordination is being essentially repeated. The terms used are «priorities», «headline targets», «integrated guidelines», «country reporting» and «country-specific recommendations», which are all known instruments. Even in defining the roles of the various institutions the European Council remains the «focal point of the new strategy» and the Commission continues to «monitor progress towards the targets, facilitate policy exchange and make the necessary proposals to steer action and advance the EU flagship initiatives». However the novelty is that the European Parliament will have to act as a «driving force», to mobilise citizens, and to act as a co-legislator for «key initiatives». Thus it is an important space to support and prescribe the coordination among national policies.

Introducing normative pillars where today we only have guidelines means placing perspectives and actions for coordination in the context of harmonisation that could render them much stronger and more effective. There are no legal obstacles to do so in areas traditionally reserved for each individual jurisdiction, such as education, industrial policy and a large portion of social policies. Similarly to the reinforcement of the Stability and Growth Pact, the legal bases set out by the Treaty for market integration are alone largely sufficient, even without a more specific legal basis. It would also be possible to use them to strengthen various actions that the Strategy has planned for the European level. As an example of this, I recall the action to integrate and strengthen university mobility and research projects such as Erasmus and others; the modernisation and "decarbonisation" of means of transportation through incentives and binding measures for land, air and sea transport; and finally the creation of a uniform «business environment» for small to medium enterprises, especially with the definition of «transaction costs of doing business in Europe».

Of course, it is not only a question of strong or less strong guidelines that are able to bring about given objectives in different domestic contexts. It is also a question of financial resources, an issue in which national sovereignty has remained virtually intact, at least for the quantity and quality of the endowments of the European Union. That said, the apparent mismatch between the objectives that the Union would like to see adopted by the member states and the modest financial resources available for that purpose, would benefit from at least some form of coordination between the available resources and the objectives. To the contrary it is quite predictable, for a large proportion of those resources, to be targeted to the outdated objectives of the first few years of the European Community. This would again be due to the prevalence of less and less vital national interests as opposed to the shared and crucial interests of our common future.

In conclusion, even regardless of the obstacles in which the Lisbon Strategy got stuck, it was desirable to substitute it with a new strategy that could update and integrate its aims and actions. That said, regardless of opinions, the theme of governance takes on a clear preliminary value not only because it relates to its implementation (as was the case for the Lisbon Strategy, for which no adequate solution was found), but also because it concerns the threat linked to the sovereign debt crisis that has the power to invalidate any strategy.

The reasons behind the disappointing outcome of the Lisbon Strategy, the requirements for a more credible and effective Europe 2020 Strategy and the obstacles to our current efforts to counteract the sovereign debt crisis are inextricably intertwined. In all three cases the difference between success and failure in achieving our aims rests in our willingness not to remain anchored only to intergovernmental coordination; on the contrary, it is necessary for some key issues to be tackled through an integrated approach instead of a coordinated one. This willingness has already been displayed by the competence of the president of the European Council Mr Van Rompuy with regards to the Stability and Growth Pact. We can only hope that he will be able to follow his own example, as our future would depend upon it.

Andrea Goldstein · Céline Kauffmann

Financing Infrastructures across Europe

Infrastructures are the very foundation of modern economies and societies. Energy, transport, water, telecommunications, will all continue to be essential to future development and growth. In Europe as elsewhere their role is fundamental in promoting economic growth and prosperity, in creating job opportunities for all, in mobilising resources that enable innovation and preserve the environment, and in weaving the fabric of an inclusive modern society.

Over the coming decades the requirements of global infrastructure investment will be massive, running into trillions of dollars. The bulk of investments will be in the developing world, especially in major economies such as China, India and Brazil, but needs in Europe will also be huge. In Western Europe there is an urgent need to renew or replace old infrastructure, while in Eastern Europe the need is to improve dilapidated infrastructure. In all countries, global challenges such as economic and population growth, globalisation, urbanisation, climate change and vulnerability to natural catastrophes, as well as more stringent environmental regulations, will add to the massive investment needs.

A recent OECD report, "Infrastructure to 2030: Telecom, Land Transport, Water and Electricity",[1] highlights the growing gap between projected worldwide infrastructure requirements and public funding capacities. This gap can be largely attributed to rising social expenditure associated with public healthcare and

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pension costs. In this regard, constraints in public finance have already exasperated the problem of construction delays, cost overruns and maintenance deferrals.
How can governments bridge this burgeoning financing gap? The main options are to better mobilise the ultimate sources of revenues for infrastructure development and maintenance that are collected through users' fees and tariffs and taxes, and introduce better demand management to reduce the investment needs in the first place. Better public-private partnerships may also help countries face the tremendous upfront costs of infrastructure investment and improve the technical and commercial efficiency of infrastructure services. However, private investment will not materialise unless the balance between risks and returns is deemed appropriate by lenders and investors. Moreover, private finance is repayable finance, which ultimately needs to be paid back through users' fees and taxpayers money. Public pension system reform and the creation of individual pension accounts have been flagged as potentially good opportunities to create the capital pool necessary for large and stable investments. This growing stock of pension savings – some 28 trillion dollars in assets held by private pension funds in OECD countries – needs to find a home and infrastructure investment could provide an opportunity to match long-term liabilities with long-term assets. However, evidence so far shows the limited inclination of pension funds to invest in this class of assets for various reasons, including regulatory barriers.[2]

Infrastructure requirements in Europe: a synthesis

Infrastructure investment needs vary widely depending on the methods used for valuation, but are deemed to be significant across the spectrum of sources.
In the water sector, while access to drinking water and sanitation is now commonplace, European countries still face signifi-

cant financial challenges to replace ageing water infrastructure and comply with ever-stringent environmental regulations. Stricter regulations include higher standards of water quality such as, for example, those set out by the European Union in the Drinking Water Directive,[3] the Urban Waste Water Treatment Directive[4] and the Water Framework Directive.[5] Tightening regulation in the field of energy efficiency and greenhouse gas emissions is also impacting the water and wastewater industry, traditionally an energy-intensive activity. Lloyd Owen estimates that Europe is facing levels of operating costs in the water sector of around 2.1 trillion dollars (1.5 trillion euros) between 2010-29, and of capital spending between 642 billion dollars and 990 billion dollars (440-680 billion euros). This is higher than in any other of the world regions covered by Lloyd Owen.[6] In 2007, the OECD estimates that France and the United Kingdom would need to increase spending on water by 20% to maintain current level of services.[7]
According to the "World Energy Outlook 2010", energy-supply infrastructure requires a cumulative investment of 33 trillion dollars across the world between 2010-35. The International Energy Agency (IEA) derives this estimate on the basis of population growth, economic growth and new national policies adopted to address climate change. Almost 64% of total energy investment will take place in non-OECD countries, where production and demand are expected to increase the most. In Europe, the investment is estimated at some 4 trillion dollars (2.8 trillion euros).
The European Commission expects transport traffic between member states to double by 2020 and estimates the investment required to complete and modernise the Trans-European Network at over 1.5 trillion euros for 2010-30.[8] For the UK alone, McKinsey estimates the cost of maintaining, renewing and expanding transport infrastructure at around 350 billion pounds over the next two decades, a 45% increase on average annual spending since the turn of the 21st century.[9]

Is Europe ready for the challenge? The role of Public-Private Partnerships and some lessons from the United Kingdom

What is the contribution of Public-Private Partnerships (PPPs) in a context of dire infrastructure investment needs and extremely tight budget constraints? There is no widely recognised definition of PPPs and related accounting framework. Although evidence is not systematic, in OECD countries the percentage of public sector infrastructure investment that takes place through PPPs (loosely defined as a long-term contractual relationship between a public body and a private partner, or a consortium of private firms, for the construction and operation of infrastructure) remains limited – according to OECD the value ranges between 0 and 10% in most European countries.[10] Europe nevertheless comes first in terms of PPPs in value, with about half of the global total since 1985 (303 billion dollars) and third in terms of numbers (642). The second region, Asia and the Far East, represents a fourth of all PPPs in value. Overall, PPPs in road projects represent almost half of all PPPs since 1985 in value (307 billion out of 645 billion dollars), although the share is lower in terms of numbers (567 out of 1747). Rail projects come second, followed by water.

In Europe, the United Kingdom, the Czech Republic, Slovakia, Greece, Italy and Ireland are the countries where the percentage of public sector infrastructure investment that takes place through PPPs range between 5-10%. This is lower than in the OECD countries in Latin America, such as Chile and Mexico (where it exceeds 20%), but higher than in the rest of Europe.

The United Kingdom, in particular, represents the best-known example of the widespread use of PPPs in infrastructure. Although the Private Finance Initiative (PFI) attracted some controversy when it was launched by the Major government, it has remained a cornerstone of successive Labour and Tory platforms ever since. According to Partnerships UK, since 1992 over 900 PFI projects worth over 70 billion pounds have been procured.

A huge literature has developed examining PPP potentials and pitfalls – although data are sparse.[11] There is a broad consensus that private involvement has allowed funding cost-effective projects and implementing some that would not otherwise see the light, in particular in the health and education sectors. The technicalities of PPPs are also complex and for governments it is crucial to develop specialised units to catalyse expertise and produce standard documentation (contracts, bids, memorandum of information, etc.).[12] One important lesson concerns the need to gain a clear understanding of the service required, of the budgetary requirements, and of the risk transfer. Moral hazard always lingers insofar as the political consequences of letting PFI projects fail are usually too great.[13] This was clear in the case of the National Physical Laboratory (NPL), where construction difficulties led to a three-year delay and significant cost overruns.[14] The construction contract was ultimately terminated and the government appointed a new contractor.

In the first decade of the new century, with plenty of liquidity available, banks proved very generous in funding PPPs, which as a result included plenty of debt finance.[15] Another British example is the Croydon Tramlink, in which traffic numbers proved to be significantly below forecasts. The debt had to be restructured and concession extended to 99 years.[16] Such problems have been exacerbated by the global financial and economic crisis, as banks became very reluctant to lend and private companies struggle to honour their contracts.

The OECD principles for private sector participation in infrastructure

As clearly illustrated in the previous section, limited private investment flows in infrastructure and past disputes have often been due to poor understanding of the risks involved in operating in complex sectors and to inadequate institutional framework conditions. Although a potentially interesting class of assets for investors – most notably pension funds and other institutional investors – because of their characteristics of slow technological change, long-life span and stable revenue stream, infrastructure sectors (especially water, energy and transport) share several characteristics that may deter commercial financing:

a) infrastructure projects are capital intensive. They involve high initial investment, long payback periods and disparate commercial rates of return across sectors. The resulting infrastructure is specific and cannot be used for other purposes or removed from the country;

b) the revenues come mainly from user fees or government subsidies in local currency, exposing investors and lenders to foreign exchange risk if funding is in foreign currency. This is a real constraint for international investors in countries where the currency is weak/volatile, but also for national operators if local financial markets are poorly developed. The foreign exchange risk may be aggravated, as in the case of water, by the political difficulty of implementing tariff increases;

c) management and supervision of contractual arrangements may be carried out by local entities, exposing the investors to the potential weak management and financial capacities of sub-sovereign entities, but also to the general shortcomings and gaps related to multi-level governance;

d) infrastructure services have important social and political repercussions. On the one hand, this justifies public regulation aimed at protecting users from possible abuse of a monopolistic position. On the other, such public involvement may also take the form of political interference.

Recognising this, in March 2007 the OECD Council approved the "Principles for Private Sector Participation in Infrastructure",[17] which offers a coherent catalogue of policy directions and practices to help governments properly assess and manage the implications of involving private actors in infrastructure development and harness the capacities of all stakeholders more effectively. The "Principles" and their subsequent application to the water sector[18] highlight the following main considerations for governments.

Appropriate risk allocation Appropriate risk allocation across partners is a key element of success. It involves an assessment of the party best able to manage the risk, so as to ensure value for money and sustainability of partnerships.[19] Responding to the diversity of risks, a wide range of risk-sharing arrangements is available to policy makers, spanning from the public sector assuming most of the risk to full risk transfer to the private sector.

Table 1. Typology of contractual arrangements between the government (G) and the private sector (P).

	Asset ownership	Capital investment	Commercial risk	Operations/ Maintenance	Contract duration	Retribution of operator
Service contract	G	G	G	G/P	1-2 yrs	Municipality
Management contract	G	G	G	P	3-5 yrs	Municipality: fee is fixed or based on performance
Affermage/ Lease	G	G	Shared	P	8-15 yrs	Operator collects user fees *Affermage*: revenue shared Lease: fee paid by municipality
Concession	G	P	P	P	25-30 yrs	Users
BOT (Build Operate Transfer)	P/G	P	P	P	20-30 yrs	Municipality
Joint venture	G/P	G/P	G/P	G/P	Infinite	Users
Divestiture	P	P	P	P	Infinite	Users

Ensuring financial sustainability Financial sustainability of partnerships should be ensured through appropriate tariff schemes and/or funding mechanisms that allow for proper operation and maintenance of infrastructure and account for the different levels of affordability. Public subsidies may remain necessary, notably to improve access for the poorest. However, these subsidies must be well-targeted, clearly-defined in the budget and sustainable for the public finances. Overall affordability for governments – taking into account the impact on budget of subsidies and contigent liabilities – needs to be ascertained. This requires disclosure mechanisms that help safeguard fiscal discipline and transparency.

Improving the enabling environment The role of the government is essential in establishing adequate policies, regulatory frameworks and contractual arrangements, and for the ultimate responsibility to meet the population's basic needs. It involves establishing appropriate institutions, including the relevant regulatory bodies. Infrastructure sectors, most notably water and transport, are fragmented, with oversight responsibilities often split between different local, national and regional authorities. This raises important capacity challenges and generates issues of consistency across government sectors, also taking into consideration capacity gaps and allocation of resources.

Establishing accountability mechanisms Contractual arrangements with the private sector for infrastructure are typically long-term and as such not likely to cover all aspects of the complex relationship between the private sector and the public sector. Mechanisms exist that may help reduce the uncertainty that comes with long-term incomplete contracts or deal with their consequences. They include: strengthening competitive pressure and promoting information sharing; adopting performance-based contractual arrangements; providing for clauses and mechanisms to frame the discussions on future issues as well as formal dispute resolution mechanisms.

Consultation with end-users and other stakeholders Informed involvement of other actors in the process, such as local communities and regional partners, can be essential to identify priorities, facilitate maintenance and monitoring of performance. However, consultation should be developed according to the principles of clear focus, representation and transparency, and should be organised strategically at important stages of policy making.

By way of conclusions

There is no ideal financing structure practice, as a lot depends on the project. PPPs or PFIs are suitable for projects that are not economically feasible, concession mechanisms for those that are economically feasible, and more extensive regulation is required for projects of a monopolistic nature. What is true across the board is that, in order to ensure profitability and reassure understandable public concerns about private sector involvement in key infrastructures, the partnerships need to be strong, transparent and comply with consistent regulation.
Beside financing, another main problem with large-scale infrastructure projects is the "NIMBY syndrome" (Not In My Backyard), with local opposition to big projects often persisting for decades and disrupting long-term planning. NIMBY often becomes BANANA (Build Absolutely Nothing Anywhere Near Anything, or Anyone).[20] In order to articulate a national consensus on long-term goals, key stakeholders such as government, business, local authorities, consumers and NGOs must be brought together. The government, in particular, needs to put in place systematic analysis to predict market risks and prepare solutions. The alternative is simply too stark to consider: letting Europe fall behind and deprive its citizens of the benefits of socially-inclusive globalization.

NOTES

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Social Investment as a Socially Sound Strategy for Growth

Since the late 1990s, many experts have contributed to redefine the principles, goals and instruments of the welfare state to adapt it to the new socio-economic context of the post-industrial era.[1] Central to this new thinking is the emphasis that is placed on developing policies that aim at "preparing" rather than "repairing". While different terms have been used, the different analyses point towards a similar policy logic based on what can be labelled "social investment".

The social investment perspective is intended to sustain a different economy than that after 1945 – the knowledge-based economy. In this new economy, knowledge is considered as the driver of productivity and economic growth. The knowledge-based economy thus rests on a skilled and flexible labour-force, which can easily adapt to the constantly changing needs of the economy but also be the motor of these changes. The social investment perspective also aims at modernising the post-war welfare state so as to better address the new social risks and needs of contemporary societies, such as single parenthood, the need to reconcile work and family life, lack of continuous

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careers, more precarious forms of contracts and possessing low or obsolete skills.[2]
Consequently, the social investment approach rests on policies that both invest in human capital development (early childhood education and care, education and life-long training) and that help to make efficient use of human capital (through policies supporting women's and lone parents' employment, through active labour market policies, but also through specific forms of labour market regulation and social protection institutions that promote flexible security), while fostering greater social inclusion (notably by facilitating access to the labour market for groups that have traditionally been excluded).

Social policy as a productive factor

In this new perspective, social policies are viewed as a productive factor, essential to economic development and to employment growth. Traditional forms of "passive" social policy intervention of the post-war welfare state are not sufficient to address the needs of the new "knowledge economy". To succeed in this "knowledge economy" it is necessary to have a highly skilled and educated workforce, who can quickly adapt to the constantly changing needs of the economy, and who is also the motor of this change thanks to its creative and innovative potential. Today, unemployment is more and more linked to a lack of adequate skills to fill today's jobs, and this lack of adequate skills and education is also expected to stymie future economic growth and employment creation, unless the necessary investments are made to foster human capital development.
Welfare systems should thus promote and support employment and economic growth. Central to this renewed orientation for welfare systems is the idea that social policy should aim at "preparing" the population to prevent certain social and

economic risks associated with changing employment conditions and family patterns, and to minimise the *intergenerational* transfer of poverty, rather than at "repairing" through passive income maintenance schemes after the risk has occurred.

As such, social expenditure should be rechanneled from passive to active social policies. Social spending should be directed towards activating people in order to allow individuals and families to maintain responsibility for their wellbeing via market incomes, rather than towards passive benefits. However, this does not mean that "any job" is good and that social benefits should be scaled back so as to "make work pay". Instead, social policy should help to "make work pay" through positive economic incentives (by improving net income for those who work, first of all at the bottom end of the wage distribution), and should assist in promoting the creation of "quality jobs".

In this perspective, the state is assigned a key role in fostering the development of human capital (through investments in education and training) and in providing the necessary services and benefits to make efficient use of human capital (policies providing support for labour market participation, particularly among categories such as lone parents and young parents, for example day-care services) and to avoid human capital depletion (provision of in-work benefits – rather than social assistance or allowances – as well as support for job training and job searches, in addition to unemployment insurance).

One of the main aims of the social investment approach is to minimise the intergenerational transfer of poverty, but also to promote the intergenerational transmission of knowledge. While the policies put forward focus on promoting equal opportunity in the present (by facilitating access to education and training and to the labour market), this is expected to produce benefits in the future in terms of a reduction in the intergenerational transfer of poverty and inequalities, but also in terms of economic and employment growth. Indeed, not only are social policy and economic growth seen as mutually reinforcing, social policy is in fact seen as a *precondition* for economic growth.

Three central policy domains

Three areas of public policy stand out as particularly central: human capital improvement, the relation between the productive sphere of the economy and the reproductive sphere of the family, and employment relations. In all these areas, public services stand out as crucial components of a strategy that aims at preparing the population to the particular social risks caused by life course contingencies.

Policies that invest in human capital are of crucial importance. Education and training policies constitute the most obvious method of improving skills – particularly cognitive and social skills – relevant to the service-based, knowledge economy. Skill acquisition in formal institutions begins in early childhood education and care, and continues in the primary, secondary and tertiary stages of education. Skill acquisition during these stages of education is realized through policies that promote high enrolment and quality instruction.

Other types of public policies, though, such as sick pay or generous unemployment benefits, along with adequate rehabilitation programmes and active labour market policies, can also protect the value of individuals' skills. Human capital policies that foster the expansion of high quality jobs therefore include those that aid in both the acquisition of skills and the protection of the value of the skills already acquired. Well-designed unemployment insurance benefits carry the potential of also improving matching process on the labour market by working as search subsidies.

The focus on the relation between the productive and the reproductive spheres hinges on policies that help parents combine work and family life. Here the aim is both to increase labour supply by supporting mothers' employment in order to foster economic growth and ensure the long-term fiscal sustainability of welfare systems, but also to make families less exposed to the risk of poverty. An underlying aim is also to enable families to realize their desired fertility. Policies put forward typically include childcare services of high quality and accessible to all, and parental leave schemes framed in a way that allows both parents to take care of their children (relatively short leaves, well paid and with a bonus for the family if the leave is shared between the two parents). Of crucial importance here is the quality of the childcare services and the design and generosity of the parental leave schemes, both for providing children with equal opportunities at the earliest age and for their cognitive development, and to promote gender equality.

The third area of focus, that of employment relations, seeks to address the issue of the increasingly differentiated employment patterns over the life course in order to reduce the probability of being trapped into inactivity and welfare dependency. Günther Schmid[3] advocates that in an environment where workers experience more frequent labour market transitions, not only between employment and unemployment, but across a far wider set of opportunities and contingencies, including full- and part-time work, self-employment, training, family care, parental leave, child rearing and gradual retirement, policy supports are needed for individuals to successfully manage these transitions, preferably in accordance with productivity enhancing flexibility and higher employment levels. The issue is not maximum labour market flexibility or the neoliberal mantra of "making work pay". Instead, the policy imperative is for "making transitions pay" over the life cycle through the provision of "active securities" or "social bridges", ensuring that non-standardized employment relations become "stepping stones" to sustainable careers. Here the notion of flexicurity is central.

Promoting growth while fighting new forms of labour market problems

In today's economy, qualifications are more important than ever, especially in view of the increasing needs in new sectors of employment, such as "green jobs", advanced technologies, and the digital economy which lie at the core of the new economy. In this new context, the lack of adequate qualifications has become a new social risk. Indeed, unemployment risks and rates are much higher for the unskilled than they were a couple decades ago, and much higher than for those with tertiary education. As the European Commission's "New Skills for New Jobs" report[4] underlines, employment rates vary greatly according to qualification levels. The employment rates across Europe as a whole in 2008 for those with high skills was 83.9%, that for medium skill levels was 70.6%, and that for low skill levels was only 48.1%. Not only this, but the wages of the low-skilled have also fallen relative to more skilled individuals despite falling numbers of low-skilled individuals in the labour forces of most advanced economies, which suggests that there has been a fall in the demand for low-skilled labour. In fact, between 2007 and 2010, the number of jobs employing people with high skills has increased in Europe, while the number of low-skill jobs has decreased.[5]

The fact that the unemployed are predominantly unskilled and that vacant jobs require high skills suggests that we need here to emphasise again the importance of education, training, skill formation, maintenance and updating of skills as policies preparing individuals for the current and future economy.

Increasing education and skill levels has a positive effect on employment – both in terms of increasing employment levels and in terms of creating "good jobs". Thus, if we want not only to reduce unemployment but also to promote employment growth (especially in "good jobs"), while also promoting social cohesion rather than polarisation, it is important to complement demand-oriented Keynesian measures with supply side-oriented instruments that go beyond the neo-liberal deregulation of labour markets, lowering of labour costs and provision of incentives for the unemployed to take poorly paid jobs, and instead up-skill the unemployed by providing them with the necessary learning capacities, and safeguard the younger generation against a lack of qualifications. This is best done through policies that are broad-based, egalitarian and of high quality, and that follow the whole life-course, starting with early childhood education and care.

Social investment and equality

While specific policies are needed to support the least skilled who are presently on the labour market, the social investment strategy cannot exclusively be based on programmes targeted only at “the unskilled” or other disadvantaged groups, but should in the first place be based on the provision of universal, quality education and training programmes throughout the life-course. Equality and quality must be at the centre of the social investment approach in order for the programmes to deliver good returns.

Equality appears to be a necessary precondition for promoting growth and employment, especially in good quality jobs. At stake here is both equality of access (to quality childcare, to education, to life-long training, to quality health and care services) and income equality. Egalitarian societies perform better.[6] As the Scandinavian countries illustrate, they are more successful in implementing social investment policies and in achieving many of the desired outcomes linked to this strategy. The experience of the Nordic countries suggests that social investment policies can be used to successfully combine social and economic goals. These countries display high and broad-based education levels, which appear to translate into high levels of social capital and social cohesion, greater learning and innovation capacity at work (making these countries amongst the most competitive economies in the world), more flexibility on the labour market, good economic growth including the creation of more and better jobs. These countries also display higher female employment rates, lower poverty rates, including lower transmission of intergenerational poverty and have been dealing successfully with demographic issues, both in terms of providing care for the elderly and in maintaining fertility levels. The key to this success seems to be the fact that the Nordic countries have not pursued a simple re-orientation strategy with their welfare systems towards more activation, but have instead combined strong protection with heavy social investment, with the aim to promote social equality as well as gender equality.

Thus it is not just equality of opportunity ("social justice") but also equality of outcomes that matters. The fact that equality appears to be a precondition for a successful social investment strategy urges us to remember the merits of traditional social protection and anti-poverty programmes, and suggests that reduction of income inequality should remain high on the social investment agenda.

Gender equality should also be a central goal on the social investment agenda. Raising female employment rates cannot be enough. Persistent gender inequalities such as the division of unpaid care and household labour, the gender wage gap, labour market segregation and the "glass ceiling effect" for women must also be addressed. This means that special attention must be paid to the specific design of policies that seek to promote women's employment and to policies for reconciling work and family life.

Likewise, more attention needs to be devoted to the structural and political factors that contribute to the kind of ethnic inequalities that characterize European societies today and which are likely to be of increasing importance in the future if not properly addressed. A focus upon upgrading the skills, including the communication skills of immigrants appears crucial.

Social investment and quality

"Quality" should be another crucial component of a social investment strategy. This relates both to the quality of jobs but also to the quality of services. Only high quality childcare can foster good cognitive skill acquisition amongst all children and help reduce social inequalities. Participation in a course of education does not directly translate into high achievement: the quality of education matters more than simple participation for skill accumulation, particularly at the low end of the capability distribution.

When it comes to active labour market policies, policies directed only towards "activation" in the sense of pushing people back onto the labour market to take up "any job", as in the neoliberal strategy, have not produced good results. While employment rates have generally increased over the 2000s, the jobs created have very often been of low quality, taking the shape of atypical jobs, short term contracts, interim work, short part-time, etc., which has resulted in increased in-work poverty. Thus active labour market policy can be considered as part of a social investment strategy only if conceived as an instrument of social promotion, and not only as a way to increase employment rates at any cost. Amongst the various active labour market measures, only the "up-skilling" ones seem to fit the social investment approach. Activation is not enough.

This is all the more important since if the quality of jobs is forgotten, activation only leads to shifting people from inactivity into in-work poverty, which does not reach the economic goal of increasing employment rates in order to increase the tax base and support future pensions and health care costs. Furthermore, given the challenges of economic globalisation, one way to remain competitive on the world market is through innovation, and the production of goods and services of high quality.

It is necessary to invest in quality services and hence in the qualifications and working conditions of jobs in sectors like transport, construction, health and education and personal services. These areas are too often regarded as not forming part of the economics of quality, because of inadequate measures of productivity (based on the number of units processed per hour, and the level of formal education). The service and collective utility of the service should be promoted as a criterion for evaluating the "productivity" or the "utility" of work.

Investing in quality means that substantial investments must be made to improve education, training and up-skilling schemes, as well as to improve working conditions. This in turn means that more, rather than less, social spending or, rather, *investment* is needed. The fact that an effective social investment strategy in the short run entails increasing social expenditure cannot be ignored. This may well appear problematic in the aftermath of the 2008 financial crisis and in a time viewed as a period of financial austerity. Yet there are good reasons for changing the way such expenditure is considered, and to take seriously the idea that these social expenditures are in fact *investments*, from which economic returns can be derived. In the end, the social investment approach is about the long-term reproduction of the future tax base, so that we can avoid the severe austerity coming from the ageing of our populations.[7]

NOTES

[1] Most notably OECD, *Beyond 2000: The New Social Policy Agenda*, OECD, Paris 1996; A. Giddens, *The Third Way: The Renewal of Social Democracy*, Polity Press, Cambridge 1998; G. Esping-Andersen, D. Gallie, A. Hemerijck, J. Myles, *Why We Need a New Welfare State*, Oxford University Press, Oxford 2002; M. J. Rodrigues (ed.), *The New Knowledge Economy in Europe. A Strategy for International Competitiveness and Social Cohesion*, Edward Elgar, Northampton 2001. The emergence of these new ideas has been well analysed by J. Jenson, D. Saint-Martin, *Building Blocks for a New Social Architecture: The LEGO™ Paradigm of an Active Society*, "Policy & Politics", 3/2006, pp. 429-51.

[2] G. Bonoli, *The Politics of the New Social Policies. Providing Coverage Against New Social Risks in Mature Welfare States*, in "Policy & Politics", 3/2005, pp. 431-49.

[3] G. Schmid, *Full Employment in Europe: Managing Labour Market Transitions and Risks*, Edward Elgar, Cheltenham 2008.

[4] European Commission, *New Skills for New Jobs. Anticipating and Matching Labour Market and Skills Needs*, Office for Official Publications of the European Communities, Luxembourg 2009.

[5] *Ibid*.

[6] R. Wilkinson, K. Pickett, *The Spirit Level: Why More Equal Societies Almost Always Do Better*, Allen Lane, London 2009.

[7] This text is based on the findings of N. Morel, B. Palier, J. Palme (eds.), *Towards a Social Investment Welfare State? Ideas, Policies and Challenges*, Policy Press, Bristol 2011.

Networks and Infrastructure: Connecting Europe for Sustainable Development

Michele Grillo
A Single Energy Market

It has been fifteen years since the liberalization of public utility networks, and the energy sector seems to be particularly representative of the difficulties inherent in putting into practice the project of a genuine Single European Market. Today, these challenges are further complicated by the needs of all EU countries to come up with appropriate strategies to deal with the economic crisis which began in 2008. In fact, on 7 September 2010, Commission President Barroso, in his state of the Union speech to the European Parliament in Strasbourg, identified energy as «a key driver for growth and a central priority for action», highlighting the need to «complete the internal market of energy [and] build and interconnect energy grids».
Investment in infrastructure projects is a key part of the strategy for the economic recovery of Europe. Electricity and gas are crucial areas in this context because of network inadequacies in transnational interconnections which have persisted over time. Before the launch of the Single Market project, European energy markets were segmented along national boundaries. Transnational interconnection was only aimed at guaranteeing states mutual assistance in case of temporary shortage. With the liberalization of the market, interconnection needs have increased enormously: an integrated competitive market requires cross-border exchanges to be seen as the norm and not as the exception. If competition is limited to the confines of individual, internal national marketplaces, its effects will likewise be limited, which is exactly as it has been the case until now.

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In view of such considerations, it is surprising that the project for an integrated European energy market has been pursued without giving due attention to the importance of interconnection infrastuctures. Particularly in its initial phases, the liberalization dealt with network problems from a predominantly antitrust point of view. The first directives introduced between 1996 and 1998 (directive 96/92 for the electricity sector and directive 98/30 for the gas sector) aimed above all to ensure a level playing field for the operators controlling the infrastructures and those who were using infrastructures belonging to competitors. The main concern was to make sure that incumbents (that is former monopolies still controlling the infrastructures) did not make use of cross-subsidies, whereby the vertically integrated company's common costs resulted as network running costs that all users of the infrastructure had to bear. In this way, the incumbents might gain an unfair advantage over rival companies competing in the same markets. In order to pre-empt potential unfair practice, and control the economic conditions imposed on competitors needing to access the network, the first directives introduced the principle of Third Party Access and made the so-called *functional separation* of accounts and administration management obligatory for integrated firms.
The Commission continued this approach with its second phase of directives (2003/54 and 2003/55). Apart from specifically preventing cross-subsidies, there was the additional and more general concern that vertically integrated firms should not be allowed in any way to activate practices aimed at excluding their competitors from using the network. In order to better promote these aims, the second phase of directives obliged integrated operators to introduce *legal separation*, i.e. to let a separate company be responsible for managing the network. In this way, the roles of network management and service provider are clearly divided.

The reform debate has centred squarely on alternative forms of vertical separation. The prevailing comment was that *functional* or *legal* separation between network management and service provision – being different from ownership separation – is too bland and unfit to ensure the level playing field objective. At the same time, it was also highlighted that the directives adhered to a narrow static view, since they did not take into account that the vertically integrated operator benefits from controlling the infrastructure, not simply through stipulating conditions for the use of a *given* infrastructure by competitors, but above all through strategic decisions as to the maintenance and development of the network.

Concerns that vertically integrated operators may not be pursuing investment strategies for infrastructures consistent with the Single Market goals emerged in the energy sector inquiry of the European Commission, which was carried out over a two-year-period from 2005 to 2007. Further to the inquiry's analysis, the Commission has recently introduced the Third Energy Package. The inquiry shows that ten years after liberalization, markets remain mainly national, segmented and are still characterized by a high degree of concentration. Operators who have pursued strategies to enter different markets have done so by acquiring shares in companies who operate in such markets, thus exploiting market segmentation in Europe, rather than contributing to reduce it. The inquiry attributes the fact that markets are poorly integrated to insufficient cross-border trade and pinpoints the reason for this to two causes: the inadequacy of transnational interconnection networks, in a "material" sense, and the inadequacy of "institutional" infrastructures in managing wholesale energy exchange, that lack uniformity across countries, especially with regards to the allocation of the limited interconnection capacity between borders. Both causes severely hinder energy exchange from countries with lower prices towards countries with higher prices.

With respect to “institutional” infrastructures, over the last ten years a lot of effort has been made to set up and develop wholesale markets at a European level. The process, much more advanced in the electricity sector compared to the gas sector, has enhanced competition in energy markets, discouraging bilateral trade and incentivating trade on power exchanges. It is hoped in this way to mitigate information asymmetries in trading, limit negotiation costs and generally raise both the transparency and liquidity of the market. Within this framework, both the Commission and National Regulatory Agencies have set up “regional” markets which while they transcend national boundaries cannot yet be considered European.
Though insufficient to overcome the more challenging inadequacy of the “material” infrastructure, the regional market idea provides a pragmatic approach that may gradually lead to the integration of energy markets in Europe along a path of least resistance. The Regional Electricity Initiatives started up by the European Regulators Group aim to establish seven regional markets. Within each market it should be possible to modify the way exchanges between EU member states are conducted.
So far, transnational trade has been organized on the basis of separate bilateral markets, each one cleared separately, with cross-border capacity allocated through separate auctions. Regional integration allows the supplies and demands of two or more national markets to be grouped together (particularly those which are decided in the so-called “day-ahead market”). This system not only provides the advantage of a larger market but also allows a more efficient allocation of cross-border capacity. Inasmuch, the latter is determined not on the basis of separate auctions, but it is the implicit result of a single auction mechanism.
Regionally integrated power exchanges have already been operating, albeit at varying levels of intensity, for some time.

Nord Pool – made up of Norway, Sweden, Denmark, Finland and in part, Germany – is a single power exchange for which either "zonal prices" or "system prices" are quoted depending on whether power flows are limited or not by insufficient transmission capacity. The Central Western European Market, on the other hand, is an agreement between three separate power exchanges which results in a trilateral integrated market comprising of France, Belgium and the Netherlands with the participation of Germany and Luxemburg. The Iberian market, made up of Spain and Portugal, presents similar characteristics. Italy is not part of any of the regional markets and in fact, when potential groupings for regional European markets are designed, it is found to be the only country whose regional market coincides with its national boundaries.

Developments for gas lag behind because wholesale trade is nearly always conducted bilaterally. A stable system of gas stock exchanges, still in the process of being slowly developed in a number of countries, is a crucial prerequisite for the integration of cross-border exchanges.

Undoubtedly, regional markets represent an important step towards an integrated European market. The increase in market liquidity and greater efficiency in the use of cross-border capacity have contributed significantly to price reduction. Although the establishment of regional markets is still in process, the steps already taken appear to be exerting attraction and are functioning as an incentive to individual national systems to participate. However, generally speaking, benefits remain limited. On the one hand, "institutional" infrastructures alone are not able to eliminate at the source the hidden conflicts between network operators, who are caught between national and regional interests. On the other hand, and more crucially, full integration of wholesale markets is blocked by insurmountable capacity bottlenecks that hamper transnational energy trade. The problem, then, does not only concern inefficiencies in using the existing infrastructure (inefficiencies that can be made up for by better coordinating mechanisms and regulation) but also resides in inadequacies in the network infrastructure itself. The Third Energy Package has amended the second group of directives and their respective regulations. For the first time, the need for overcoming the physical barriers which are strangling energy interconnections is directly addressed. The Package aims to influence the behaviour of the operators, both to prevent the vertically integrated firms from activating investment strategies whose principal objective is to maintain their market power, and to incentivate all operators to carry out the structural investments necessary for the integration process. In pursuing these goals, the Third Package proposes a two-fold strategy: reinforcing the separation between service operators and network operators, and encouraging the coordination between regulators through the setting up of an Agency for the Cooperation of Energy Regulators.

As for the former, the Commission initially intended to impose a definite separation of decision-making processes, requiring the separate ownership of the network firm with respect to the ownership of the service provider. The Commission's proposal was opposed by vertically integrated operators, despite the fact that the energy sector inquiry failed to find significant vertical synergies and produced evidence to prove that in cases where operators were separate, economic benefits accrued to both the network firm and the service providing firms (one argument often cited in this context is that the much larger United States gas market relies on independent open networks). In any case, the Commission's proposal did not receive the political support of important EU member states including France and Germany and the suggestion of an obligatory form of separation was not acknowledged. Thus, two other options were offered to vertically integrated companies: a) the appointment of an Independent System Operator (ISO) that would act as the single management entity of the network (Italy, when implementing the first electricity directive, had introduced such a figure in the person of the Gestore della rete di trasmissione nazionale, GRTN, but the idea was subsequently abandoned); b) the possibility of maintaining within the vertically integrated firm an Independent Transport Operator (ITO) who was to be given the prerogative of independent action. However, firms opting for a weaker form of vertical separation would be subject to a pervasive regulation, whereas regulation would be less "intrusive" towards operators who separated ownership of the networks from service providers.

In the former contexts, regulators will have a difficult task balancing the competitive use of network infrastructures with the incentives of the vertically integrated operators. Tension is emerging between pro-competitive regulation in the short term, that implies Third Party Access, and pro-competitive regulation in the longer term, which requires ignoring the principle of Third Party Access to provide incentives for integrated operators to enlarge capacity.

Under the Third Energy Package the responsibility for handling this trade-off has been entrusted to the European Agency for the Cooperation of Energy Regulators. The Agency's job is to settle disputes between national regulators; define the rules for cross-border energy trade; and carefully evaluate when it might be appropriate to suspend Third Party Access rules due to the greater public benefit that would ensue from infrastructure investment.

Nevertheless, by entrusting the control of vertically integrated firms' decisions regarding infrastructures to a regulation mechanism, the Third Energy Package only partially fulfills the necessary steps for achieving an integrated European market. Providing measures so that Third Party Access does not put off vertically integrated operators from carrying out investments does not guarantee that sufficient incentives are provided to

those same operators to undertake all the investments necessary to remove the bottleneck in the interconnections which today hamper an integrated European market. Resorting to adjustments of the regulation model based on Third Party Access means assuming that vertically integrated firms have a genuine interest in augmenting levels of infrastructure to meet higher levels of energy demand. The crucial point, however, is that, with a view to the European market as a single market, the provision of an adequate supply of cross-border infrastructures is laden with positive externalities which are not easy to internalize when delegated to vertically integrated operators, however they may be regulated.
Access tariffs is the typical tool regulators have to encourage a private network owner to take those investment decisions necessary for the development of a competitive single market (that is decisions that are to be taken with a view to European public interest). The terms governing the tariffs, however, should not only guarantee the investor normal profits when running at full capacity, but should also stipulate a "premium for risk", when due to the economic cycle or for other market reasons a part of the capacity remains unused. In order to be able to offer these guarantees, the regulator needs to accurately estimate the risk and include it in the tariffs. In addition, the regulator must agree *ex ante* not to expropriate any extra profits the investor might make *ex post* once the investment has been made. Because of the difficulty inherent in drawing up a similar regulatory design, the Third Energy Package tends to provide incentives for vertically integrated operators via the suspension of the Third Party Access principle.
In a similar vein, and in a way that was initially very promising, some years ago, the Italian Regulatory Authority established a regulation mechanism to incentivate investment in new infrastructures by removing a significant 80% of the obligation to offer network services to competitors. However, on the basis

of results available today, the idea did not turn out to be as successful as was hoped.
The difficulty of encouraging vertically integrated firms to make investments necessary for a competitive European single market is also relevant to another currently hotly debated topic which focuses on the financing of infrastructure projects, particularly on ways of incentivating the participation of long-term investors.
The current economic crisis obviously excerbates concerns on this matter. However, even before consideration of funding supply issues, the substantial problem is that the demand for real investment is likely to be too low, unless it is the result of proper collective decision-making at European level.
There is a crucial reason which, in my opinion, has not been sufficiently debated, that suggests that neither regulation nor separation of ownership may provide the appropriate incentives for encouraging investment decisions compatible with a competitive integrated European market. This reason leads me to the conclusion that the question of control over the network providers cannot be avoided, and that an energy network company should have the profile of a "public European company".
The point is that a competitive integrated European energy market needs a larger infrastructure capacity than that which the current configuration of utility networks within the oligopolistic and segmented European markets is capable of producing. It is difficult, however, to entrust the market, even a regulated market, with the investment decisions relative to a larger capacity infrastucture. Decentralized decisions regarding infrastructure are guided by the prevailing market conditions. Furthermore, in a non-competitive market, these same decisions represent the principal tool for integrated firms to consolidate their market power.
Thanks to the modifications introduced by the Third Energy Package, vertically integrated firms might not be discouraged

from making investments in the same way they would have been discouraged under Third Party Access. However, nothing would discourage such firms from maintaining network capacity within limits that permit the continuation of the current monopolistic market context. Over the years, the largest vertically integrated operators have resisted any request to enlarge their network infrastructure, on the argument that this would give rise to “excess supply”. Instead, the point is that proper competition in the integrated European energy market precisely requires “excess capacity” of the network infrastructures compared to the actual size that only fits today’s non-competitive equilibrium.

The argument above is even more compelling for ownership separation than are the conditions for implementing Third Party Access. At the same time, nevertheless, the same argument suggests that ownership separation may not provide sufficient incentive for investment decisions compatible with the necessary network excess capacity. Even a separated network operator, reacting to market signals, would come to decisions that maintain capacity at an insufficient level, as long as competition in the market remains imperfect. Such a result would be even more likely if market signals were consistent with a collusive equilibrium between network users. The only way to break collusion would be to have demand for network services coming from new operators. Such demand, however, would remain potential, due to the network constraints and would never turn into effective demand, unless new operators are actually given the possibility to enter the market.

In conclusion, even ownership separation is not enough to guarantee that decisions taken as to infrastructure investments are compatible with an integrated and competitive market. To fulfil this goal, the demand for them must come from an intrinsically public agent. But for this to happen, a more advanced political agenda is necessary. The substance of such an agenda could be, for example, the setting up of a "European public company for energy networks", in which all member states would have a share, and which would be able, as a European subject, to make decisions on infrastructure, especially, but not only, those decisions relative to cross-border interconnections. Although the precise manner in which such a project could be developed is beyond the scope of this paper, its actuation would seem to be a prerequisite for the effective establishment of a single European energy market.

Chris Nash

Investments in Trans-European Transport Networks

The European Commission has long considered that individual member states have received insufficient incentives to invest in improved international transport networks within the European Union. Moreover, from the early 1990s the Commission has sought to promote greater investment in these networks, by providing coordination mechanisms as well as financial means (although these have been limited except for countries in receipt of regional and cohesion funding). However, progress has been much slower than envisaged, and more recently the Commission has revised its Trans-European Network policy to concentrate on a core network.
In its White Paper (March 2011)[1] the Commission set out its intention to make rail the main mode of medium distance transport for both passengers and freight by 2050. Trans-European Network funding has always been strongly biased towards rail transport and particularly towards high speed lines; as part of this policy, the Commission foresees a three-fold increase of the length of new high speed lines in Europe by 2030.
This paper will review the experience of the Trans-European Networks, and particularly of high speed rail investment, and examine its contribution to the economic and environmental goals of the Commission. The next section will provide some background to the development of the Trans-European Transport Network. We will then consider the appraisal of Trans-European Network projects, and particularly high speed rail lines.

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Finally, we will consider the contribution such investments may make to the achievement of the European Commission's economic and environmental goals and suggest a more appropriate way forward.

Development of the Trans-European Transport Network

As noted above, the European Commission has long believed that there are inadequate incentives at the national level for individual governments to invest to improve cross border transport links. This is, essentially, because many of the benefits of such investments accrue to other countries; indeed, in the case of key transit corridors, this would include all countries other than those linked by the infrastructure in question. As a result, the Commission asked member states to identify Trans-European Networks of all modes of transport and to develop projects to deal with key gaps and bottlenecks in them.

In 1994, the TEN-T programme was initiated by the European Council endorsing a list of fourteen priority transport projects, selected by the Christophersen Group and since referred to as "the Essen Projects". In 2004, the list of priorities was extended to include thirty projects. However, it was noted that progress was much slower than anticipated. One of the main reasons for this is lack of funding. For most countries, the EU only provides funds for studies (50%) and up to 10% (or exceptionally 20%) for construction costs. However, in eligible countries regional and cohesion funds provide up to 80% of the costs. TEN-T projects also qualify for favourable lending terms from the European Investment Bank.

Whilst the priority projects include all modes of transport, a large proportion of them have been rail projects, and in particular high speed passenger lines. Eighteen of the thirty projects are rail, whilst a further three are a mixture of rail and road. In 2009, the Commission launched a comprehensive review of the TEN-T policy, and revised guidelines are expected in 2011. Whilst the review concluded that a lot of individual links had been completed, significant cross border gaps remained, and inter-operability continued to be inadequate. The vision of the network was restated as «an integrated multi-modal network spanning the continent, triggering further economic growth and competitiveness and mitigating environmental impacts», but to speed up implementation of the most important projects, emphasis shifted to a core network of multi modal corridors.[2]

More recently, the Commission has published the new White Paper on European transport policy. This places an even greater emphasis on rail as the means of reconciling continued economic growth and growing transport demand with environmental constraints, and in particular the need for a major reductions in greenhouse gas emissions. It argues for the transfer of at least 30% of existing road freight to rail or other environmentally friendly modes by 2030, and that by 2050 rail should be the main mode for medium distance passenger and freight transport. In pursuit of this, the existing length of high speed rail lines ought to be tripled by 2030. The next section will consider the appraisal of Trans-European Network projects and in particular high speed rail.

Appraisal of Trans-European Network projects

The most recent independent review of Trans-European Network projects took place as part of the FUNDING project. Of the twenty-two projects appraised, it assessed that ten were not worthwhile.[3] It concluded that existing procedures for identifying TEN-T projects gave little incentive for member states to limit themselves to identifying efficient projects, if they thought they could get funding regardless of the economic case for the projects. The study found little reason for the Commission to be involved in funding projects where little cross border traffic was involved (in nine of the projects, cross border traffic accounted for less than 10% of total traffic). It concluded that European funding should be confined to schemes where, although there was a good case for building them, efficient user charges (based on marginal cost pricing) would not come close to recovering the full cost of the scheme, and there was significant cross border traffic.[4] The appropriate level of European funding would be determined by one minus the cost elasticity of the scheme multiplied by the proportion of traffic that was cross border.

These rules would tend to favour cross border rail projects, as these exhibit strong economies of scale and low shares of local traffic. Indeed, other work within the project suggested that, while most European high speed investments were justified, the attempt to recover the costs of building new high speed lines through high track access charges may counteract the benefits of building the line by reducing the level of service train operators were willing to provide.[5]

The case for investment in high speed rail as a mode of transport which will promote economic growth whilst mitigating environmental consequences rests primarily on two propositions. Firstly that high speed rail will lead directly to economic growth by saving costs and increasing competitiveness in the European economy. Secondly, that it will divert traffic from other more environmentally damaging modes of transport. In the following sections we consider each of these arguments in turn.

High speed rail and economic growth

In a standard transport appraisal, the principle benefit considered is time saving. Whilst leisure time saving is valued by those benefiting from it, in terms of promoting economic growth it is time saving on business trips which has the most direct effect. Typically, these time savings are valued at the hourly wage rate of the relevant staff, plus a mark-up for the overhead costs of employing labour, on the basis that the time savings release labour that can be productively employed to boost output. Such savings may typically provide around half of the measured benefits of high speed rail.[6] However, it has been noted that this crude valuation procedure ignores the fact that, especially with the growth of the use of laptop computers, mobile phones and train wireless access to internet, travelling time on train may be put to productive use.[7] Ways of allowing for this in valuing time savings were pioneered by Hensher[8] but are seldom used in practice. On the other hand, some studies[9] still find that employers are willing to pay a large amount to save travel time of their employees for other reasons, such as enabling them to do more in a single day at their destination and thus saving a repeat trip or an overnight stay, and ensuring that they arrive at meetings refreshed and ready to perform at their best. New high speed lines may also boost economic growth by reducing the costs of freight traffic. Most high speed lines do not directly carry freight, except sometimes for high speed parcel delivery, but they do free up capacity on the existing network for faster lower cost freight services.

There are relatively few publications on *ex post* cost-benefit analyses of specific high speed rail projects. One of the few published studies, for the Madrid-Seville line, which opened with less than 3 million trips *per annum* and is still carrying only of the order of 5 million trips per annum, found the project not to be justified.[10] A recent review of the Madrid-Barcelona investment reached the same conclusion.[11] Conversely, the French experience is more encouraging. France is one of the countries with the most experience of high speed rail (HSR), and systematically conducts cost benefit analyses of all transport projects. It is also required under French law that an independent *ex post* evaluation be undertaken of all major projects requiring government funding. All the lines so far appraised were found to have acceptable social rates of return, although that for TGV

Nord was marginal at 5%. The key difference from Spain is that all the French lines carried at least 15 million passengers per annum from the year they were opened.[12] It has been found that key issues in determining social viability of high speed rail are the construction costs, value of time savings and volume of traffic.[13] In practice, it appears that typically somewhere between 9 million and 15 million trips per annum at opening are necessary in order to achieve social viability.

Do high speed rail and other transport projects offer wider economic benefits beyond those found in a traditional transport appraisal? This has been the object of long debates, but empirical evidence is hard to obtain. Many studies have found increases in property prices[14] or in GDP[15] in the vicinity of the line for new HSR projects. Alain Bonnafous found some evidence that Lyons expanded its role in the service sector as a result of the TGV Sud-Est,[16] whilst Reg Harman uses qualitative evidence that HSR aided regeneration in Lille and Lyons.[17] However, it is generally argued that such effects are transfers, either of economic activity from other locations, or of benefits such as time savings into property values.

More recently it has been accepted that there are genuinely additional wider economic benefits from agglomeration effects, increased tax revenue from increased labour supply and increased production under circumstances of imperfect competition.[18] Agglomeration effects provide external benefits over and above the direct benefits to firms using the facility by making such firms more accessible to customers, suppliers and the workforce. Whilst the benefits of increased labour force participation to the participants themselves should have been included in a conventional appraisal in terms of their willingness to pay for the trips, there is also clearly a benefit to the taxpayer from increased tax receipts. However, both these effects are believed to arise mainly in conurbations.[19] For instance, with reference to the proposed British high speed line (HS2), they are estimated to be a relatively modest proportion of benefits and mainly arise because the new line releases capacity for improved commuter services in the major cities.[20] To the extent that imperfect competition raises prices above marginal costs in the economy in general, the benefits of any increase in output achieved by the reduction of costs as a result of reduced business travel and freight costs will be magnified over and above the value of the cost saving itself. This will form a more significant wider benefit of high speed rail given the importance of business travel times savings in the appraisal of high speed rail.

Environmental benefits of high speed rail

Construction and operation of new high speed rail lines causes noise, disruption and visual intrusion. On the other hand, to the extent that it diverts traffic from other more environmentally damaging options, it will have offsetting benefits. The first key question is thus: how much traffic will a new high speed line divert? The second is: what is the relative environmental cost of rail and of the other modes?

According to de Rus et al.,[21] the first high speed lines in France and Spain (Paris-Lyon and Madrid-Seville) led to a fall in the air share of the market of more than two thirds. It should be noted however that the after situation includes substantial generated traffic. Wilken reports that surveys of Madrid-Seville passengers indicated that 15% of the additional rail traffic was newly generated,[22] whilst according to Bonnafous no less than 49% of the additional traffic on Paris-Lyon in the first four years was generated traffic.[23] In other words, whilst there was indeed a substantial transfer from air, the reduction in the road mode share was largely caused by the generation of rail traffic, rather than direct transfer. Other evidence suggests that when rail station-to-station journey time is up to around two hours and a half, rail dominates the market; at four hours rail still has a substantial market share; but beyond that the rail market share decreases dramatically.[24]

Many studies find that rail is overall less environmentally damaging than road or air travel.[25] One study attempting to quantify environmental benefits for a specific high speed project is the HS2 proposal in Britain.[26] Environmental benefits, including reduction in greenhouse gases, were found to be small. Whilst the new line would divert some traffic from road and air, reducing environmental costs on these modes, it would have environmental costs itself in terms of noise and visual intrusion. Moreover, most of its traffic would be diverted from conventional rail or induced. Given that high speed rail uses more energy than conventional rail, and that the United Kingdom makes extensive use of fossil fuel to generate electricity, this offsets much of the savings, although the fact that HSR – with its long nonstop journeys – typically achieves higher load factors than conventional rail serves to mitigate this problem (Eurostar and the French TGV network, with compulsory seat reservation and yield management systems, report average load factors of the order of 70%, whilst the German ICE network, with more frequent stops and no compulsory reservation, only achieves 50%). There is also the issue of carbon embodied in the construction of new infrastructure; whilst studies suggest this is not a significant issue for lines as heavily used as HS2, it might be for less well used lines. It should be noted however that HS2 is on a route where rail already has a strong market share except for the minority of very long journeys. Environmental benefits, and particularly greenhouse gas reductions, may be significant for cases where existing traffic is predominantly on air. It is also the case that rises in the shadow price of carbon over time, as well as other factors such as the value of time, might increase the value of the benefits of high speed rail over time. But in this case no likely increase in the value attached to carbon would make the environmental benefits of high speed rail significant.

Conclusions

The European Commission remains firmly committed to a priority network of Trans-European links which it believes will facilitate economic growth in an environmentally sustainable way. It has reiterated that new high speed rail lines should play a major part in this strategy. However, some evidence undermines these propositions. Firstly, it appears that at least some of the priority projects have been badly selected. Secondly, whilst many projects will benefit businesses by providing faster travel, and to a lesser extent improving freight and commuter services, evidence for substantial wider economic benefits is less certain. Thirdly, the net environmental benefit of new high speed lines appears marginal.

On the other hand, it does appear that cross border rail links have the characteristics, economies of scale and a high enough proportion of cross border traffic to justify European Commission funding to encourage their construction. A good case does appear to exist for investing in new high speed lines where passenger volumes are large. However, high speed rail can be a costly solution to transport problems compared to benefits where volumes are not large, and less expensive solutions, involving upgrading existing lines, the use of tilting trains or alternative modes of transport, need to be evaluated in such cases.

Thus investments in Trans-European Networks need to be more selective to ensure good value for money. Tighter rules are needed on appraisal and on European contributions to funding to ensure that value for money is secured.

NOTES

[1] On 28 March 2011 the European Commission adopted the *Roadmap to a Single European Transport Area – Towards a Competitive and Resource Efficient Transport System*, forty initiatives aiming at building «a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment» and at reducing «Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050».

[2] Commission Staff Working Document, *The New Trans-European Transport Network Policy. Planning and Implementation Issues*, 19 January 2011.

[3] S. Proost, F. Dunkerley, S. Van der Loo, N. Adler, J. Bröcker, A. Korzhenevych, *Do the Selected Trans European Transport Investments Pass the Cost Benefit Test?*, Center for Economic Studies, Discussion Paper Series, 10.02, January 2010, available on www.econ.kuleuven.be/ces/discussionpapers/default.htm. By contrast Frontier Economics found almost all projects funded under the Cohesion Fund to be worthwhile, Frontier Economics et al., *Ex Post Evaluation of Cohesion Policy Interventions 2000-2006 Financed by the Cohesion Fund. Work Package B: Cost-Benefit Analysis of Selected Transport Projects*, Inception Report, 15 February 2010, available on www.ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/wpb_inception_report.pdf.

[4] S. Proost, F. Dunkerley, B. De Borger, A. Gühneman, P. Koskenoja, P. Mackie, S. Van der Loo, *When Are Subsidies to Trans-European Network Projects Justified?*, in "Transportation Research. Part A: Policy and Practice", 3/2011.

[5] Adler et al., *High-Speed Rail and Air Transport Competition: Game Engineering as Tool for Cost-Benefit Analysis*, in "Transportation Research. Part B: Methodological", 7/2010, pp. 812-33.

[6] See, for example, Department for Transport, *Economic Case for HS2. The Y Network and London – West Midlands*, DfT, London 2011, available on www.highspeedrail.dft.gov.uk.

[7] G. Lyons, J. Jain, D. Holley, *The Use of Travel Time by Rail Passengers in Great Britain*, in "Transportation Research. Part A: Policy and Practice", 1/2007, pp. 107-20.

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[10] G. de Rus, V. Inglada, *Cost-Benefit Analysis of the High-Speed Train in Spain*, in "The Annals of Regional Science", 2/1997, pp. 175-88.

[11] Frontier Economics et al., *op. cit.*

[12] J. F. Paix, *Feedback on High Speed Rail in France. Proceedings of the 7th World Congress on High Speed Rail*, Beijing 7-9 December 2010.

[13] De Rus, Nash, *In What Circumstances Is Investment in HSR Worthwhile?*, in de Rus (ed.), *Economic Analysis of High Speed Rail in Europe*, Fundación BBVA, Bilbao 2009, available on www.fbbva.es/TLFU/dat/inf_web_economic_analysis.pdf.

[14] See, for example: E. Cascetta, F. Pagliara, V. Brancaccio, J. Preston, *Evaluating Regeneration Impact Test of the Channel Tunnel Rail Link*, 12th World Conference on Transport Research, Lisbon 11-15 July 2010; F. Pagliara, C. Barrasso, J. Preston, *High Speed Rail Accessibility Impact on Property Prices: Evidence from St Pancras International Station in London*, 16th Panamerican Congress of Traffic, Transport and Logistics, Lisbon 15-18 July 2010; J. Preston, G. Wall, *The Ex-Ante and Ex-Post Economic and Social Impacts of the Introduction of High Speed Trains in South East England*, in "Planning, Practice and Research", 3/2008, pp. 403-22.

[15] G. Ahlfeldt, A. Feddersen, *From Periphery to Core: Economic Adjustments to High Speed Rail*, MPRA Paper 25106, Munich University Library, Munich 2009.

[16] A. Bonnafous, *The Regional Impact of the TGV*, in "Transportation", 2/1987, pp. 127-37.

[17] R. Harman, *High Speed Trains and the Development and Regeneration of Cities*, Greengauge 21, June 2006, available on www.greengauge21.net/wp-content/uploads/hsr-regneration-of-cities.pdf.

[18] A. J. Venables, *Evaluating Urban Transport Improvements: Cost-Benefit Analysis in the Presence of Agglomeration and Income Taxation*, in "Journal of Transport Economics and Policy", 2/2007, pp. 173-88.

[19] D. J. Graham, *Wider Economic Benefits of Transport Improvements: Link Between Agglomeration and Productivity*, Department for Transport, London 2005.

[20] Department for Transport, *op. cit.*

[21] De Rus (ed.), *op. cit.*

[22] D. Wilken, *Areas and Limits of Competition Between High-Speed Rail and Air*, Think-Up Project Workshop, Dresden December 2000.

[23] Bonnafous, *op. cit.*

[24] De Rus (ed.), *op. cit.*; Steer Davies Gleave, *Air and Rail Competition and Complementarity. Final Report*, European Commission DGTREN, August 2006.

[25] See, for example, INFRAS/IWW, *External Costs of Transport. Update Study*, Zurich/Karlsruhe 2004.

[26] Department for Transport, *op. cit.*

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The Contribution of ICTs to Cohesion and Growth: Choosing Public Policies

Over recent decades, Information and Communications Technologies (ICT) have greatly impacted on productivity and growth of the main developed economies. In fact, their growth gap can be largely retraced to the different amount of production and use of ICTs. Since ICTs are considered as general purpose technologies, we expect that this significant and pervasive contribution on the one hand will continue for a long time, and on the other will not be completely internalised by private actors. This gives public intervention a solid theoretical basis, corroborated by the clear success of states such as South Korea and Japan that have based their industrial policies on ICTs. This subject has become topical again, given that many have proposed programmes for participation or public financial support for Next-Generation Networks (NGN), inspired by the Korean and Japanese experiences.
The most revolutionary project, launched by the labour government in Australia, will make 100 MB/s fibre optic connection available to 93% of homes and wireless and satellite access at 12 MB/s to the residual 7%. Over the next decade the total investment will be around 43 million Australian dollars. On the regulatory front, it is worth noting that the government will maintain

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control over a company that will provide, under a regime of ownership separation, the wholesale of fibre services at geographically homogeneous prices to those who wish to operate on the retail markets. Moreover, Telstra, the incumbent operator which owns the copper network – after long negotiations and legislative modifications which allowed going ahead with the project even without the Australian company's involvement – accepted to cooperate in return for profit and savings of a current value of 11 billion Australian dollars; these were partly linked to the wholesale supply of infrastructure service and partly to the acceptance of the gradual switch-off of the copper network with the simultaneous transfer of the customers to the fibre service. Finally, a totally public firm will gradually take over from Telstra the obligation to provide universal voice services.
Even in the United States, where private property of infrastructure has always been complemented by a regulatory framework to safeguard the universality of the service, the Obama administration is developing – within a wider programme for the stimulation of the economy – an ambitious plan for improving access to broadband and super-fast broadband. The National Broadband Plan-Connecting America, setting an initial objective of universal availability of broadband (fixed or mobile), at a download speed of 4 MB/s, evaluates the necessary financial support at 24.3 billion dollars.[1] These additional resources derive in part from crossed internal incentives within the sector that supports vocal services (up to 15.5 billion dollars over the next decade), but a considerable support comes from budget funds: in 2010, the American Recovery and Reinvestment Act provided for a once only contribution of 7.2 billion dollars. However, FCC states that: «Given the plan's goal of freeing 500 megahertz of spectrum, future wireless auctions mean the overall plan will be revenue neutral, if not revenue positive».[2]
In the following pages, with the support of exemplary cases, we will illustrate and briefly comment on the problems we face

in coherently defining the role of the different instruments of public intervention. Moreover we will try to rationalise and simplify them, in accordance to principles of stability, proportionality and subsidiarity, in order to guarantee its effectiveness and limit, at the same time, intrusiveness, discretion and the distortion effects of fragmentary and overlapping interventions.

Objectives and instruments of public intervention

The examples of Australia and the United States illustrate the first dilemma regarding the objectives and the possible instruments of public intervention. Should we be concentrating our efforts on new high-speed networks that would struggle to take off – as they require particularly copious investments in their access segment (NGAN, Next Generation Access Network), which will replace the historical last mile of copper (local loop) – against benefits that are uncertain in terms of both time and distribution among actors? Or should we instead favour the support considered to be necessary for investment in scarcely populated areas, subject to infrastructural digital divide, that the market will not be able to resolve even with different technology and reduced ambitions? A second dilemma focuses on the relative advantages of interventions on the supply-side, if we consider that the promotion and enhancement of new services requires public funding on the demand-side for the development of e-government application software as well as for overcoming the competency deficit of the potential users.
The three categories of intervention would have complementary and synergic effects and adequately illustrate the effects of acceleration of innovation that an industrial policy inspired by the principle of overcoming the market coordination deficit could have if compared to an attitude of *laissez faire*; however, the state of public finance after the 2008 downturn require a high degree of selectivity. Moreover, there is an undeniable ten-

sion between projects like the Australian one and the reforms carried out in Europe over the past quarter of a century which led, through privatisations and the abandonment of a concessionary regime, to a shift from direct management to a regulatory role of the public intervention in this sector. Thus, important policy questions concern the ways and limitations in which an *interventionist* approach and its instruments can coexist and operate in synergy with the philosophy of intervention adopted by the European Union, based on the market and the pro-competitive regulation that is also the basis of the growth promotion policies put forth by the Lisbon Strategy. From this perspective the most important document is the Commission Communication "Community Guidelines for the Application of State Aid Rules in Relation to Rapid Deployment of Broadband Networks" (2009/C 235/04) of 30 September 2009.

The theme of the types of public intervention is also intertwined with the issue of inequality, which is today the most prominent in the definition of ICT policies for innovation and growth: this has effects in terms of equity as well as in terms of viability and effectiveness of such policies. Inequality affects incomes, the required competencies for the use of technologies, general culture and the type of economic activity exercised and thus the ability to fully take advantage of instruments and information; finally, inequality depends on the geographical characteristics of the area in which one lives and thus the cost of infrastructure of an adequate quality. If the willingness to pay negatively affects the demand and the costs penalise the supply, the development of new broadband technologies (in remote and scarcely populated areas) and super-fast broadband (in urban areas) may be economically unviable. More specifically, the actual unit costs of the networks which bring fibre optics to homes (FTTP, Fibre To The Premises) decrease significantly when the service is actually put into place, as 70% of the installation costs depends on the number of "previous" users (those to whom the service has been delivered) rather than those who are actually subscribers. Thus, even in urban areas, accessible costs, in addition to favourable conditions for demand, are necessary for a sufficient distribution in order to break even. In Analysys Mason[3] it was illustrated that in the United Kingdom an increase in the rate of adoption of FTTP services from 31% to 63% of households would bring about a reduction of 41% (from 2900 pounds to around 1700) in the infrastructural cost per subscribed user. This is also an inequality between the potential of different countries: it is clear that, in comparison to less developed areas, countries which are wealthier, more educated, more egalitarian, more urbanised, with a government more likely to invest in innovation, a more efficient public administration and welfare and tax systems that do not impact too heavily on the disposable income of poorer families, stand a higher chance of success in the implementation of projects that, in turn, can accelerate growth and innovation and improve cohesion.

More than attempting an exhaustive classification of instruments and objectives, for our purposes it is useful to identify the problems in terms of choice that the new opportunities of innovation pose in the most relevant areas of intervention.

a) Respect for civil and social rights and legality: the role that ICTs have in supporting civil liberties as set out at constitutional level, such as freedom of information, security, healthcare and education, and the possible negative effects of their use explain the relevance, in the legislation of all developed countries, of laws to protect minors, freedom and plurality of information, privacy, cyber security, public health (electromagnetic pollution) and the universality of the service. The exercise of these rights is in any case limited by the economic cost of ICTs, therefore they imply trade-offs and impose complex choices. An example is the guarantee of network neutrality: does offering a "business class" service to those who are willing to pay to receive better quality constitutes an unacceptable limitation of pluralism or does it improve the incentives for investment and thus the affordability of the "economy class" category? A similar dilemma can be found in the gap between performances and costs that the new networks will determine between urban and rural settings and the opportunity of public support to the dissemination of the service in the high-cost areas.

b) Regulation and protection of competition: in this sphere, new networks – by highlighting the need to share and coordinate when developing the local access infrastructures or, alternatively, to recognise their natural monopolistic character, handing the network over to an entity committed to a neutral behaviour – seem to have questioned the project at the heart of the new European regulatory framework: the gradual replacement of *ex ante* interventions to regulate the sector with the *ex post* action of antitrust authorities, in a market in which alternative operators progressively earn technological autonomy with the gradual development of their own infrastructure. New developments imply, in reality, that the independent sector regulator could play a central role in governance, given the complexity of the objective to allow the coexistence of the promotion of infrastructure investment and the development of competition in the final markets. The complex process that brought about, through significantly different consecutive drafts, the Commission Recommendation on the regulated access to NGAN networks, highlights this difficulty.

c) Promotion of public goods, shared resources and scarce resources: public institutions' promotion of technical standards has had an important role in past examples of industrial policy (GSM, Global System for Mobile Communications, in mobile telephones). It remains crucial, although balanced by the principle of technical neutrality, for pursuing the objective of safeguarding network integrity and inter-operability of services. Interventions of this kind could have important effects on market structures,

like the possibility of accessing multimedia content without a previous agreement between content supplier and supplier of the connectivity services. Paradoxically, one of the principles enshrined in the United States to safeguard network neutrality, user freedom in terms of choice of the characteristics of the devices to connect to the network, could facilitate the maintenance or the creation of dominant positions. If, on the other hand, it were compulsory for decoders of digital and satellite television to allow for the use of video services through the internet, the digital divide of households that do not have access to a computer (around 50% in Italy) could be reduced. Similarly, technical norms on road works and the shared use of pre-existing public infrastructure could drastically reduce the cost of developing new infrastructure and the bother caused by digging up roads. Finally, a rational use of the electromagnetic spectrum could significantly reduce the costs of setting up a broadband radio network, increase the capacity of delivering the most popular services while at the same time assuring conspicuous fiscal gain.
d) Coordination activities and demand policies: the role of public service providers allows states to promote coordination activities to overcome stalemate situations in which an insufficient demand for new services discourages investments in the infrastructures necessary for their development (chicken and egg problem). Public actors can activate demand both directly, through the purchase of connectivity services, as well as indirectly, as the network applications that they offer determine an increase in the private demand for connectivity. The definition of challenging programmes of purchase of services could additionally reduce the risks perceived by investors, while subsidies aimed at sustaining private demand, either of transitory type (when it is necessary to reach quickly a critical mass of users) or of the permanent type (in high-cost areas and for low-income users), can improve the efficiency of allocation and present an opportunity to take advantage of direct and indirect network externalities.

e) Public support for infrastructural investments: in addition or as an alternative to supporting user demand, financial intervention (tax relief and subsidies, funding provisions and shareholding) is often called for when the external effects determine a deficit of private investments in innovation, in the sizing and geographic extension of infrastructures. In recent years – with the expansion of municipal projects for new networks in fibre, especially in the Netherlands and Northern Europe – a significant turnaround has taken place compared to the privatisation of the national European incumbent that charcterised the last quarter of a century. In the Netherlands, the risk that new networks promoted by public institutions would develop without the involvement of the incumbent persuaded them to accept forms of partnership in the development of infrastructure and adequate guarantees for equal access to wholesale services. Even in Italy – where many resources have been invested in turn by regional, provincial and municipal authorities, often in a fragmented manner that is not always rationally motivated – at national level the publicly-owned Infratel launched a vast investment plan in fibre infrastructure (to be offered on the wholesale market, on a non-discriminatory basis, with long-term contracts). This covers areas in which the central telephone exchange is not currently equipped with the capacity to connect to the backbones for the provision of broadband services and thus can be directly used by Telecom Italia; however, they also remove encumbrances to a greater presence of other actors and other technologies, especially wireless, in areas which yield lower profits.
The European Union state aid rules provide that public initiatives do not replace the ones available in the market and do not distort competition in favour of certain technical solutions or certain economic players. In these conditions many resources available to state-owned companies – but with a status of private investors – interested in infrastructure projects with deferred revenues and reduced risks could be used. Unfortunately, the

willingness of all potential stakeholders to participate in such coordinated initiatives – which would be essential for reducing the risk and rejecting the suspicion of distortion of competition – is hard to achieve, as the different availability of assets and the different market quotas produce different incentives for the incumbents and alternative providers to dismantle the copper network, and thus facilitate the transition of the totality of the users to fibre.

The priorities of public intervention

In the current conditions of public finances, it is necessary to define transparent selection criteria for prioritising interventions. We can classify criteria according to relevance, specificity and desirability of the public intervention, those relative to the viability (considering the encumbrances), and those relative to the necessities of planning and coordination.
In terms of relevance, the criteria take into account: institutional nature of the intervention; degree to which it may be delegated to private actors; seriousness of market failures and distortion effects of intervention.

Institutional nature of the intervention and degree to which it may be delegated to private actors The order in which the areas of intervention of the state were listed above, from “a” to “e”, reflect the evaluation of their institutional relevance (in descending order) and their amenability to be delegated to the market (in ascending order), on the basis of the principle of subsidiarity. There are no doubts about the irreplaceable character of the public institutions’ exclusive role in areas “a” and “b”. In areas “c” and “d” the public role is prevalent, but challenged by those who support market solutions to problems of coordination of economic activities. In area “e”, coherently with the European state aid rules, it is not advisable to carry out interventions that – with adequate time and characteristics – the market itself would be able to produce. In cases that involve more than one area, either as an end or instrumentally, the adoption of modalities of intervention that are typical of the higher echelons of the hierarchy (more generic than sectorial) tends to simplify the tasks of the sectorial institutions and reduce the encumbrances imposed on the market. An important example concerns the use of fiscal measures instead of regulatory ones to combat the digital divide, with the explicit support for low-income users and in high-cost areas, as well as the elimination of cross-subsidies that distort prices and competition.

Seriousness of market failures and distortion effects of intervention On the basis of the principle of proportionality, it is necessary to choose interventions that would cause the least possible distortion and intrusion, among those which are effective, and renounce the idea of intervention when the problem faced is transitory and of modest entity. Although it seems difficult to obtain a quantitative estimate of the expected benefits, it seems useful to extend (albeit informally) to the intervention areas “c”, “d” and “e” – and thus to the market failures linked to external effects and coordination problems – the use of the process of market analysis and the identification of regulatory interventions that, in the context of “b”, are applied to deal with the failures linked to the market power.

With reference to the planning of interventions, the multiplier and synergy effects with complementary interventions, and the needs of timing should be taken into consideration.

Multiplier and synergy effects with complementary interventions Demand-side public intervention (e-government, healthcare, education, security, etc.) are indispensable to ensure an adequate and rapid use of new infrastructure.

Needs of timing The coordinated development of a comprehensive strategy for innovation allows to envisage logical sequences of interventions that take into account the learning dynamics and the spreading of the effects in the economic system. For instance, while for the development of super-fast broadband (the fibre optic access network) rules are extremely urgent, whereas public financial investments are much less so, both measures to promote demand and support to investments in high-cost areas are unavoidable.

In terms of viability, the size of the necessary financial commitment and the irreversibility of the intervention should be taken into consideration.

Size of the necessary financial commitment Not only do we have "zero cost" projects, but also interventions, like rationalisation of processes for the allocation of electromagnetic frequencies, that in turn generate financial resources that can be reinvested. The Italian government has recently gained over 3 billion euros from the auction of radio frequencies previously allocated to television, which, used for broadband, will facilitate innovation and help overcome the digital divide. This decision, contrasted for a long time by the digital television operators, will also improve the prospects of using the broadband platform for video services, which is essential to promote the demand of new networks.

Irreversibility of the intervention Interventions to stimulate the creation of a new market (like sustaining demand in the learning period and when the critical masses have not been reached yet) could have transitory characteristics and reduced risks; on the contrary, interventions such as the participation to the capital of a wholesaler that develops infrastructure in high-cost areas, may be permanent and not substitutable.

The following section will briefly analyse, on the basis of these criteria, the guidelines for intervention coherent with the urgency of innovative public policies and with the current economic situation.

Types of digital divides and how to best deal with them. Public policies to contrast inequality

In addition to the respect for fundamental rights, pursuing the universal access to this service reflects economic objectives, both in terms of efficiency (for the use of network externalities) and redistribution. This theme is destined to become of paramount importance as many of the social benefits of broadband (for instance those linked to the use of public services online) imply a massive user base among the population, and the difference between the supply costs in urban areas and rural areas increases significantly as the network performance improves. In Italy today, around 12% of the population lives in areas where the ADSL (Asymmetric Digital Subscriber Line) service is not on offer or it is at the theoretical maximum speed of 640 kB/s; the interventions necessary to connect at least 5% of the population are considered to be very onerous (long-term digital divide). Even where broadband service is offered at acceptable levels, the quality is not the same throughout the country: at the end of 2008, for instance, only 57% of the population had access to ADSL2+ technology, which allows for a maximum speed for users to send data of around 20 MB/s (and which is also not in high demand). Moreover, in some parts of the country the socioeconomic characteristics (older population, low levels of education and IT literacy, reduced purchasing power) determine a perverse combination of high supply costs and reduced willingness to spend. In addition to that, in such areas, innovative ways to supply public services based on broadband (assuming that

the public administrations are able to use it efficiently and effectively) could have a higher impact on social cohesion and savings in the exercise of public functions.
The tools that have so far been adopted to promote universal use of vocal services have been the geographical equalization of prices and the partition between operators of the supply costs (in the short period, and calculating the net revenue, according to the tariff plan) to unrewarding areas and non-gainful users. The ways in which these instruments have been used are not competitively and technologically neutral. The distortion is even greater if we consider the opportunities for joint supply of voice services and broadband services, that require additional investments and a long-term evaluation of the preferable technology. More specifically, as far as Italy is concerned, Telecom is the only designated operator for supply services in these circumstances and it is assumed that it does so through the traditional fixed network: another actor that would want to supply this service through a different form of technology would not benefit from the implied support of the geographic equalization of the final prices. More generally, given certain per capita income differences between areas, it seems probable that the geographic equalization of prices is insufficient for pursuing the objectives of social cohesion that it sets out.
Summing up, if the state took more direct and explicit responsibility for the redistributive needs and the promotion of social cohesion – through investments for the development of networks in high-cost areas, support to the income of those who (wherever they may be) could be excluded from the service due to insufficient purchasing power, and promotion of social inclusion through public demand policies – it could be possible to overcome tariff structures that penalise urban demand more than they promote rural demand, and that, in any case, determine an insufficient quality of the supply and a reduced competition level in these areas.

Public intervention in developing NGANs: reasons and problems

The analysis presented above illustrates that the state could play a decisive role, albeit indirectly, to facilitate the development of NGANs by just carrying out effectively its institutional functions in different contexts than that of financial intervention in new networks.

Many stakeholders have called for more decisive action, but it is wise to evaluate these interventions on the basis of the above-mentioned criteria of relevance, feasibility and time frame. This also calls for taking into consideration the irreversible effects and the legitimate rights derived from past choices (privatisations and the philosophy at the heart of the European regulatory framework): a concrete prospect for the development in this sector must be based on the respect of acquired rights, on consensus and incentives.

It is apparent, as the Australian project illustrates, that today technology would allow to give the character of shared infrastructure for public utility (like the provision of gas and electricity to homes) to the most costly segment of the network, the periphery: a safe monopoly, in which many resources are invested and that gives the production system a cheap, low risk wholesale service. This service would surely be of great interest for institutional investors; public actors could accept a reduced and deferred revenue, taking into account the effects that innovation would have on growth. This model would be more suited to increase the geographic coverage of fibre services and ensure homogeneous prices.

According to this model, similarly to the development of internet economy, the main contribution to innovation and growth is given by those who use and not by those who supply the connection. However, in the entire world, the greatest problem for the operators of telecommunications is their inability to have a

role in this model, developing a complementary offer to that of connection (content, services and IT applications for businesses, mass internet services supported by advertising). It is no surprise that they continue to consider the ownership of the network as their primary competitive advantage and that they are reluctant to give up financial resources in this segment to invest them in complementary services.
On the other hand, even if it were viable, it is not a given that this model would only yield positive results: to replace a "public" monopoly with an oligopoly of vertically integrated telecommunications operators that compete on the final markets to expand and diversify the services offered and improve complementary services, would only mean leaving all the added value to the oligopoly, gradually more concentrated, of the American giants of content and internet.
Now let us consider what role public investments could have in terms of a gradual evolution of the sector that takes into account the limitations that history and public resources impose.
The start of massive investment in NGANs is not the priority in countries such as Italy and it is not on the agenda yet, given the fact that the gains are not expected to be high. In order for these countries to benefit from this it is still necessary to work on the human capital aspects: IT and managerial skills, propensity for innovation and entrepreneurship, investments in education and research, reforms that promote efficiency in public administrations.
The role of public investments could be more significant in a subsequent phase, in which the aim is to serve low-density urban areas or where the demand is lower, for which the needs to contain costs are higher. Public financial resources could play a synergic role with the regulatory framework that is being defined by the European Union to give operators additional incentives for the choice of development models considered preferable from a collective point of view.

As the costs for the development of the network increase (for each user), the public contribution for the development of passive infrastructure (diggings, inactive fibre) would prevail, while the operators could prefer the wholesale purchase of active services, already configured (bitstream), instead of infrastructural competition.
In this scenario, public resources could be employed to facilitate multiple development projects, each focusing on a suitably-sized geographic area, that would thus not necessarily require the joint participation and construction and management role by the same private actor. As a result, there would be a considerable increase in market contention. And maybe, if the prospects of gain are high, we could observe an increase in the propensity of the incumbent to innovate, as happened in countries where the contest is ensured by the competition between platforms (cable TV networks) and municipal initiatives.

Conclusions

If market failures are pervasive in the world, they are even more so in one sector, like ICTs, where everything is more concentrated and permeates the socioeconomic systems, thus determining its development. It is not necessary to deny the role and success of the pro-competitive liberalisation and regulation of telecommunications to recognise that, even in its least regulated sectors, like the internet, the explosive growth of ICTs depended on the interaction between technological progress and free entrepreneurship, as well as on the institutions that catalysed and coordinated it: the system of research, public demand, both military and civilian, and standardisation. And in the traditionally most regulated sector, infrastructure, arising opportunities to develop brand new networks, instead of modifying existing ones, highlight the problem of investment promotion; they also indicate that the regulatory authorities have

a governance role that goes beyond that of mere guardians of competition. In order for these investments to be sustainable, the prevalent concern for regulators to simply manage the market powers is no longer sufficient; other actors, not necessarily public, ought to operate synergistically with the governance authorities, taking responsibility for the coordination and management of externalities. In this context, public investments are not taboo, if private ones are limited in time and space.
Notwithstanding the importance of a promptly defined and stable regulatory framework, the spatial and the temporal dimensions could be used to order and clarify the other two types of public intervention, which allocate resources, respectively, to the demand-side and to support investments. As for the former, moving towards less densely populated areas, the public role should intensify and consolidate both components. As far as the temporal dimension is concerned, demand-side policies ought to be launched immediately, whereas those in support of investments are urgent in less densely populated areas and should be implemented in others, like participation in or financial support to private projects, if the latter are slow in the independent implementation of adequate plans.
In order for the system to work, the prospect of public participation in investment should not induce private actors to delay independent self-sustaining initiatives, but instead, encourage them to bring them forward. To that end, the conditions for accessing public resources should corroborate the system of incentives defined by regulatory action, and reward, in terms of profitability, those investments that do not rely on public support and more specifically those that are shared between multiple operators.

NOTES

[1] Federal Communications Commission, *Connecting America: The National Broadband Plan*, 2010, available on download.broadband.gov/plan/national-broadband-plan.pdf.

[2] *Ibid*.

[3] Analysys Mason, *The Costs of Deploying Fibre-Based Next-Generation Broadband Infrastructure. Final Report*, 8 September 2008, available on www.broadbanduk.org/component/option,com_docman/task,doc_view/gid,1036.

Alfredo Macchiati

Some Pros and Cons about the Green Economy

It may be helpful to start these notes by recalling the official definition of green economy set forth by the United Nations Environment Programme (UNEP): «A green economy is one that results in improved human well-being and social equity, while significantly reducing environmental and ecological scarcities. (…) Practically speaking, a green economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services. These investments need to be catalyzed and supported by targeted public expenditure, policy reforms and regulation changes».[1] The definition clearly expresses aims and tools: equity, also between countries; development in terms of income and employment; and the important role of public decision makers, who should promote reform and regulation but also support the investment process.

Policy makers often exploit the rhetoric of the green economy: it should help us overcome the crisis, revive state intervention in the economy and virtuous planning; and transform a constraint (the reduction of emissions) into an opportunity for development, or otherwise risk creating a climate harmful to humans and to economic growth itself. The green economy has thus become a fashionable policy, especially among "non-conservative" political leaders (with Blair at the forefront), who have placed it

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at the heart of their message to voters, and various international organizations. Environmental policies have become a crucial feature of government intervention. According to some scholars the "environmental state" is the heir of the welfare state.[2] The reasons for this popularity are to be sought in its capacity to introduce utopian ideals into the political debate[3] – we often come across expressions such as Global Green New Deal – and in the electorate's sensitivity to environmental issues (although this has fallen as a result of the current crisis, which has shifted attention to other, more immediate concerns).
The following comments aim to underline that the available economic analyses, still at a fairly preliminary stage, can only offer some guidelines, not all of which are consistent with overly optimistic (not to say triumphalist) policy visions on the virtues of green development, and that public policy should thus be particularly cautious both in its stated aims as well as in terms of the policies actually implemented.

Europe and the difficult path to green economy

The European Union aims to perfectly embody the idea of "environmental state", and has set highly ambitious targets – reducing emissions by 80% by 2050, and creating 1.5 million new jobs – which should be interpreted more as policy choices than as actually achievable targets. However, if we assess the weight of green stimuli within the fiscal packages adopted by the G20 countries to support the economy in recession, we do not find the EU leading the way: according to a reconstruction of interventions in 2008-09, the United States and China account for more than two-thirds of the green stimuli for the economy, while the EU's efforts are meagre in comparison. This is however not surprising, considering the limited resources controlled by the "government of the Union". The extent of public deficit and the sovereign debt crisis have led some countries to review at least some of their incentive measures. It has become less likely that states can support the conversion of the grey economy (which damages the environment) into a green economy. Where European leadership has been most evident, besides in terms of emission reduction targets, is in the creation of a system for trading CO_2 emission permits. The tools used and results so far achieved by the system are however controversial.

But we cannot overlook the fact that no green economy can be built, realistically, without setting a price on pollution, or on the overexploitation of natural resources, using systems such as taxation or tradable permits. It is necessary to pay for something that was previously, for the most part, free or actually subsidized (such as coal in Europe), albeit for comprehensible reasons. These steps are particularly critical for governments who seem to prefer rationing through regulation rather than pricing, and understandably so: the aim is to limit the distribution effects, compared to the two alternatives of full (taxes) or partial tariffs (tradable permits).

The prospects of the green economy have not only clashed with the economic crisis and the difficulty of achieving consensus. The Fukushima incident, which seems to have made nuclear energy significantly less attractive for many countries, is on the one hand certainly a reason for renewable energy to assume increasing importance. On the other, it compromises a potentially low-emission energy source which could help achieve a system in which the various sources are well balanced. We should in fact consider a characteristic of renewable sources, namely that production is discontinuous due to their “intermittent” nature: the production of a photovoltaic system can go from 50 megawatt to zero in a few seconds if a cloud blocks out the sun. Looking ahead, the reduced use of nuclear power somewhat complicates the scenario, certainly for those countries that could have relied on nuclear power and have decided to abandon it, but to some extent, also for countries like Italy, that were considering adopting it, and that in any case import energy produced using this source. Overall, the degrees of freedom for a more environmentally friendly energy policy have been reduced.

Renewable energy: true technological revolution?

One of the most frequent arguments made by advocates for development driven by the green economy is the profound innovation in technologies that would be produced by the adoption of non-polluting techniques and by the greater protection of natural resources. In particular, the promotion of renewable energy would be beneficial to all activities related to the installation of such power generation systems and the related technologies. In addition to these direct effects there would be other, indirect effects, in related fields (including IT and transport). On the other hand, however, there would be the effect of reducing investment in the production of energy from traditional sources. According to some estimates, the balance of these effects would be moderate: in the case of particularly aggressive policies 0.73% of GDP in 2030 (but less in previous years).[4] Moreover, innovations in renewable energies do not seem to be comparable, in terms of their ability to exert indirect effects, with those of other major technological revolutions in the past. Finally, the effects on the general development of the economy should take into account the fact that the weight of the energy sector does not exceed 2-3% of GDP. We can of course assume a spillover effect of innovation and the resulting acceleration of new investments, new business models, and new products. But as mentioned, such visions of epoch-making changes – Jeremy Rifkin speaks of the third industrial revolution – do not seem to be backed up by impact analyses.
It would also be worth assessing the complementary nature of the short and long term effects of the various interventions

and how these effects combine to affect the reduction of pollution and other aspects of environmental protection. According to some studies, the activities with the greatest stimulus (in particular on employment in the short term) seem to have relatively less favourable long-term effects. Conversely, other interventions, such as reducing traffic congestion or increasing production with renewable energy, have long-term effects but only stimulate demand to a limited extent. In other cases, such as the protection of natural resources and energy efficiency, they seem able to stimulate demand and also contribute to environmental protection.

What about employment?

The other virtue often attributed to the green economy – positive effects on employment, with the creation of so-called green jobs – should also be viewed with caution. The positive effects on employment should go beyond short-term operations supporting demand; on the other hand the building up of clean energy requires time, and short-term effects on employment tend to be overestimated.[5] In the long term, the effects may be more significant, though it is not entirely clear whether the new employees would be able to replace the loss of employment in "high emission" sectors. According to supporters of this view, investment in reducing emissions would produce positive effects in other areas and compensate for losses in employment in "high emission" sectors. In reality, to what extent these effects may be general or depend on local circumstances is controversial and far from settled. Equally controversial is whether this increase in employment is stable over time or will also suffer from competition from low cost countries.
According to relatively recent and extensive research in the EU, employment is affected although not significantly: in the short and medium term particularly aggressive policies would lead to

an increase in employment of 0.15% in the EU for 2020.[6] Other studies adopt different perspectives and have returned more optimistic results. In any case, the productivity of green jobs appears to be low.

In assessments of the effects on employment, it may help to look at a particular "case study". Studies on the Spanish case – and subsidized renewable energy sources there – show that for each new job created in this sector more than two are lost in the rest of the economy, owing to the difference in renewable energy production costs compared to the cost of other energy sources. This difference in costs has in turn two implications: public support per employee is relatively more expensive than that which could be achieved in other sectors. If the support is translated into relatively more expensive rates (by means of feed in tariff systems, for example) this determines relatively higher energy costs for other businesses.

Nor should it be forgotten that employment in the green economy is still subject to the dynamics of international trade. A case in point is that of Evergreen Solar in Massachusetts – as recounted by Harvard economist Edward Glaeser in "The New York Times" –,[7] which after several years of profitable business had to relocate its facilities to China. This is emblematic of the fact that green jobs follow the rules of international trade and that any employment benefits for advanced countries may be limited to high value-added posts (engineers, designers, or qualified installers) rather than affecting large masses of unskilled workers. We thus come to an important conclusion: in countries where the use of labour with low added value is not competitive, there may be effects in terms of the quality rather than quantity of labour demand. This requires an adjustment in terms of labour supply: OECD reports indicate that small and medium-sized enterprises are finding it difficult to meet the qualified staff requirements associated with development of the green economy.

Public interventions to sustain innovation

Another critical aspect is the ability of governments to choose the "best" (entrepreneurs, projects, companies) when allocating the public funds that should support innovation. Considerable administrative skills and the availability of extensive information are required. Subsidies may actually be the best way to foster new technologies, but only if used in a targeted manner. They may also be used (by means of tax credits or subsidised loans) to improve energy efficiency. More controversial is whether subsidies on the supply-side are an appropriate tool to support specific technologies.

For example, the famous Danish case of the support for wind energy, which brought the country to a position where, in the 2003-08 period, 20% of its generating capacity was produced by that source, proved to be rather expensive: about 10-15,000 dollars per employee.[8] The Danish case highlights that the benefits for employment may have been more significant if these funds had been allocated to other sectors. In general, according to research, where the opportunity cost of public funds is also taken into account, subsidies for renewable energy are not an efficient way to create jobs.

It seems that it is the characteristics of environmental policies – predictability, flexibility, and impact –, rather than the type of tools, that increases the capacity for innovation.[9] Also according to the OECD, funding Research and Development is preferable and more productive if directed towards "facilitative technology" such as batteries or intelligent networks rather than specific technologies (i.e. wind energy). The use of competitive procedures and the authoritativeness and independence of the agencies that verify compliance with the requirements for entitlement to benefits are other important aspects of a regulatory plan. These considerations taken together lead us to look more realistically at what can come from the revolution of the green

economy in terms of economic growth, to place greater emphasis on technological innovation and thus on the need to pay particular attention to the form of government intervention.
To this end, it may be useful to briefly review some economic criteria suggested in a comprehensive report recently published by the OECD dedicated to how the green economy could support development.[10] The development aspects that could be provided by the green economy include, according to the OECD, increased productivity through more efficient use of resources; new opportunities for innovation that tackles environmental problems; new markets for green technologies and new work opportunities; and increased investor confidence in government intervention to tackle environmental problems. In order for this virtuous approach to be feasible, the policy mix of a green growth strategy should be such as to minimize the economic cost of transition.
Here it is worth taking a brief digression: the fact that conversion is expensive in the short term and that it is not immediately clear how these costs should be distributed among the various countries and income classes, is an issue that has perhaps not been sufficiently analyzed. Paul Krugman is convinced that controlling emissions would slow development, but not much, and, based on studies available, sets it at between 1 and 3% of world GDP.[11] In truth, his evaluations seem somewhat hasty, and producing accurate assessments is a complex operation of economic modelling.[12] Faced with this uncertainty about the cost of transition, the cost efficiency of specific tools should be the guiding criterion. There are also other important criteria: effectiveness in stimulating innovation; ability to stimulate operators on the basis of convenience and not according to obligations; flexibility so they can cope with possible reductions in the levels of uncertainty; and effectively facilitating international coordination.
The choice of instruments should also reflect the nature and size of the various market failures. In this regard, according to

the OECD,[13] the conditions that seem particularly conducive to the use of specific instruments can be summarized as follows:
a) pricing pollution by means of mechanisms such as a tax or permit system remains the most efficient way to reduce environmental damage;
b) in the choice between tax and certificates, certificates arouse fewer reactions but have start-up and management costs and are excessively volatile. The choice could also take into account the size of the firms that produce pollution. If they are large and therefore the pollution is relatively concentrated, the permit system may be relatively more efficient;
c) subsidies for "green" activities should be avoided due to their costs for the public budget and their effect on the reduction of external factors, which is not always clear. Moreover, they contribute to the formation of interest groups that make management of the green economy less flexible;
d) the main motivation for public support for renewable energy is to be found in the long-term prospects for R&D, assuming that production costs fall drastically (otherwise there would be an endless drain on public funds). In other words, policies encouraging R&D in clean technologies may be appropriate when there are "learning by doing" effects with high entry costs.
The measures taken at a national level to combat climate change may encounter strong resistance based on concerns of competitiveness. This kind of argument is particularly strong when, such as in the last decade, we see the partial decline of manufacturing sectors in developed countries compared to some developing countries. International policy coordination thus becomes crucial: in the absence of effective measures in this direction, domestic firms may suffer a loss of competitiveness. These effects, known as leakage, although sometimes exaggerated (recent OECD analysis provide indications to that effect, although for some sectors the impact can be significant), are amplified by the economic crisis.

A number of measures can be adopted to alleviate this loss of competitiveness, such as the exemption from Emission Trading of sectors involved in international trade, or the introduction of tariffs on imports from countries not participating in international agreements, or the free allocation of issuance permits. Each of these alternatives has some drawbacks. Exemption from tax or from a cap and trade system of energy-intensive industries has the obvious disadvantage of losing the chance to reduce emissions at a relatively low cost. The main difficulty of using the tariff tool is that while this should tackle the problems of competitiveness by imposing a similar carbon price on non-national manufacturing companies, it would not necessarily reduce the production losses suffered by domestic companies as a result of measures taken by the country. Indeed, such losses might be even larger after the imposition of these duties, since such a measure could lead to higher prices of imported intermediate goods and thus a possible reduction in demand and profitability, without considering that the reduction of emissions is a goal that should be achieved in any case, with or without import duty. The administrative costs of these measures, the risks of trade retaliation and the depressive effects on international trade should also be considered. Dealing with the risk of carbon leakage is, however, hardly an option.
To date, the allocation of free permits seems to be the tool of choice for minimizing the impact of emissions cuts on the competitiveness of domestic firms. The European Union has followed this path, and the weight of the permits assigned through auction will still be partial in the third phase of the trading system after 2012.

Conclusions

As the effects of growth are uncertain, consensus management aimed at implementing effective green development policies remains difficult, despite the general acceptance of pollution reduction targets by the public. The green development policy brings environmental benefits that will affect the next two or even three generations, and, as we know, politicians find it hard to subject the interests of current voters to the benefit of those in the future. These are choices that have significant and highly controversial redistribution aspects (the carbon tax may fall mainly on low income groups since they spend relatively more of their money on energy), also considering the influence of the powerful lobbies that may be formed as a result of public intervention. There will be the problem of compensating the losers but also that of nurturing favourable constituencies without ending up their prisoners.

The real strength of green development, especially in advanced countries, is the support for new technologies (without however expecting miracles). This requires well-designed regulatory and incentives policies, which are notoriously difficult to push through. One aspect of policies for green development that could help achieve consensus is the increased accountability on the impacts and beneficiaries of government programmes: clearly informing the public about who perceive the benefits and how they are financed (and by whom).

In the same spirit of accountability, it is desirable for policy makers not to give misleading messages: the green economy is not a win-win solution in which unemployment falls, the environment is protected, and competitiveness rises. In reality, abandoning old technologies based on the exploitation of natural resources involves risks in terms of both economic efficiency and equity, and requires considerable legislative and enforcement capacities. Environmental policies are needed, but they are a slippery ground for public policy.

NOTES

[1] See www.unep.org/greeneconomy.

[2] J. S. Dryzek, C. Hunold, D. Schlosberg, D. Downes, H. K. Hernes, *Environmental Transformation of the State: The USA, Norway, Germany and the UK*, in "Political Studies", 4/2002, pp. 659-82, available on www.politicalstudies.org/pdf/edsfavourites/dryzek.pdf.

[3] «It can't be a utopia, but utopian strands will be involved», commented Anthony Giddens on a low-carbon future; Giddens, *The Politics of Climate Change*, Polity Press, Cambridge 2009, p. 10.

[4] M. Ragwitz, W. Schade, B. Breitschopf, R. Walz, N. Helfrich et al., *EmployRES: The Impact of Renewable Energy Policy on Economic Growth and Employment in the European Union*, Karlsruhe 2009, available on ec.europa.eu/energy/renewables/studies/doc/renewables/2009_employ_res_report.pdf.

[5] See UNEP SEF Alliance, *Why Clean Energy Public Investment Makes Economic Sense: The Evidence Base*, 2009, available on www.sefi.unep.org/fileadmin/media/sefalliance/docs/specialised_research/Advance_Draft_economic_impact_01.pdf.

[6] See Ragwitz, Schade, Breitschopf, Walz, Helfrich et al., *op. cit.*

[7] E. L. Glaeser, *Why Green Energy Can't Power a Job Engine*, in "The New York Times", 18 January 2011, available on economix.blogs.nytimes.com/2011/01/18/why-green-energy-cant-power-a-job-engine.

[8] CEPOS, *Wind Energy. The Case of Denmark*, Copenhagen 2009, available on www.cepos.dk/fileadmin/user_upload/Arkiv/PDF/Wind_energy_-_the_case_of_Denmark.pdf.

[9] See N. Johnstone, I. Haščič, M. Kalamova, *Environmental Policy Design Characteristics and Technological Innovation: Evidence from Patent Data*, OECD Environment Working Papers, 16/2010, available on www.oecd-ilibrary.org/environment/environmental-policy-design-characteristics-and-technological-innovation_5kmjstwtqwhd-en.

[10] OECD, *Towards Green Growth. A Summary for Policy Makers*, May 2011, available on www.oecd.org/dataoecd/32/49/48012345.pdf.

[11] P. Krugman, *Building a Green Economy*, in "The New York Times", 7 April 2010, available on www.nytimes.com/2010/04/11/magazine/11Economy-t.html?pagewanted=all.

[12] See D. Helm, *Climate-Change Policy: Why Has So Little Been Achieved?*, in “Oxford Review of Economic Policy”, 2/2008, pp. 211-38, available on www.kysq.org/docs/211.pdf.

[13] OECD, *op. cit*.

Equity and Growth:
Ideas for a New Welfare

Vito Peragine

Income and Inequality. A Contribution to a European Strategy from the Equality of Opportunity Perspective

The development of a European economic and political strategy should address properly the distributional issue. It is necessary to reclaim the theme of the (unequal) distribution of resources from the residual position in which the economic theory and the public debate have relegated it to over the past thirty years, and to bring it back to the centre stage of the debate about the reasons for the 2008 economic crisis, the recovery strategies and the plans for future growth. To do so, it is essential to carefully observe the economic inequalities present (and growing) in European countries, to retrace their evolution and structure, and suggest evaluation criteria. It is also necessary to analyze the traditional arguments in support of inequality, inquire into their legitimacy and put forward alternative cases for developing a wide support for a European strategy for social cohesion. This paper seeks to contribute to this debate from the perspective of equality of opportunity. I maintain that this theoretical approach, if understood correctly, would open up the discussion and improve our understanding of inequality, of its effects, and of the necessary policies for its reduction.

The recent dynamics of income inequality

Over the past decades income inequalities in many developed countries have grown significantly (see Figures 1 and 2). The

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increase is more apparent in Anglo-Saxon countries (United States, United Kingdom, Canada) and concentrated in certain periods in some European countries such as Germany and Italy.

However, almost all European countries have been affected by an increase in inequality, including the Nordic states typically characterised by a more egalitarian distribution.[1]

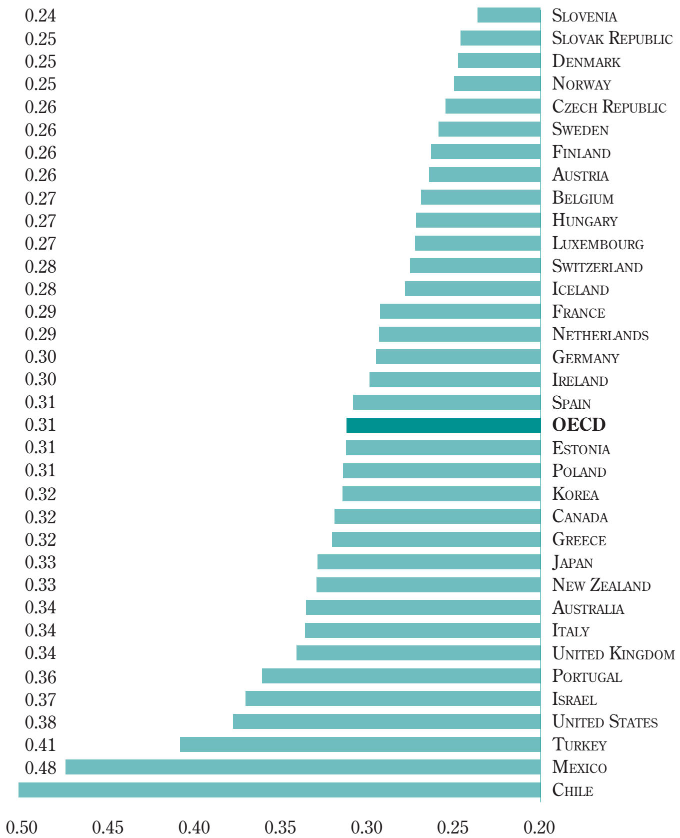
A common feature of the evolution of income distribution in different countries is the increase of inequality in the high end of distributions: the increase of high incomes, more than the dynamics of the lower end, explains growing inequalities. The dynamics of high incomes have generated a process of income polarisation in many countries, which has led to a narrowing of the middle class and an increase of the gap between the high-income group and the rest of the population.

For instance, in the United States, between 1977 and 2007, about the 57% of income growth benefited the richest 1% of the population. In terms of net income (after state intervention), about the 40% of growth benefited the same group.

For Italy, in particular, data indicate a significant decrease in inequalities from the start of the 1970s until the early 1980s, with the exception of the two-year period 1978-79. The phase of reduction of inequalities coincides with the beginning of the so-called "autunno caldo" (hot autumn), a period during which unions and workers were pressing for equal pay. This equalisation in resource distribution weakened between the 1980s and the early 1990s, during which inequality patterns fluctuated.

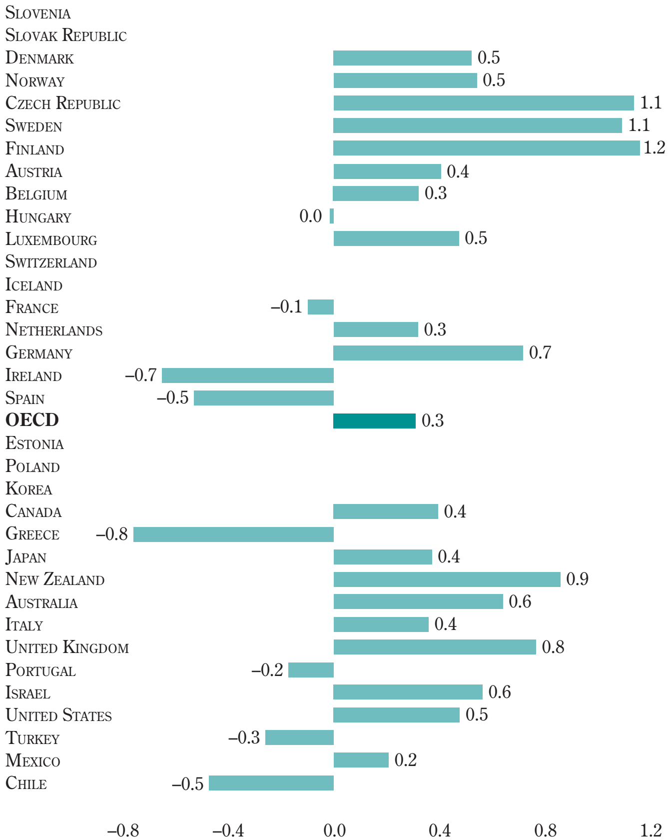
This changed during the 1992-93 political crisis that brought inequality back to the figures registered in the 1980s. From then, notwithstanding the transformations of Italian society, both in terms of structure and labour market regulations as well as the social security system, stability or a slight increase of inequality has been noted.[2]

Figure 1. Income inequality in OECD countries. Gini coefficient, late-2000s.



Source: OECD, *Society at a Glance 2011 : OECD Social Indicators*, OECD, Paris 2011.

Figure 2. The recent dynamics in income inequality in OECD countries. Annual average change in Gini between mid-1980s and late-2000s, percentages.



Source: OECD, *Society at a Glance 2011* cit.

Now, how does one evaluate these inequalities? Is it advisable for states to intervene to reduce them? Is it desirable that the objective of a reduction in economic inequalities should be at the heart of a European strategy? This is a recurrent theme that should be properly addressed. In the scientific literature and in the public debate there are currently two main arguments in support of the legitimacy of inequalities and thus of the illegitimacy of public interventions for redistribution.

Arguments in favour of inequalities

The first argument is ethical: income inequalities (or inequality in wealth, or in any other indicator of individual success) ultimately depend on different talents and individual efforts, starting from the performances exerted at school, and thus would be morally acceptable. When a minimal survival network for all citizens is guaranteed, residual inequalities would be morally legitimate.[3] The most progressive variant of this view sets out an additional requirement: so as to ensure that the distribution is fair, it is important to have equal access to different economic and social positions, and more precisely ensure the absence of formal and legal discrimination. This view is sometimes called "equal opportunities"; however, it would be more accurate to define it as the "principle of non-discrimination", given that, as we shall see, equality of opportunity is a far more complex matter. A further variant of this view maintains that a high degree of inequality in the outcomes is typically associated to a high level of social mobility, in which the *status* of one generation does not depend on the position of the previous generation. The combination of an ethical position – inequality of results is not as such morally illegitimate – and of a descriptive clause – inequality of results is typically associated to social mobility – is the first defence to the existing inequalities. The second argument in favour of inequalities is instrumental: inequality as a condition for economic growth. This view claims that inequalities are generated by different talents and individual productivity; the very existence of different reward of talent is an incentive for process of innovation, investment and growth. In the following sections I will critically discuss these two arguments in defence of inequalities from the perspective of equality of opportunity (EOp).

Possible answers stemming from the equal opportunities theory

The inequity of inequalities The answer to the first argument is based on a recently elaborated theory of distributive justice based on the idea of equality of opportunity.[4] To evaluate the fairness of a distribution of resources, the equal opportunities theory does not only take into account the end results: in order to say that a distribution is fair, everyone must initially be placed in the same conditions, leaving the outcomes of the various activities in which they engage to determine their position in society and the assets they have. Once the relevant outcome variable has been determined, such as income, wealth or welfare, the theory of EOp distinguishes two different types of factors that influence such outcome: exogenous circumstances, beyond the control of individuals, such as gender, family background or ethnicity; and factors of individual responsibility, which are variables that individuals control.
The EOp theory claims that inequalities of outcomes based on circumstances are ethically unacceptable, and thus must be avoided *ex ante* or compensated *ex post* through public intervention; the differences of outcomes due instead to different degrees of individual effort are ethically acceptable and do not require compensation. This is of course a broad picture, which encompasses different conceptions of distributive justice: the wider the set of factors beyond individual responsibility, the wider the

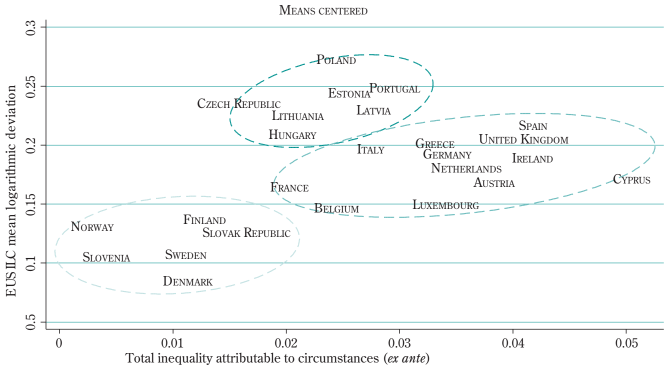
range of unacceptable inequalities and thus the necessity of public compensation. This philosophical position has generated a growing economic literature dedicated to the measurements of the degree of inequality of opportunities in various economies and to the evaluation of different public policies on the basis of their ability to increase equality of opportunities.[5] In order for this approach to be effective it is not necessary to have an (improbable) consensus on the complete classification of the single factors into the two categories of circumstances and individual responsibility. Even in the case of partial consent – if for instance in a given society it were held that income inequalities due to gender or family background differences were unfair – the analytical framework would allow for the evaluation of the degree of inequality with reference to these specific characteristics.

In light of this theoretical framework, a recent empirical literature has tried to quantify the portion of inequalities in a given income distribution (and in other welfare indicators such as health condition, education, wealth) due to circumstances such as gender, place of residence, country of origin, family background, and what is instead residual inequality.

In a recent study based on 23 European countries, Checchi, Peragine and Serlenga[6] illustrate how inequality of opportunity account for a portion between 15% and 50% of income inequality in various European countries (see Figure 3).[7] Portugal, the United Kingdom and Ireland are among the countries with a higher degree of unequal opportunities. Scandinavian countries are those with the lowest degree of inequality. Italy holds an intermediate position.

If we observe another geographic region, a recent study by the World Bank[8] on Latin American countries quantifies the percentage of inequality of opportunities as reaching about 45%. Moreover, a recent longitudinal analysis[9] on one of the most egalitarian countries in Europe, Norway, dedicated to the study of the evolution of inequality, shows how, differently from in-

FIGURE 3. INCOME INEQUALITIES AND UNEQUAL OPPORTUNITIES IN EUROPE.



SOURCE: CHECCHI, PERAGINE, SERLENGA, *OP. CIT.*

come inequality, inequality of opportunities tends to accumulate over time. It is clear that income inequality, if measured on the basis of current income of individuals, tends to be constantly higher than the inequality observed in permanent income, due to the life cycle as well as the random factors that usually compensate each other through time. Conversely, the work of Aaberge, Mogstad and Peragine[10] illustrates how inequality of opportunity calculated on the basis of permanent income tends to be even greater than the inequality of opportunities calculated on the basis of current income.

Finally, it is important to evaluate the correlation between inequality of opportunities and income inequality. The available data, encompassing both a cross countries analysis and a longitudinal analysis, indicate a positive correlation: inequality of opportunities and income inequality are highly and positively correlated.[11]

In particular, Checchi, Peragine and Serlenga[12] identify three groups of countries. The first type comprises some Eastern European countries that have experienced a system of planned economy (in particular Poland, Lithuania, Latvia and Estonia): in these countries we can observe a high degree of income inequality but a mid-range level of inequality of opportunities. The experience of a planned economy, with a strong egalitarian distribution, explains the reduced effect that exogenous variables have on the current income distribution. The second type includes the majority of continental European countries that display a mid to high degree of income inequality and a high degree of inequality of opportunities. Finally, the third group of "egalitarian" countries (Nordic countries and some Eastern European countries) display low levels of both kinds of inequality. It is evident that the analysis of inequality of opportunities highlights different patterns of distributions within Europe, and suggests potential recommendations of the priorities of the redistributive policies of different countries.
In sum, the data show how an important portion of income inequality observed today in Europe and other developed countries cannot be attributed to differences in the levels of individual efforts and responsibility; on the contrary, they can be predominantly ascribed to exogenous factors such as family background, gender, and place of residence. As the distribution of these characteristics is morally arbitrary, income inequalities based on them are morally unacceptable.

The traps of inequality The second argument in defence of inequalities is instrumental. Inequality, some claim, is necessary to activate processes of investment and accumulation that are necessary for economic growth. The existing theoretical literature suggests three types of channels through which a greater inequality can support growth. The first channel (Kaldor's hypothesis) is linked to the greater inclination of the rich to save

and thus to the greater accumulation of capital that would be guaranteed by a more unequal distribution. The second channel[13] is linked to the incentive mechanisms that a more unequal distribution of salaries would guarantee in the labour market. The third channel can be explained through the existence of the significant start-up costs of investment projects: in order for there to be the ability to sustain such costs and carry out the productive investment, a certain accumulation of wealth is necessary. Thus a more concentrated distribution would allow for a greater rate of investment. Barro[14] suggests a similar argument based on investing in education.
Conversely, models that point out the risks of inequality for economic growth put forward three main arguments. The first links a highly unequal distribution to a greater probability of unproductive investments by the rich and, conversely, an insufficient availability of resources for the poorest, that prevents them from putting their abilities and talents to good use.[15] The second group of models focuses on the imperfections of financial market and the subsequent difficulties in accessing credit, that, added to an unequal income distribution, lead to the exclusion of entire classes of individuals from important productive activities for growth. Finally, the last generation of models links an unequal or highly polarised distribution with an increase in social conflict and political instability, producing negative effects on growth rates. In addition to this theoretical literature[16] a wide empirical literature has tried to estimate the correlation between inequality and growth, both through cross section and longitudinal analyses.[17] The only sound conclusion that can be drawn today from this literature is the absence of conclusive results. There are no universally accepted and robust facts: the state of the art on the relationship between inequality and growth does not allow us to affirm that there is evidence of any causal nexus. However, both the theoretical and the empirical literature summarized above focus on the relationship between total inequality

and growth. If, conversely, we examine the link between inequality and growth from the perspective of equal opportunities, the key question becomes the following: does the existence of exogenous inequalities, linked to circumstances beyond individual control, constitute an obstacle to growth?
This question is at the heart of a recent report of the World Bank, "World Development Report 2006: Equity and Development":[18] the idea is that one of the reasons why the literature on inequality and growth is not very conclusive depends on the lack of a clear distinction between exogenous and endogenous inequalities. Exogenous inequalities, that is inequalities of opportunities, lead to the persistent exclusion of entire classes or categories of individuals from market activities, and by doing so they deter investment activities (first of all, in education) and accumulation that are necessary for growth. From a dynamic perspective, there would be actual "inequality traps" that would keep entire categories of individuals out of the labour market: for instance, women, residents in certain parts of the country, young people from poor backgrounds. This would be a huge waste of resources and a barrier to growth. A recent empirical work confirms this supposition.[19]
If the arguments discussed above are correct, the importance of a public intervention to progressively remove the obstacles that prevent groups and classes of individuals to undertake investments and work is evident.
A selective type of redistributive intervention: the equality of opportunity theory imposes targeted interventions on exogenous factors that determine inequalities on the market, through compensative measures (focusing for instance the expenditure for education in certain areas or in favour of certain categories of children) or through the removal *ex ante* of inequalities of opportunities (for example ensuring the best possible access to childcare facilities). A selective type of intervention of this kind is also less exposed to the critique that public intervention

would cause a distortionary effect and hence an efficiency loss: on the contrary, given its link to exogenous factors for reasons of equity, a redistributive intervention would have desirable qualities even from an efficiency perspective.[20]
Ultimately, the prospect of equality of opportunities helps identify the priorities of a redistributive intervention by the state: once the key inequalities that are particularly unjust or harmful for growth have been selected, it is necessary to concentrate efforts on reducing such inequalities. Starting from interventions to protect early childhood, education policies, gender policies and citizenship policies.
It is apparent that this issue is of utmost importance in Europe today and it will continue to be so. The policies to combat recession will have to face these dilemmas. Firstly, it will be necessary to reconcile the stability of public finances with growth, as growth without stability (as seen over the last few years) is dangerous and potentially destabilising, and stability of public finances without growth is difficult and unsustainable in the long period. Secondly, growth that does not take into account, or conflict with the distributive needs described above (like, for instance, those experimented in the United States in the recent past) can cause evident problems for sustainability, in addition, of course, to equity.

Conclusions

In this paper I dealt with some of the issues typically used by those who, in the European policy debate, favour the needs of macroeconomic stability and try to sideline the theme of economic and social inequalities. On the contrary, the idea is that the issue of distribution must return to the heart of the debate on economic policy in Europe and that the objective of a fair distribution of resources should inspire coordinative efforts at European level.

I suggested an interpretation of inequalities and of their effects within the theoretical framework of equality of opportunities. The reported data show how a large part of income inequalities existing in Europe today cannot be attributed to differences in the levels of individual efforts and responsibility but to exogenous factors. As the distribution of these characteristics is morally arbitrary, income inequalities based on them are morally unacceptable.

Moreover, the second argument according to which inequality of results is the price to pay for a mobile society where the "social lift" works and where there is equality of starting points is not a valid one. On the contrary, empirical evidence shows a negative correlation between income inequality and social mobility: the greater the distance between individual outcomes and positions, the greater the difficulty in passing from one position to another over the course of one generation.

Finally, inequality is sometimes defended as an instrument for growth. However, a recent literature argues that inequalities, and especially inequalities of opportunities, determine traps for entire groups of individuals and thus slow down the growth process of an economy.

The equality of opportunity perspective, as illustrated in this paper, might contribute to understanding the inequalities present (and increasing) in Europe today and to evaluate in greater detail the effects on the prospects of growth. Showing the weight that morally arbitrary factors have on the genesis of income inequality and the obstacles that these inequalities pose prospectively to the growth of the European economy constitutes a first step in the building of consent on a European strategy for social cohesion.

NOTES

[1] For recent evidences and discussions see D. Krueger, F. Perri, L. Pistaferri, G. L. Violante, *Cross Sectional Facts for Macroeconomists*, in "Review of Economic Dynamics", 1/2010, pp. 1-14.

[2] The overall level of inequality observed in Italy is strongly influenced by the geographic differences between the two macro-areas of the country, the North and the South. Brandolini and Smeeding note that in 2000 the average gap between equivalent incomes in the Centre-North and South was 37% and that, *ceteris paribus*, if it were possible to eliminate the average differences between the two macro-areas, the indicator of total inequality would drop by 11%. See A. Brandolini, T. M. Smeeding, *Inequality Patterns in Western Democracies: Cross-Country Differences and Changes over Time*, in P. Beramendi, C. J. Anderson (eds.), *Democracy, Inequality, and Representation. A Comparative Perspective*, Russell Sage Foundation, New York 2008.

[3] The classic example for this type of view is R. Nozick, *Anarchy, State, and Utopia*, Basic Books, New York 1974.

[4] See: R. Dworkin, *What is Equality? Part 1: Equality of Welfare*, in "Philosophy & Public Affairs", 3/1981, pp. 185-246; Dworkin, *What is Equality? Part 2: Equality of Resources*, in "Philosophy & Public Affairs", 3/1981, pp. 283-345; R. Arneson, *Equality and Equal Opportunity for Welfare*, in "Philosophical Studies", 1/1989, pp. 77-93; G. A. Cohen, *On the Currency of Egalitarian Justice*, in "Ethics", 4/1989, pp. 906-44; J. E. Roemer, *A Pragmatic Theory of Responsibility for the Egalitarian Planner*, in "Philosophy & Public Affairs", 2/1993, pp. 146-66; Roemer, *Equality of Opportunity*, Harvard University Press, Cambridge 1998; M. Fleurbaey, *Fairness, Responsibility, and Welfare*, Oxford University Press, Oxford 2008; V. Peragine, *Ranking Income Distributions According to Equality of Opportunity*, in "Journal of Income Inequality", 1/2004, pp. 11-30.

[5] One of the recent annual reports of the World Bank used the EOp approach for the analysis of distribution in developing countries, see World Bank, *World Development Report 2006: Equity and Development*, The World Bank and Oxford University Press, Washington 2006.

[6] D. Checchi, V. Peragine, L. Serlenga, *Fair and Unfair Income Inequalities in Europe*, ECINEQ Working Paper Series, 174/2010.

[7] It must however be noted that these estimates only reflect the lower threshold of inequality of opportunity: if other variables were to

be added to the initial circumstances, the measure of inequality would only increase.

[8] R. Paes de Barros, F. H. G. Ferreira, J. R. Molinas Vega, J. S. Chanduvi, *Measuring Inequality of Opportunities in Latin America and the Caribbean*, The World Bank and Palgrave Macmillan, Washington 2009.

[9] R. Aaberge, M. Mogstad, V. Peragine, *Measuring Long-Term Inequality of Opportunity*, in "Journal of Public Economics", 3-4/2011, pp. 193-204.

[10] *Ivi*.

[11] This result is consistent with the empirical literature on social mobility, which considers only one exogenous circumstance (family background measured on the basis of income or social status of the parents) and finds a positive correlation between inequality and immobility: more equal countries are also those that have a greater intergenerational mobility and vice versa.

[12] Checchi, Peragine, Serlenga, *op. cit*.

[13] J. A. Mirrlees, *An Exploration in the Theory of Optimum Income Taxation*, in "The Review of Economic Studies", 2/1971, pp. 175-208.

[14] R. J. Barro, *Inequality and Growth in a Panel of Countries*, in "Journal of Economic Growth", 1/2000, pp. 5-32.

[15] P. Dasgupta, D. Ray, *Inequality as a Determinant of Malnutrition and Unemployment Policy*, in "Economic Journal", 385/1987, pp. 177-88.

[16] See O. Galor, J. Zeira, *Income Distribution and Macroeconomics*, in "The Review of Economic Studies", 1/1993, pp. 35-52.

[17] See: A. Alesina, R. Perotti, *Income Distribution, Political Instability, and Investment*, in "European Economic Review", 6/1996, pp. 1203-28; A. Alesina, D. Rodrik, *Distributive Politics and Economic Growth*, in "The Quarterly Journal of Economics", 2/1994, pp. 465-90; Barro, *op. cit.*; K. J. Forbes, *A Reassessment of the Relationship Between Inequality and Growth*, in "The American Economic Review", 4/2000, pp. 869-87; T. Persson, G. Tabellini, *Is Inequality Harmful for Growth? Theory and Evidence*, in "The American Economic Review", 3/1994, pp. 600-21.

[18] World Bank, *op. cit*.

[19] G. A. Marrero, J. G. Rodriguez, *Inequality of Opportunity and Growth*, ECINEQ Working Paper Series, 154/2010.

[20] For a discussion of the aspects linked to the efficiency of policies on equal opportunities see Fleurbaey, *op. cit*.

Jeanne Fagnani

The Development of Family Services: A Precondition for Promoting Economic Growth and Social Development in Europe

Despite profound changes in living arrangements, families continue to play a crucial role in maintaining social cohesion and cross-national public opinion surveys have proven that this institution is still perceived as the main source of satisfaction in people's lives. Now more than ever, within the context of economic uncertainty and public budget constraints, providing families with a wide range of services is essential to ensure they can meet the challenges ahead. I will begin by identifying some future challenges and key drivers of change in the domain of family-service supports. In the second part of the paper, after taking stock of family services in the EU, I will place emphasis on some of the best practices in this area throughout Europe. To conclude, I will argue for the adoption of a more holistic and integrated approach to family services as a way to meet the emerging needs of Europe's citizens.

The years ahead: challenges and opportunities facing policy makers in the domain of family-service support

Against the background of the current economic crisis and high unemployment rates, families, especially working parents, are demanding an increase in the provision of both public and market-provided services. The logic underpinning this demand arises from multiple obligations (especially paid and unpaid

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work), the need to promote women's employment, fighting poverty, alleviating social inequalities, and enhancing children's wellbeing.

The room for manoeuvre may be narrow, as governments will face enormous challenges in the domain of family-service support over the coming years. Budget constraints, in the context of welfare state cutbacks, will play a significant role. A dramatic increase in the percentage and in the numbers of dependent old people will have an impact. Precarious employment will become increasingly more widespread. Moreover, in a context of deep organisational changes in the workplace, many parents will face an exacerbation of the work/family life conflict.

Current trends in family structures, formation, and composition make it more important than ever to identify the most efficient ways in which to support families in their day-to-day life. Changes include an increased divorce rate and the spread of remarriage and reconstituted families. Single parents and smaller families have become proportionally more widespread. Further tensions arise when we realise that with the expected increases in the rates of labour force participation for both men and women aged sixty and over, the support and assistance this group was previously able to provide may be heavily constrained in the near future.

As a result of these trends, the issue of how to provide families with the most efficient, sustainable, and adequate services is likely to become more prominent on the policy agenda.

Reviewing the role of family services in the EU

With regards to caring for dependent people, borders between the state, the market and families have been redrawn in most European countries. Tasks commonly found under the umbrella of childcare and eldercare were previously carried out by women within the family context, but have since been transferred to other institutions. The public sector, the market, and non-profit organisations have jointly taken on this responsibility. Many women are employed by families as childminders, paid domestic helpers, or as home carers for elderly people. For the most part these jobs attract a female workforce, are poorly paid and lacking in job security.

In the case of France most of these care jobs are subsidised by the state, either through tax deductions or a reduction in social security contributions. Policies encouraging paid care outside the family have had some positive impact in terms of the inclusion of women in the workforce, and this has been particularly beneficial for non-qualified immigrant women for whom participation rates have increased rapidly. Additionally, by shifting formerly unpaid care into the formal economy, carers receive access to social rights from which they would otherwise be excluded in the informal economy. By alleviating the burden on families, these positions allow other women to retain their own jobs and, therefore, to be less (or not at all) economically dependent on their partner.

Against the background of an overall increase in female employment rates, since the 1990s reforms to enhance work/life balance have gained momentum in many European countries. At the same time, advancing the development of public and/or market-provided childcare provisions has become an important trend and the availability of preschool childcare has improved significantly across the European Union.

Labour market policy adjustments and welfare reform have arisen in the wake of the financial crisis across the EU (in Denmark for example). Employment-oriented family policies have been expanded due to concerns over a shortage of skilled workers. Employers' demands for more flexible working hours and the desire to reduce welfare related expenditures have gone in tandem with an increase in the employment rates of women with family responsibilities. Moreover, increasing the recruitment, retention and advancement of qualified women is increasingly recognised as a crucial business concern requiring a multi-dimensional approach, which includes the delivery of high-quality family services.

With regards to policies aiming to provide support to families caring for elderly people or preschool children, the current trend is to adopt a comprehensive and integrated approach by encouraging the multiple institutions involved in this sector to collaborate and thereby bridge families, volunteering associations, and local authorities and communities. "Integrated" services, located in the same site or building, enhance the coordination of local services delivered by different public bodies and provide families with flexible options and support in family matters. In France, over the last decade, there has been an increase in the number of *multi-accueil* services, sometimes called *maisons de la petite enfance*. The rationale is to group multiple and flexible childcare arrangements together in one place: *crèches*, *halte-garderies* (half-time day care), emergency care for children at risk, and meeting rooms for childminders who look after children in their own home. The objective is to meet parents' needs by providing them with opportunities to tailor their childcare arrangements in relation to professional needs and to have access to a sort of one-stop shop for the childcare solution best suited to their current obligations (from part-time to full-time for instance, on a regular basis or occasionally, etc.). In order to increase flexibility, a given number of slots in each *multi-accueil* are left deliberately open and cannot be defined in advance.

Across Europe governments have sought to expand childcare facilities, but significantly different starting points among them explain different answers to similar challenges. Despite some evidence of convergence between countries, differences remain striking in respect to levels of supply and modes of governance. In the Nordic countries and in France childcare services are given priority among the public expenditures for families and children; this group leads the EU in respect to public childcare provision and benefits aimed at reducing childcare costs for families. In Sweden, for instance, a place in a day care centre is guaranteed within a three-month period after a request is made for any child aged between one and five years. Conversely, southern European countries typically spend less public funds on childcare. For younger children informal care remains the rule and mainstream participation in preschool begins from the age of three.

The UK is notable as it long sat at the bottom of European league tables for the areas examined. Under Blair's Labour government, however, significant improvements were made to the work/family balance, particularly in childcare provision. Government expenditure increased, and all three- and four-year-olds now have access to some form of free childcare provision. In Germany, significant steps in the right direction have also been made over the last decade, but the picture remains far from complete and the country still lags behind the Nordic countries and France. Cultural and institutional obstacles have reduced the pace of childcare reforms and have led to a patchwork policy, in which all childcare is provided at the municipal level, by local non-profit providers or NGOs and churches.

Services for the elderly: diversity across Europe is still the rule Long-term care has become a crucial issue and is high on the policy agenda. While informal care provided by relatives (mainly women) plays a crucial role and is still widespread across European residential care services, domestic help provided at the city-level, and home-care allowances are rapidly evolving to meet a growing need. There is also a huge variety in how money is spent on services for the elderly.

Trends in the demand for support services and devices for the elderly have pushed telecommunications into uncharted territory. One example is the development of ICT-enhanced autonomy using wireless local networks. The package could also include linkages for the use of Near Field Communications

(NFC) technologies in body area networks. Where ICTs may be used most intensively is in bringing the hospital into the home for families in the future (remote health monitoring).
Against the backdrop of economic uncertainty and rapid demographic and social changes, the necessity to meet new families' needs has encouraged governments to foster "best practices" and to institute policies of mutual exchange and learning as recommended by the European Commission.

Best practices throughout Europe

Finland: variety and flexibility in childcare services In Finland, every child under compulsory school age has a right to day care, to be provided by local authorities once parental leave comes to an end. Family and centre-based day care services operate all day and all year and include round-the-clock care if needed. A variety of municipally provided services exists in addition to those made available by the Lutheran Church and voluntary organisations.
Municipalities can opt for a mixed system of provision, which is both public and private. In general, services are provided directly through municipal day care centres, family day care, homes, and preschool classrooms (the main forms of provision). Parents have the freedom to choose a private or public service. Competition from public services ensures private providers keep costs down. Thanks to the private childcare allowance and municipal supplements, the fees parents pay in private services are not significantly higher than those in the public sector.

France: promoting effective staff training. The example of licensed childminders An important quality indicator in ECEC (Early Childhood Education and Care) provision is the level to which staff have been trained. In order to foster high-quality social care provision, the French government has made efforts over the last decade to develop a training policy that specifically targets licensed childminders, the backbone of the French childcare system.

Improving working conditions

The long process of so-called "professionalisation" among childminders was aimed at eradicating their activity from the underground economy. The desired objective was to shift this activity away from the informal economy, turning it into formal paid care work, and in the process pave the way for access to all the social rights attached to the job. There has also been acknowledgement of the fact that employee/employer relationships in this domain differ somewhat from the more traditional model found in other sectors of the economy.

The objective of the 2005 reforms concerning childminders' work status was to move the prevailing regulations closer to something that resembled work rules found elsewhere, especially with regard to labour contracts, salary, and regulating working hours. The "professionalisation" programme also restructured the framework that governs working conditions for childminders and provides the legal tools to manage labour relations between employers and registered childminders.

Thanks to this reform, and the increase in public financial support for childcare, childminders have recorded significant progress with regards to their professional status and working conditions since the 1970s.

Legal and professional framework for childcare by childminders

All childcare services are subject to licence procedures and controls that are expected to ensure quality and safety of care. Childminders need a license to care for children in the home. The license procedure is handled by the local services in charge of mother and child protection (Protection maternelle et infantile, PMI). Since the law of 2005 was enacted, legal and professional regulations include 120 hours of training of which 60 should be carried out before beginning to care for children. An additional 60 hours of training must be completed within the five years following registration. The training programme is paid for and supervised by local authorities. In addition to training requirements, the housing conditions and environment in which the children are to be cared for must be approved, with particular attention paid to space, hygiene and safety.

The family tax credit: promoting crèche creation in private companies

The current promotion of company-run childcare centres (partly funded by the Family branch of social security) is a response to the new realities of the workplace. A measure was introduced in 2004 to promote the creation of *crèches* in private companies (termed *crèches d'entreprise*) by providing them with tax deductions along with partial funding from the local allowance funds (Caisse d'allocations familiales, CAF). The family tax credit (Crédit d'impôt famille, CIF) is a financial incentive provided to companies to encourage them to develop more family friendly initiatives for their employees. The CIF stipulates that 25% of related expenses are deductible from taxes paid by the company up to a ceiling of 500,000 euros per year per company. Within this regulatory framework, five categories of expenses are statutory:

a) expenses linked to training programmes for employees on parental leave;

b) supplements paid to employees on maternity or paternity leave or on leave for child sickness;

c) costs linked to the creation of *crèches* or contributions to the running of *crèches* in which places are reserved for employees with children under three years of age. The service provider (either the company itself or a private provider in charge of managing and running the childcare centre) is subject to specific

requirements and has to comply with the PMI criteria relating to the quality of care in order to be entitled to CAF subsidies;
d) employee refunds on expenses related to exceptional child-care costs arising from unpredictable professional obligations outside the normal work schedule;
e) contribution to the cost of purchasing CESU (a prepaid service voucher) for their employees.

CESU (prepaid service voucher): subsidising the cost of home help
To simplify procedures for legally recruiting domestic workers and to combat undeclared work, the French government introduced the Chèque emploi service universel (CESU), an universal service employment voucher, in 2006. The scheme is designed to subsidise the cost of legally employing a home helper to undertake everyday tasks around the home. It allows families to pay for domestic service work and can also be used to obtain childcare outside the home, as provided by any individual or organisation. 50% of the related expenses can be recovered in the form of an income tax break, up to a ceiling of 15,000 euros of the total costs (including social contributions). Families who do not pay income tax are eligible to tax credits.

Germany: multi-generational centres, providing a wide array of services to families Created by the ministry in charge of family affairs (Bundesministerium für Familie, Senioren, Frauen und Jugend, BmFSFJ), the programme's overall goal is to build a new mix of public services, involving non-profit organisations, the private sector and volunteers (the motto is «More services for every age»). In addition to providing old and young people with opportunities to connect to each other (meals are provided, as are meeting rooms and childcare services) and to enhance intergenerational solidarity, the programme also serves to reinforce relationships and connections. Employed people are able to mix with people outside formal employment; professionals rub shoulders with volunteers; and otherwise fragmented service providers in the community have a suitable point of reference.

UK: significant improvement in childcare provision The UK long sat at the bottom of European league tables in most aspects of family policy, but measures implemented by the Blair government have made a significant improvement in the work/family balance, particularly in childcare provision, while promoting partnerships with the "community". Now, the main role for local authorities is to manage and coordinate supply and demand of childcare by providing information to parents about the local childcare market and other services for children, and to stimulate the creation of local for-profit providers to meet the demand. Many local authorities now have "childcare business managers" and all childcare is expected to be self-funding or sustainable. The private for-profit sector now occupies 85% of the childcare market. In one illustration, the "core offer" of integrated services in Sure Start Children's Centres consists of: integrated early years education and childcare, family support and learning, outreach to isolated and vulnerable families, information and advice, links to Jobcentre Plus, and adult learning and leisure. Implementation and coordination of these services is the responsibility of local authorities in partnership with local providers.

Making the case for the adoption of a more holistic and integrated approach to family services

The need to adopt a more holistic and integrated approach to family services is clearly evident. The concept of "family mainstreaming" must begin to play a more prominent role and the family must be integrated into all aspects of social and economic life.
When organising access and delivery of family services it would be a mistake to neglect the role of housing and transportation.

A trend towards longer commuting times has come about as a result of gradually expanding limits on what constitutes the "local" job market. While on the one hand this phenomenon has created some advantages in terms of income and career prospects, it also entails a reduction of the time devoted to family commitments and increased tensions over the need to combine job and care obligations. Strong residential segregation along socio-economic lines can also counteract any positive outcomes that would otherwise derive from a fair and effective use of family services.

With the development of atypical and unsocial working hours the current scenario demands an increase in female employment and the encouragement of gender equality in the home. Employers and companies must also take into consideration that employees with dependents (children, elderly, disabled people, etc.) should have some degree of control over how their working hours are scheduled.

States as well as other social actors have recognized that children represent a common good and that responsibility for their well-being is far from a strictly private, family-based, affair. Indeed, investing in children might be a long-term profitable strategy for society as a whole.

However, guaranteeing the well-being of children, as well as ensuring each child has the opportunity to reach his or her full potential, requires a multi-dimensional and systematic approach which extends beyond the simple provision of cash benefits, generous as they may be, and branches out to include a wide range of family services. In the context of cost containment, the provision of in-kind benefits deserves to be given priority over cash benefits.

From this perspective, lessons should be drawn from the Nordic countries, given that they have been far more successful than other European countries with regards to a wide range of social indicators. It comes as no surprise that the Nordic countries, followed by the Netherlands, Belgium and France rank among the ten best places to be a mother according to the 12th annual Mothers' Index Report, which rated 164 countries to determine the best places in which to be a mother (Norway secured the top position). In conclusion, we can identify a clear need to move beyond the current situation if countries wish to ensure social cohesion while at the same time promoting economic growth and social development across Europe.

Naomi Chambers

Health Systems: Challenges and Growth Strategies

The aim of this essay is to outline the scale of economic, political and social challenges facing healthcare systems in Europe, and the new demands of European citizens, including increased opportunities for patient mobility across borders and the impact of social networking and the digital age. We then examine the changing face of health care systems and services in Europe, including the growing role of competition and markets, more out-of-hospital care and the potential for e-health. We conclude that health systems are better at incremental innovation than disruptive innovation; that systems are not good at learning from each other; that e-health adoption is slower than its equivalent in other service industries; and that the health professions can play a particular role either in slowing down change or as champions of change.

Challenges

There is a raft of enduring challenges facing all health care systems, which have been well rehearsed by a number of authors, for example, WHO,[1] Blank and Burau,[2] Saltman, Figueras and Sakellarides[3] and Goodwin.[4] These challenges have much in common with those in other public sector or social welfare programmes (education, housing and so on) but it can be argued that there is a greater number and greater complexity of strands coming together in health which makes the endeavour more intractable.

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Six strands are identified here (summarised in the box below) which have to be handled by system leaders contemporaneously. Since the global economic downturn in 2008, and the deepening crisis in the eurozone, and given the rate of technological advances in healthcare, top of the list of challenges has to be the affordability of care. Fiscal stress was identified as one of five policy drivers by the OECD in its review of common pressures faced by governments.[5] Governance, which includes comprehensive controls, and prioritisation tools to avoid overspending are therefore essential. Efficiencies are demanded now more than ever, in a recurring mantra of "more for less". This is crucial given the demographic "time bomb" as we live longer, technology keeps us alive in very old age, and the proportion of older people *versus* the working population increases. Second is the question of quality and safety in patient care. This demands good

Six system challenges in healthcare

- Financial pressures: need for comprehensive controls
- Quality and safety of care: need for good systems and implementation
- National and local politics: need for astuteness over competing forces
- Consumer demands: need for prioritisation tools and patient focus
- Power of the professions: need for negotiation and influencing skills rather than command-and-control approaches
- Complexity of the health system: need for inter-organisational governance and collaborative leadership

Source: N. Chambers, *Leadership and Governance*, in K. Walshe, J. Smith (eds.), *Healthcare Management*, Open University Press, 2011.

measures and data, excellent systems of monitoring and sophisticated influencing abilities over highly qualified professionals. Even in countries such as the United Kingdom, which boasts a National Health Service (NHS) stretching back to 1948 and an elaborate professional regulation infrastructure, inquiries into failures of care, which first started in the 1960s, continue today, without, apparently, the basic lessons being learnt and applied. These governance failures are replicated worldwide.[6] Third is the confounding factor of politics in health care which nationally drives successive top down reorganisations and restructurings,[7] and which locally "interferes with" evidence-based reconfigurations of services and ensures politics-driven health policy making.[8] Political astuteness in manoeuvring around this is called for. Fourth is increasing consumer demands and steadily increasing dissatisfaction with services,[9] requiring a response which is both economic, for example through the construction and implementation of technical prioritisation tools, and socio-emotional, for example through ensuring the design and delivery of services which are "patient-centred". Fifth, is the power of the professionals, particularly doctors, who deliver the services and who can sabotage attempts to make changes if they make no sense to them.[10] The only realistic way forward is through co-ownership, management by influence and distributed forms of leadership. And finally, although it increases complexity, there is a growing acknowledgement that health services are managed more effectively in health systems which cross institutional boundaries than they are within single organisations[11] which requires consideration of multi-form and multi-level governance and collaborative forms of leadership.

Demands from European citizens

There is no doubt that together with globalisation, which allows for instant comparisons, and, on a European scale, the enact-

ment of patient mobility in the European Union through the passing of the directive 2011/24, citizens have higher demands with regard to choice, and expect to experience a different relationship with healthcare services from the traditional passive role which they have until recently inhabited.
The work of Coulter and colleagues covering eight countries in Europe identified that the European patient was becoming both more informed and less submissive. In particular, the authors identified that many patients want a more responsive health service, choice of primary care doctor, specialist and hospital, more information to make those informed choices and that younger people were more likely to be dissatisfied in general with the health services that they received. Variation between countries was significant: for example, people in Spain and Poland showed a much greater preference for a paternalistic style than those in Switzerland and Germany, and against all measures people in Poland were the most dissatisfied with their health care.[12]
In addition to the successive challenges to the European Court of Justice in cases where care has been denied, and the recent passing of the EU cross border health care directive, there is increasing evidence that patients do want to move across borders in certain circumstances to access their healthcare. In a survey repeated annually of members of a large German health sickness fund, Wagner[13] found that a proportion of respondents continue to be keen to be able to access European specialists of other countries, and it was important they had this opportunity of choice of medical practitioners; a significant proportion also signalled that a principal reason was that they trusted in a particular doctor or facility in another country. For those who had used health care from another country, most treatments were in the outpatient setting and the top reasons were cost savings and the opportunity to combine treatment with a vacation.[14]
It is not news that the world we live in has been dramatically transformed because of technology, and particularly the power of the

internet and social media; increasingly we bank online, we book and review our holidays over the internet, we link to friends via social networks. What is surprising is that in many countries healthcare has been slow to adopt, adapt and utilise new electronic approaches. Despite the arguments for the importance and radical potential of e-health, implementation has often been limited.[15]

Changing face of healthcare systems

Across Europe, waves of reforms since the 1970s have changed the face of health care systems and services. But with many local variations, two main universal healthcare systems remain – the Bismarckian or statutory health insurance-based model and the Beveridgean or tax funded and (local or national) government operated model. Central and Eastern European countries emerging out of the communist era have opted in the main for the former. As a very broad generalisation, the tax based systems find it easier to offer integrated and coordinated care, particularly for patients with long-term conditions[16] and the insurance-based systems are better at offering choice and score more highly on responsiveness.[17] Differences in country performance endure: from an examination of OECD statistics, the Netherlands and France are near the top in terms of overall outcomes, for example in terms of life expectancy, survival rates from cancer and other rates of amenable mortality, with the UK considered one of the best in terms of value for money as measured by health care as a proportion of GDP spend.
Using the vehicle of a national (Beveridgean) system together with systematic devolution to regions, Italy has implemented a number of systems and processes, including ensuring a comprehensive basic package of services, comprehensive population health screening, national clinical guidelines to improve the quality and reliability of care, and delegation of managerial authority to hospitals and local health enterprises. Infant mor-

tality has dropped, deaths from cancers have decreased and life expectancy for women in particular has improved significantly and stands at over 83 years.[18] In Italy as in other countries, health inequalities persist despite the existence of universal coverage.

Primary health care led systems are widely acknowledged to be more efficient, effective and equitable[19] but countries continue to struggle to overthrow the dominance of the hospital sector in terms of resources and headlines.

The influence of new public management philosophies have permeated health services in three main ways: policy makers have been attracted by the allure of markets and competition, new flexibilities in public employment have been introduced and mechanisms of accountability and control have been modernised. The evidence-base for the marketisation of health services is not clear.[20] The USA, an extreme example of the use of markets in financing and provision of health care indicates the best features (clinical outcomes and resource utilisation) and the worst (population coverage) of this policy.[21]

A modification of the market approach, managed competition, or the quasi-market has been applied in the European context. This ensures universal coverage, as no one is refused insurance or coverage, and competition is more likely on quality rather than on price. Getting the incentives right and ensuring multilevel governance to promote inter-organisation working remains problematic.[22] New flexibilities in employment include fixed term contracts rather than "job for life", decentralisation of human resource management, the use of appraisals and skill mix. The last of these has promoted multidisciplinary teamworking and provided the opportunity for other health professions, particularly nursing, to expand and extend their roles, an example being the growth of the nurse practitioner in the Netherlands, Nordic countries and in the UK.[23] Mechanisms for accountability within the public sector have been changed with a move towards *ex post* rather than *ex ante* monitoring of activity and performance against expectations. There has also been a concomitant growth of regulation as states have moved away in many cases from direct provision.[24] Performance management in healthcare is also more likely, often by means of contract monitoring, to address issues of clinical quality which, until only recently, was not considered legitimate territory to challenge the medical profession on. Meanwhile high quality and comprehensive primary health care continues to be promoted[25] – if not always pursued – as the best option as it saves money on unnecessary and expensive hospital treatment which can also be a distressing experience for patients. Countries which spend little on healthcare but which have very good primary care – for example Cuba – do very well. Primary care in the UK NHS is good but the quality is still too variable and relations with hospital doctors are not as close as they could be. Close collaboration with hospitals through integrated care leads to patient-centred services. The notion of primary care gatekeeping on the other hand may need to be revisited. Germany and France have "weak" gatekeeping by primary care physicians or family doctors to specialist care, but enjoy excellent health outcomes. There are some compelling circumstances, particularly in the management of long term conditions, where patients need to have direct access to specialists.

Conclusions

Is this enough? Are health services keeping up with the strains and challenges described above? There is evidence of some helpful moves towards policy convergence, for example in the areas of regulation, in the trend towards more out-of-hospital care and shorter lengths of stay in hospital, improvements in the management of long term conditions and the strengthening of primary care and integrated care. Payment by DRGs

(Diagnosis-Related Groups) has proved, for example in Italy, to be a robust policy tool for planning and analysing activity, reducing inpatient admissions for ambulatory sensitive conditions and for measuring performance of clinicians.[26] Equity of access and the elimination of health inequalities in some countries, including the UK, remain elusive. And health systems are better at incremental innovation than at disruptive innovation. The temptation is to add new services rather than to replace them. And the "not invented here" syndrome exists: systems are not very good at learning from each other.

There is evidence that e-health adoption is slower than the equivalent in other service industries. E-health covers an increasingly wide range of activities and approaches. It is commonly understood as encompassing electronic health records, personalised or remotely delivered healthcare (including diagnostics, monitoring, advice, appointments and prescribing), mobile health devices, virtual teamwork, and electronically enabled disease and knowledge management. With the increasing political importance of the sustainability agenda, the obligation of countries to capitalise on the potential of e-health is critical. As the EU Commissioner for the Information Society put it last year: «Without embracing e-health, our health systems will simply not work tomorrow». But e-health faces significant challenges in implementation, including financial, structural, cultural, capacity and regulatory barriers. There is too often a burdensome layering of new systems, networks and databases on top of old processes, roles and organisations. It is not always clear why some initiatives take off and others do not, who should lead, who should invest and who should be the target beneficiaries.

The roles that doctors choose to play are crucial as barriers or as champions of change, whether it be in terms of encouraging greater skill mix with other professions, or agreeing to the closure of popular but unprofitable and sometimes clinically

unsafe hospitals. Their support is required for modernisation just as their clinical freedoms are being eroded with the implementation of efficiencies, treatment prioritisations and audit of the quality of clinical practice.
Finally, European governments play a key role, through determining the levels of investment in health care and through regulation mechanisms for its delivery. The temptation, which many governments have fallen prey to (particularly in the UK, but also in Germany and France) is to seize upon yet another management restructuring or reconfiguration of the health insurance governance frameworks to solve the ongoing challenge of "more for less". This is a distraction from the main task in hand. Given the stresses described above, a more rigorous approach to assessing the public value provided by the constituent parts of health systems in different countries is urgently required instead.

NOTES

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Andranik Tangian

Flexicurity: Promises and Outcomes

Flexicurity is a European labour market policy adopted in 2007 within the European Employment Strategy. By analogy with the motto of the Prague Spring of 1968, «socialism with a human face», flexicurity can be understood as deregulation of labour markets with "a human face". It aims at softening the ongoing flexibilisation of employment relations (including easier firing and hiring, adjustable working hours, variable pay, etc.) by creating advantages in employment security and social security.

The European Union authorities promote flexibility as a necessary means for improving the competitiveness of the European economy.

However, there is no unambiguous statistical evidence for this point, and until now flexicurity remains a normative approach with little empirical feedback.

Some politicians and scholars warn that it is unclear which policy responses are to be expected. The main normative argument – that flexibility improves economic performance – is still disputed, and there are serious doubts about its compatibility with security. Moreover, social partners have not reached a consensus on the implementation of flexicurity, and the public debate continues.

This paper outlines the history of flexicurity and attempts to explain its operation and outcomes.

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Deregulation of labour markets

Since the 1980s general employment insecurity has increased significantly in Europe. In addition to unemployment, the number of those employed in atypical work, such as part-time, fixed-term, or self-employed, has disproportionately grown.[1] According to the 2010 Eurostat "Labour Force Survey",[2] the share of atypical employment (other than permanent full-time) has exceeded 40% in 10 out of 27 member states.

One of the major causes rests on current globalisation trends. Indeed, investments can easily be made worldwide, industries and services move from one country to another, making permanent employment restrictive for efficient economic performance. Moreover, the collapse of the USSR gave way to capitalism in Eastern Europe and in the Soviet-oriented developing countries. The market economy became total. To improve the competitiveness of firms left behind in the move of industries to countries with cheaper labour, European employers required a liberalisation of national economies.[3] Some governments yielded to their pressure, and employment protection legislation became more relaxed, resulting in a number of negative effects on labour market and social structures.[4]

Growth of atypical employment and intensive labour market transitions[5] resulted in a new social structure which the public policy failed to adequately reflect. In most of post-war Europe, employment relations had been regulated by rather strict employment protection legislation and by collective agreements between employers and trade unions. The contradiction between the flexibilisation pursued by employers and the labour market regulation, which the trade unions defended, has generated a debate on the impact of flexibilisation and employment protection legislation on economic performance and employment.

The proponents of flexibilisation relied on good labour market performance where there is little regulation, as occurrs in the

Anglo-Saxon model, which encompasses the United States, Canada, United Kingdom, Ireland, Australia, and New Zealand.[6] The "Dutch Miracle" of the 1990s coincided with a deregulation of labour market in the Netherlands, which had a different kind of economy.[7] Denmark with its weak employment protection was highly successful in the background of "Eurosclerosis"[8] as well.[9] All of these elements persuaded a number of politicians and scholars in recognising the usefulness of labour market deregulation. It was held that flexibilisation improves competitiveness of firms and thereby stimulates production, which in turn will provide more jobs.[10]

On the other hand, pros and cons of labour market flexibility versus employment were investigated by numerous scholars (for a review focusing on European welfare states see Esping-Andersen).[11] The review of empirical studies led to conclude that «the link between labour market regulation and employment is hard to pin down».[12] The same empirical evidence, suggesting that unemployment is practically independent of the strictness of employment protection legislation, was reported by the OECD.[13] There were even cases when the same legislation changes caused different effects. For instance, the impact of almost equal deregulation measures on easing restrictions on the use of fixed-term contracts «was sharply different» in Germany and Spain.[14]

During this debate, the OECD Jobs Strategy[15] and European Employment Strategy[16] were developed. The strategies were very similar and called upon member states to relax employment protection and to increase the flexibility of working hours. The minor difference was that the European strategy paid more attention to the role of social partners, potential negative consequences of certain policy responses, and interconnections between employment and social policy.[17] Furthermore, the European strategy was updated several times and detailed through numerous employment guidelines without, however, reformulating its objectives. According to Watt, it was a «change merely of presentation».[18]

Demands for flexibilisation have met with strong resistance, especially in countries with a long tradition of struggle for labour rights. With reference to Korver, Wilthagen and Tros[19] state that the "Green Paper. Partnership for a New Organization of Work",[20] «which promoted the idea of social partnership and balancing flexibility and security», met with a very negative response from French and German trade unions because «the idea of partnership represents a threat to the independence of unions and a denial of the importance of worker's rights and positions, notably at the enterprise level». The International Labour Organisation (ILO) has reported that «the flexibilisation of the labour market has led to a significant erosion of workers' rights in fundamentally important areas which concern their employment and income security and (relative) stability of their working and living conditions».[21]

The deregulation of European labour markets also evoked serious concerns about the future of the European welfare state. The rapidly growing atypical employment is not only less secure than the normal full-time permanent employment model, but also provides less career prospects and training chances.[22] Moreover, it often disqualifies workers from social benefits, since the eligibility for such benefits of those atypically employed is substantially lower than that of those who are permanently employed.[23] For instance, the coverage of atypical workers by unemployment benefits in EU-15 is only 70.6%.[24] The problem of in-work poverty due to atypical employment is also aggravating, which is recently recognized at the European level.[25]

All of these issues needed some policy adjustments. On the one hand, demands for further flexibilisation continued. They reflected the belief that market economy was most efficient and self-regulating. This viewpoint, driven more by normative reasons rather than empirical evidence, paid tribute to a certain political philosophy. On the other hand, European values did not allow policy makers to ignore social priorities. To make flexibility consistent with security and in order to reflect the traditions of the European welfare state model, the flexicurity approach was proposed.

Development of the flexicurity approach

The notion of flexicurity was introduced in order to reconcile the European public with the increase in flexible employment, which resulted in a decrease of job security and reduced eligibility for social security benefits. Wilthagen and Tros[26] ascribe the invention of the word "flexicurity" to a member of the Dutch Scientific Council of Government Policy, Professor Hans Adriaansens, and the Dutch Minister of Social Affairs, Ad Melkert (Labour Party). In the autumn of 1995, Adriaansens introduced this term in his speeches and interviews, after having defined it as a shift from job security towards employment security. He suggested compensating the decreasing job security (fewer permanent jobs and easier dismissals) by improving employment opportunities and social security benefits.

For instance, relaxation of the employment protection legislation would be counterbalanced by providing better conditions for temporary and part-time workers, supporting lifelong professional training to facilitate career changes, and introducing more favourable regulation of working hours and additional social benefits. In December 1995, Ad Melkert presented a memorandum, "Flexibility and Security", proposing that employment protection legislation be relaxed for permanent employees, provided that temporary workers were granted regular employment status, without, however, adopting the concept of flexicurity as such. By the end of 1997, the Dutch Parliament had accepted the flexibility/security proposals and translated them into laws, which came into force in 1999.

The OECD ascribes the origins of flexicurity to the Danish "golden triangle" model: traditionally weak employment protection, highly developed social security, and efficient active labour market policies.[27] The interaction of these three pillars is described by the OECD as follows:

> «The Danish model of flexicurity thus points to a third way between the flexibility often attributed to deregulated Anglo-Saxon countries and strict job protection characterizing southern European countries (…) Those who do not quickly go back to employment are assisted by active labour market programmes, before re-entering employment. The vast majority of unemployed persons who are members of a U[nemployment] I[nsurance] fund receive UI calculated at the rate of 90% of their previous income from the first day of unemployment and for a maximum of four years, including periods of activation (…) The potential disincentives deriving from these high income replacement rates are addressed by requiring the unemployed to be actively seeking jobs and by offering mandatory full-time activation programmes. Activation is therefore seen as fulfilling both a qualification and a motivational purpose».[28]

Regardless of the origins of the word "flexicurity", both Denmark and the Netherlands were recognised as «good-practice examples»[29] and inspired the international flexicurity debate. Although some authors considered flexicurity a specifically Dutch/Danish phenomenon,[30] the idea rapidly spread throughout Europe.[31]
For the first time, the EU referred to flexicurity as a «combination of flexibility and security» at the Lisbon summit in 2000.[32] After that, the words "flexibility" and "security" began to be juxtaposed in an increasing number of official documents. Due to an informal minister meeting in Villach in January 2006, flexicurity as «flexibility through security» became a top theme in the EU.[33] In addition to that, a significant chapter dedicated to this topic was included in "Employment in Europe 2006"[34] and flexicurity was put on the agenda of the German-Portuguese-Slovenian trio-presidency of the EU during 2006-07.[35]

In November 2006 the DG Employment, Social Affairs and Equal Opportunities of the European Commission issued a strategic “Green Paper. Modernising Labour Law to Meet the Challenges of the 21st Century”.[36] In addition to the text, it contained fourteen questions aimed at initiating an open online debate on legislating flexicurity policy by making employment protection more relaxed and by introducing some security measures. The results of the debate were to be reflected in a Commission communication on flexicurity in the following year, «which will set out to develop the arguments in favour of the “flexicurity” approach and to outline a set of common principles by the end of 2007 to help member states steer the reform efforts».[37]

Among other issues, the “Green Paper” refers to recent labour market reforms in three EU countries to convince other member states to pursue the flexicurity policy and to implement corresponding legislation adjustments. The first one is the “Dutch Flexibility and Security Act 1999”, already mentioned above.

The second is the Austrian Severance Act (Abfertigungsrecht) 2002, which regulates the accumulation of severance payment accrued throughout the entire career of employees in special severance accounts accessible upon dismissal or retirement. Employers make obligatory contributions to these accounts of 1.53% of salaries paid (this percentage was calculated according to an econometric model), and no longer have to give severance payments in the event of dismissal. Since dismissals were relatively easy in Austria, severance pay was the major deterrent. After the reform, dismissals became quite a formal procedure, and employers obtained the freedom to make fast labour force adjustments for the flat 1.53% (“flexibilisation tax”). From the employees’ viewpoint, the Abfertigungsrecht is a kind of firing insurance. The European Commission argues that the reform favours «upward mobility» because the severance accounts are kept safe, with the result that a voluntary change of job does not mean losing the severance entitlement linked to a long tenure.

The third example is the June 2006 Spanish Decree easing the conversion of temporary labour contracts into open-ended labour contracts. The new law allowed workers on subsequent temporary contracts with the same employer to get a permanent contract, with a reduction of regular severance payment in case of dismissal by 27%.[38] According to the "Green Paper", this measure stimulates permanent employment due to lower dismissal costs.

In June 2007 the European Commission developed its conception of flexicurity in a communication, "Towards Common Principles of Flexicurity: More and Better Jobs Through Flexibility and Security", later published as a brochure.[39] The major novelty of the "Common Principles" is its comprehensiveness in presenting the idea of flexicurity – up to proposing four pathways on how to implement flexicurity in four different types of countries. The "Common Principles" were accepted by the EU Employment and Social Affairs Ministers Council on December 5-6, 2007, whose decision was endorsed by the European Council on December 14, 2007.[40]

In February 2008 a public initiative, "Mission for Flexicurity", was launched for promoting flexicurity as an official European labour market policy.[41] By the end of 2008 it was followed by a flexicurity-relevant communication, "New Skills for New Jobs. Anticipating and Matching Labour Market and Skills Needs"[42] adopted by the Council on March 9, 2009. After that, the Council of the European Union issued "Council Conclusions on Flexicurity in Times of Crisis",[43] and the DG Economic and Financial Affairs joined in the promotion of flexicurity, having published the communication "A Shared Commitment for Employment".[44] Finally, the European Union retains flexicurity on Europe 2020 as its principal labour market policy.[45]

It follows that flexicurity has been adopted with serious intentions and for a long-term perspective. An official flexicurity website has been launched by the European Commission,[46] and two academic web pages are dedicated to flexicurity research and

are regularly updated.[47] In 2009 the European Commission supported the establishment of the Research Institute for Flexicurity, Labour Markets Dynamics and Social Cohesion at Tilburg University[48] to carry out and coordinate flexicurity studies and to promote the study of flexicurity at the academic level.
Thus, three distinct periods can be highlighted for the 15-year history of flexicurity.

1995-2001. Security for those flexibly employed It is the time span between the first use of the word "flexicurity" and the first references to it by the EU. This period is characterised by labour market reforms in the Netherlands and the launching of the academic flexicurity debate.[49] During this period, flexicurity is understood as a policy to protect atypical workers from the negative consequences of labour market deregulation. European social partners do not participate in the debate. Subsequently, after having been involved in the debate, trade unions promoted precisely this understanding of flexicurity.

2001-2006. Flexibility-security trade-off This period runs up to the publication of the first European strategic document – the Commission's "Green Paper", at the end of 2006. During this time span the idea of flexicurity as a flexibility-security trade-off is shaped. The EU makes occasional references to flexicurity as a balance between labour market flexibilisation and social developments. The OECD[50] and European Commission[51] positively mention flexicurity in their analytical publications, "Employment Outlook" and "Employment in Europe", finding the flexicurity approach appropriate for implementing their employment strategies. European social partners start becoming involved in the discussions.

2006-present. Security through flexibility In the Commissions' "Green Paper 2006" and especially in the "Common Principles", flexicurity is understood as security through flexibility, or even as «flexibility security»; in other words, it refers to securing flexibility by adapting the labour force to flexible employment. Flexibility is regarded as providing «more and better jobs», because it improves economic competitiveness and, accordingly, contributes to labour market performance. With some reservations, the EU adopts the flexicurity approach in this understanding as its official policy, discusses it with national governments and social partners, and supports flexicurity research. Flexicurity gets a vivid response in academic and public debate.

All the considerations around flexicurity, combined with alternative policy suggestions and inclusions of various items made its conception rather vague: «Flexicurity loses its potential for clearly guiding the social partners: almost any possible topics of negotiation can be interpreted in the framework of flexicurity, from working time to wages or collective dismissals».[52]

Such a broad viewpoint implies that discussions on flexicurity, observed pragmatically, with a focus on content rather than on wording, can be used as a framework to enhance social dialogue. For instance, the Dutch Flexibility and Security Act of 1999 suggests a new role for trade unions in applying labour laws. According to Wilthagen and Tros,[53] Dutch collective agreements can partially derogate from legislation in either direction, so that the law is only «three-quarter mandatory».[54] This unique feature of the Dutch flexicurity gives collective bargaining a pivotal role in regulating employment relations, as well as an additional legal dimension for new demands by trade unions. A closer look at the Danish flexicurity also shows that its weak employment protection is in a sense compensated by a strong role of trade unions, whose density of about 80% is among the highest in Europe.[55] The role of collective bargaining in «employment protection as it works in practice» has been recently recognised by the OECD as well.[56]

At the same time, flexicurity emerged as a normative approach, which developed within the neo-liberal political philosophy. As a result, it creates a prejudice among leftist politicians and trade unionists. Flexicurity has still no comprehensive operational descriptions. To provide empirical feedback, the Employment Committee[57] recommends a list of macro indicators for monitoring flexicurity policy. Summarising these developments, the European Commission's Joint Research Centre published an extensive report on flexicurity composite indicators.[58] There are also flexicurity studies with an emphasis on quantitative methods.[59]

Operation and outcomes of flexicurity

As mentioned, since the 1970s the Western governments began to introduce financial liberalisation so as to simplify the access of Western capital to the world markets. There was also the hope of improving living standards in industrialised countries while at the same time addressing poverty concerns in developing countries, and simultaneously enhancing the West's political influence during the Cold War. Investments in countries with low labour costs promised cheap goods for consumers and high returns for investors. At the same time, the target countries were expected to benefit from modern technology and job creation. That was the theoretical starting point for the current globalisation.[60]

Since then, world prices have become relatively more even, and imported goods are no longer as cheap as they used to be in the 1970-1980s. Living standards in the industrialised countries, including the United States, improved visibly exclusively for top earners: «Even households at the 95th percentile – that is, households richer than 19 out of 20 Americans – have seen their real income rise less than 1 percent a year since the late 1970s. But the income of the richest 1 percent has roughly doubled,

and the income of the top 0.01 percent» – people with incomes of more than $5 million in 2004 – «has risen by a factor of 5».[61]
As for developing countries, the poverty issue was not solved at all, and inequality actually increased.[62]
At the beginning of the 1990s, European industry began to improve its profitability and competitiveness, due to participation in financial speculation and an increase in atypical forms of employment. The first element was inspired by the invention of derivatives – sophisticated financial products based on other financial products. Financial speculation became quite popular, and many formerly purely industrial enterprises are now involved in these activities. For instance, Chang called Porsche a «hedge fund with a car maker attached».[63] The second tactic was facilitated by the European Employment Strategy with its flexibilisation of labour relations.
Obviously, flexibilisation provides a number of benefits for employers, including financial advantages. The business world divests itself of restrictions, managers improve performance by rotating and tightening their grip on personnel, and firms gain higher profits. Earlier, the top earners were exposed to risks but low earners were relatively secure. Flexibilisation actually shifts the responsibility for business failures from top to low earners, reducing workers' security while retaining income disparities. However, advantages do not come from nothing. All expenses are covered by the state in the form of additional social security expenditure. Therefore, this type of flexibilisation scenario turns out to be a long-term indirect government subsidy to firms. Since the state budget originates from taxpayers, employees contribute considerably to this subsidy.
An innovative feature of this type of employment relation is the intermediation by the state in income redistribution. Employment relations were formerly restricted to the employer-employee axis. In the early stages of capitalism, the employer simply underpaid workers. The employer used the advantage

of having the means of production and purchased the employee's ability to work rather than the results of the work and used this device to obtain added value. Nowadays, employment relations no longer constitute an axis but a circle "employer-employee-state-employer" with a sophisticated money loop based on legislation, social security and tax systems. The relationship between an individual employer and an individual employee is now extended to all employer-all employee relation, the added value being redistributed through all these systems.

Lifelong learning is a particular task, with which employers charge the state. The supply-side economy adopted in the Lisbon Strategy and retained in the Europe 2020 Strategy requires a qualified labour force.[64] Indeed, the common marketing strategy is aimed at permanently updating products and services. For instance, Microsoft releases new versions of its software (often with bugs), forcing millions of users not only to purchase them but also to constantly upgrade their skills. It also requires constant training of Microsoft personnel in order to develop new software. The same can be said about other industry branches. The competitive market needs new clients and new offers, creating a kind of dependence on new consumer products. In turn, it stimulates supply and finally creates a circle of market operation.

As for the opportunities for making foreign investments, which in practice means exporting jobs, this tool gave employers a legal instrument of pressure on their governments: «If you do not relax employment protection according to our requirements, we shall continue moving jobs abroad, where labour is cheaper and employment protection is less strict, and you will remain here facing an army of unemployed». Thus, having liberalised the financial sector, European governments paved the way to a loss of control over their own labour markets.

The Hans-Böckler-Foundation has performed a number of empirical studies to analyse the flexicurity policy response.[65] These studies attempted to operationalise the concept of flexicurity from eight different viewpoints: a) neo-liberal, b) trade-unionist, c) of the European welfare state, d) of working time, e) of precarious employment, f) of job quality and lifelong learning, g) of trends in collective agreements, and h) of macroeconomic development with regard to the current crisis. These studies provide empirical evidence of increasing labour flexibility accompanied by a decline of social security.

In particular, it is shown that the countries with higher flexibility are more affected by the current crisis.[66] One of the reasons is that flexibility, favouring easy labour adjustments, encourages risky market behaviour by firms, which makes them more credit-dependent. At the same time, a generous social security, public works and other forms of state participation make the economy less dependent on the private sector and protect it from unpredictable shocks. A better alternative to flexicurity would be the "normalisation" of employment relations, namely reducing flexibility, which, among other things, would require less social security expenditure. Thus, empirical analysis has shown with statistical certainty that flexicurity did not pass the test set by the crisis.

Summing up what has been said, the current trends drastically contradict the Commission's assertion that «flexicurity strengthens the European Growth and Jobs Strategy»,[67] at least if flexicurity is restricted to the understanding of the European Commission. This is a serious warning against improper implementation of flexicurity and its one-sided use in favour of employers.[68]

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Elsa Fornero

The "Good" Flexibility in Individuals' Life Cycle: An Achievable Goal or a Chimera?

Labour markets and pension systems: two parallel reform paths to confront the demographic challenge

According to official projections,[1] over the next five decades, Europe's population will become considerably older, while slightly decreasing in numbers. As the large "baby boomer" cohorts (generally consisting of those born between 1946 and the early 1960s) approach retirement, fertility will remain largely below the natural replacement rate and longevity will continue to improve, triggering a major increase in old-age dependency ratios. This demographic scenario raises concerns about economic growth, which could experience a drawback, if only for the growing tax burden required to satisfy the rising needs of an increasingly elderly population.[2] Structural reforms in labour markets as well as in welfare systems are consequently required in order to increase participation rates, particularly among women and the elderly, and to boost productivity, possibly through investment in human capital and in innovation. These reform processes started in the 1990s in most European countries and continue to this day.

The generally accepted view was that the introduction of more flexibility in labour markets would raise employment and participation rates, without reducing wages or employment opportunities, or hindering the suitable development of individuals'

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life cycle, due, for example, to insufficient risk coverage. Labour market reforms have indeed brought about, or at least started, a transition from a more traditional system, modelled on the "regular and protected" employment of the "breadwinner" (the man of the house), to a more inclusive system capable, in principle, of offering greater opportunities to the young, the women and the elderly, namely the weaker segments of the market.
A parallel type of reform, mainly inspired by financial stability reasons, but also somewhat stimulated by the need to inject greater neutrality, and thus flexibility, into retirement decisions, has been set up in pension systems.[3] In general, the change has been towards a stronger correlation, at the individual level, between contributions and benefits, with a common trend towards substituting Defined Contributions (DC) formulae for the more generous earnings-related ones (Defined Benefits, DB), typically combined with various forms of early retirement provisions (such as the Italian "seniority pensions").
Somewhat disappointingly, though, these reforms have not (yet?) delivered the promised results: flexibility in the labour market has often resulted, particularly for the young, in job instability and lower wages. Moreover, pension reforms have restored (or will restore in the long run) financial stability, but at the likely price of sacrificing future viability. With both reforms, a significant transfer of responsibility has occurred from the state, which has become less protective, to the individuals, who are increasingly burdened with new difficult decisions (e.g. with respect to participation in pension plans, portfolio allocation of pension wealth, receipt of lump sums instead of annuities, etc.). The process, moreover, has not been supported either by an adequate preparation for the new financial choices workers must make concerning their pension strategies, or by cultural changes in attitudes to risk.
Indeed, it is easy to argue that more often than not flexibility has resulted, particularly for the young, in a state of precarious-

ness: in labour markets low wages are generally accompanied by discontinuous, sometimes marginal, employment relationships, while the financial sustainability of pension systems risks being achieved at the price of endangering future pension adequacy. These failures could be the result of inefficiency in management and redistribution processes at national level, with an excessive burden on younger generations. In some countries at least, a further reason could be the slow implementation of reforms, a result of either strong social resistance and/or scarce political courage. Indeed, while the introduction of flexible contracts has been swift, the phasing out of protective mechanisms for older cohorts has been slow, a situation that has created significant generational imbalances and risks undermining the credibility of reforms.

A deeper underlying cause that has influenced the effectiveness of reforms, however, can certainly be found in the comparatively low economic growth which has characterised Europe in the last ten to fifteen years, with regards both to other regions in the world and to previous decades, and which has been exacerbated by the impact on the real economy of the financial crisis which started in 2007. In a growth environment, flexibility does not deteriorate precariousness, and contributory pensions (which typically depend on the rate of growth of the wage bill) do not run the risk of becoming inadequate. Growth, however, is not like “manna from heaven”; in more technical terms, it is not an “exogenous factor”. It is the ultimate objective of economic policy and an essential ingredient for labour market performance and for the sustainability of the welfare system.

A no-growth or sluggish-growth environment is the breeding ground for various types of vicious circles. I will mention just two of them, which have a profound impact on people’s lives. The recent tendency of younger generations to increase their dependence upon the older ones, somehow reversing the traditional flows, possibly by relying on within-the-family solidar-

ity, not only places a burden on an often limited family budget, but also ends up in reducing young people's mobility and undermining their determination to find a job and to create new families. In other words, for individuals/groups at risk precariousness tends to persist and to become a permanent feature of their life cycles.
A different but related concern lies in what can still be regarded as the supplementary nature of women's work, generally placed in a subordinate position vis-à-vis family needs; this attitude has a tendency to further deteriorate during times of economic downturn.

Extending working life

The increase in the elderly employment rate – largely through the raising of the average retirement age – is possibly the most effective way to prevent old-age poverty and to promote adequate pension systems, without undermining financial sustainability, i.e. without adding to pension deficit and debt. It should thus represent the natural response to population ageing.
On the contrary, until the start of the reform process, pension provisions in (Western) Europe effectively encouraged early retirement through flexible eligibility requirements and pervasive distortions in the pension formulae. This trend was reversed only in the last decade of the 20th century, when demographic and financial pressure forced governments to introduce retrenching reforms.
These reforms aimed to correct the myopic, but widely held, "lump of labour" fallacy (conducive to "work less, work all" policies), and to reduce the "implicit tax" on the continuation of work embedded in the generous earning-based pension formulae, resulting from a further year of work (generally calculated as the reduction in pension wealth, expressed as a fraction of yearly gross earnings). These objectives were essential

in order to overcome trade union opposition to reforms and to strengthen older workers' willingness to work, while granting them a greater choice as to when to retire. Indeed, a recent comparative research edited by Gruber, Milligan and Wise[4] finds «no evidence that inducing older persons to leave the labour force frees up jobs for the young. If anything, the opposite is true; paying for old persons to leave the labour force reduces the employment rate and increases the unemployment rate of youth and of persons in their prime age working years».

An increase in the (average) retirement age can however be achieved either by compulsory measures, i.e. more stringent eligibility requirements, or through the right incentives to work continuation, which also make the continuation of work advantageous for both the worker and the employer.

Flexible retirement is not to be confused with the pre-reform early retirement provisions and requires an age-related incentive structure. Research has shown that workers respond well to financial incentives: if they are implicitly taxed for working after reaching the minimum requirements (their pension wealth is reduced), they leave as soon as possible; if they are rewarded for staying longer in their jobs, they stay, provided other factors, such as health reasons or family considerations, do not prevent them from doing so.

Correcting the bias towards early retirement is perhaps the main rationale behind the stronger correlation that has been established between individual contributions and benefits in calculating pension levels, largely brought about by the passage from earnings-based (or DB) to contribution-based (DC) pension formulae.[5]

In this more neutral scenario, a combination of minimum age requirements and income-eligibility tests is usually established to prevent both short-sighted decisions and future increases in claims on public funds.

Beyond the minimum and generally up to a maximum retirement age, an actuarial mechanism often links pension benefits to life expectancy. Thus the former is directly correlated, for a given capitalized value of contributions, to the retirement age (e.g. in the case of Sweden and post 2030 Italy when the Notional Defined Contribution, NDC, system will be fully implemented). In some cases another "autopilot", in the form of an automatic indexation of the retirement ages to life expectancy, is also included to ensure the financial equilibrium of the system and a more balanced allocation of the demographic risk across generations.

Furthermore, to encourage "gradual retirement" – a feature correlated to flexible retirement – provisions increasingly separate the actual cashing-in of the pension benefit and the effective withdrawal from the labour force. Establishing the incompatibility between pension and earnings (as was normally the case with DB formulae, when retirees were simply forbidden from working, implying a complete taxation of earnings) is indeed hardly consistent with the DC method, given that the benefit is just the actuarial equivalent of the (notional) capital that the worker has accumulated and that he/she is entitled to withdraw, conditional to having reached the minimum requirements (age plus a minimum pension level).

These changes, implemented at different speeds and with different features in individual EU member states, put the correct management of demographic and economic risks at the heart of pension systems. This also reduced the scope for discretionary political intervention, the main responsible for past distortions, unfair redistribution (from poorer to richer workers) and transfer of the burden to future generations.[6]

Education, training and compensation

While a comprehensive array of measures have been introduced on the supply side to induce workers to remain in employment for a longer period of time, less attention has been de-

voted to the demand side, i.e. to the question of how to induce firms to retain their older labour force.
Empirical evidence suggests that age-discrimination practices persist and that firms are doing too little to adapt to the drastic change in the age composition of their workforce that results from population ageing. Direct surveys of firms' attitudes often reveal negative stereotypes of older workers, particularly with respect to their ability to adapt to new technologies and/or organisational models. Empirical evidence also suggests a positive correlation between the educational levels of the elderly and their participation in the labour market, and also a faster health deterioration of individuals with less human capital (skills and knowledge), who retire earlier.
Targeted education and (on or outside the job) training programmes to enhance workers' employability and productivity, together with more flexible working arrangements that could better suit older workers' preferences and allow for a gradual phasing out of their work efforts will thus be very important. The effectiveness of these programmes (such as gradual retirement schemes) depends on how long older workers remain employed, implying a trade off with (costly) early retirement provisions or pre-retirement schemes that simply transfer money to laid-off workers.
Other aspects of the labour market are not less important and will also have to be redesigned. For example, seniority-based earning schemes (another characteristic of Mediterranean economies) may contribute to a mismatch between compensation and workers' productivity, and have far-reaching undesirable consequences.
More generally, labour-market rigidities tend to create suboptimal age-based coalitions of interests. In flexible labour markets, wages track productivity: they typically increase up to middle age and then fall as workers approach retirement. Firms have no particular incentive to prefer younger workers

to older workers, and employees tend to work longer, because labour demand is more stable over time; there is thus no need for unemployment rates to differ across age groups.[7]

Conversely, in more rigid labour markets, wages and productivity tend to be less correlated to workers' age and seniority commands a premium *per se*. Older workers tend to cost too much and rather generous early retirement rules end up in representing an escape route for both employers and older workers. This strategy accommodates the preferences of both parties: the former, who prefer to hire young people, and the latter, who enjoy leisure more than work. These arrangements however can have detrimental consequences: apart from redistribution of resources from future to current generations (because benefits paid to early retirees are not actuarially corrected for the younger exit age) and from high to low-skilled workers, they favour under-investment in training and education, as people only invest when expected benefits make up for a loss in earnings.

More flexible job markets are more consistent with higher employment rates among the elderly, but of course they need to be complemented by an appropriate safety net, in order to fill the income gaps for the evermore-frequent temporary lay-offs and spells of unemployment which characterise a more mobile job market.

Women: less dependence on their status as wives/widows

In many countries, the economic well-being of elderly women still depends on their status as spouses. Although the immediate cause of this situation can be traced back to women's disadvantaged position in the labour market – typically characterised, by comparison to men, by lower participation rates, shorter working lives and lower compensation levels – a deeper motivation lies in the roles traditionally attributed to men and women in society, with the latter still regarded as the main pro-

viders of unpaid caring activities. While more apparent in developing and emerging countries, significant gender differences still persist in rich countries, notwithstanding cultural evolution and a bulk of legislative actions in favour of greater equality of opportunities.[8]
Two different, potentially conflicting, concerns arise here: on the one hand, recognition that these activities should be more uniformly distributed between men and women and that the right incentives to this purpose should be put into place is a question of equality of opportunity. On the other hand, the social relevance of these activities, irrespective to whether they are carried out by men or by women, is considered in some countries a sufficient motivation for including them – possibly through contribution credits – in the computation of pension rights.
It is open to debate whether pension systems, in addition to their function as procedures enabling resource reallocation from the active to the retirement period of individuals' lives, should also aim at redistributing income within cohorts, from high to low income citizens, from men to women, or whether – for efficiency reasons – this task should be performed by the (progressive) tax system. Certainly, in public systems some infra-cohort redistribution is not only inevitable, but also socially desirable.
Since their creation, pension systems adopted, unsurprisingly, a view of the family centred on the man's role as breadwinner and on the woman's role as homemaker. The focus on the family had the advantage of providing insurance to its members that did not have sources of income (or only very limited resources), thus functioning exactly as poverty prevention mechanisms. At the core of family-based insurance there are derived rights, specifically survivors' benefits and benefits from pension sharing, awarded to women on the ground that they tend to live longer than their spouses and would not otherwise have sufficient resources to finance their consumption needs.

By reducing incentives for women to work, this paternalistic approach, even though quite effective in alleviating poverty among elderly women, had the major drawback of reinforcing, or at least of freezing, traditional gender roles within the family. The pension reforms of the last decades, directed at pursuing financial stability, also tried to adjust to a situation where men and women have begun to share risks and tasks more equally. The strengthening of financial sustainability has called for greater actuarial fairness in the pension formulae and this, in turn, has meant placing a greater emphasis on the insurance role of pension systems and on the individual, rather than the family, as a unit of reference. The Notional Defined Contribution system, based on individual pension accounts, so that each retiree receives the actuarial equivalent of the contributions he/she paid during working life, is the archetype of such transformations. Of course, poor working lives translate into poor or inadequate pension levels, and these have to be dealt with outside the system, typically through subsidies financed out of general taxation.

The emphasis on the individual as a single entity stresses the role of women in the labour market more than their status as wives or widows. It is clear, however, that – particularly in Mediterranean countries – this reform has been enforced somewhat ahead of the necessary changes in the labour market and in society's cultural attitudes that should have supported it. Indeed, while ultimately reducing women's dependence on their spouse, the departure from a form of insurance that relied on the family to one centred on the individual exposes women to a greater risk. Transitional issues, moreover, are very important in this context. While not all women of the younger generations will be able to build careers supporting an adequate pension level, also taking into account the family and social tasks they will still be expected to perform, older cohorts, if not adequately provided for, are likely to suffer the most from reforms.

Employment-related risks can be, and actually are, mitigated in DC systems, by provisions that grant women pension rights for periods in which they are out of the labour force, including leave for maternity, child care or care of other family members. Such measures include the crediting of notional contributions that close the gaps due to caring responsibilities in the individual's social security records. These credits usually help towards the achievement of higher benefit levels and/or the completion of a minimum contributory period needed for pension eligibility.

As for the longevity risk, in systems oriented to actuarial fairness and neutrality, women's higher longevity implies reduced benefits for any given retirement age. Typically, however, mortality rates are calculated across genders, and correspond to an implicit subsidy from men to women and from single persons to couples. The provision of this additional benefit bestowed upon the spouse with the longest life expectancy can still be considered a sort of *ex post* compensation for women. Moreover, changes in the pension systems and in the gender division of labour have been accompanied by parallel changes in the family as an institution: the model of the dependent wife has been challenged by higher divorce rates, declining marriages and an increase in the number of single-parent families; new models of relationship, such as civil unions and simple cohabitation, are being adopted by growing segments of the population. Regulations concerning survivors' benefits have, on the contrary, only made slight adjustments to the trend towards non-traditional families. In many countries, this is still an open issue, if only for budgetary reasons.

Adequacy of provisions and financial literacy

Having introduced reforms that, in order to restore financial sustainability and reduce distortions, have cut public benefits and made retirement income more uncertain and more "selfmade", policy makers need to focus on ensuring that other income sources will provide adequate supplements and that households will not be left facing excessive risks.

Indeed, the "multi-pillars approach" is being implemented in most European countries not only to compensate for the reduced replacement rates offered by the public pillar, but also as a better risk-sharing device. Thus public pensions (and other benefits for the elderly, such as minimum pensions and survivor benefits) are subject to different risks than those relevant for occupational pensions and voluntary household savings.

To be effective, and thus provide satisfactory old-age income security in a less "paternalistic" environment, this diversification requires that workers participate in pension plans and, possibly, also engage in personal savings. Partly in recognition of their social importance, private pensions are not allowed to operate on a strictly *laissez faire* basis, but are typically subject to various measures of public regulation and supervision, and are also sometimes partially backed by public guarantees.

Governments should also aim at increasing and improving the ability of individuals to make sensible choices, concerning both retirement age and personal savings accumulation/investment. This can be done not only by fostering individual awareness, but also by reducing the distortions embedded in pension formulae, which lead people to myopic or unsuitable decisions, and/or by choosing an enhanced choice structure – for example, through an appropriate design of pension default options.

In the context of pension reforms and increasing financial complexity, large sections of the adult population do not appear to be sufficiently prepared to make sound financial decisions concerning their retirement savings. Both ignorance about pensions and financial illiteracy are widespread.[9] Several studies on the US indicate that workers are woefully uninformed about the characteristics of their pension plans (for example, Gustman and Steinmeier).[10] When most pensions were DB pensions and workers had to make few or no decisions about pension contributions, lack of knowledge was perhaps not too much of an issue. However, more recent data show that workers continue to be uninformed about the rules and the benefits associated with their pensions, even though the shift from DB to DC pensions has given them more responsibility. European findings are no less worrying, suggesting that a large proportion of the workforce cannot give a realistic estimate of their future pension income.

This evolution prompts important questions: are individuals prepared/preparing for their retirement? How can they be helped to make appropriate decisions concerning both their retirement age and the accumulation/investment of personal savings?

Empirical evidence points to widespread "inadequate" behaviour, with "anomalies" such as overconfidence, lack of self-control, preference for the status quo, contradictory preferences as to the dynamic allocation of resources, and so on. Financial illiteracy is also becoming an extremely relevant issue: people seem to lack basic notions of saving and of risk management, and this problem seems to be particularly acute among specific demographic groups (women, low-educated), who risk paying dearly for financial "mistakes". Higher financial literacy is associated to better choices, like more planning and saving for retirement; a better portfolio diversification (often out of the worker's employing company's shares); greater prudence towards going into debt; more attention to fees rather than to the brand of financial products. Financial education programmes should thus be implemented to improve the trade-off between individual freedom and responsibility, on the one hand, and state (or company) paternalism, on the other.

A special risk that needs to be tackled is long-term care, for which demand will inevitably increase with ageing populations. It is not clear what the appropriate model for financing and organizing the supply of care will be, and what the respective role of families and public provisions should be.

Finally, a further aspect of pension reform in the EU is a tension between the role of individual countries and EU-wide policies and institutions. Although the need to increase the role played by funded pensions is driven by EU-wide economic and demographic forces, as well as by intra-European migration, individual countries have had the autonomy to pursue reforms based on specific national circumstances, without direct EU influence. At the same time, maintaining and/or creating privately funded provisions (in the forms of both collective and individual pension funds) is an important element in a broader EU policy agenda of fostering capital and labour mobility.

Growth as the path towards a "good flexibility" in both the working and retirement periods of the life cycle

Europe is facing the challenge of moving from flexibility conceived as a cost to flexibility seen as an opportunity. Flexibility allows for the mitigation of the contrast between the generality of rules and the variety of individual situations, experiences and preferences; it also allows for greater personal responsibility. This "good" flexibility should be encouraged both during working life and at the transition towards retirement.

Flexibility during working life implies easier access to part-time work; education and training opportunities that might help improve or maintain workers' human capital; relatively low mobility costs; very short out of work periods. Countries like the Netherlands, Denmark and Sweden are not far from these good practices and offer useful benchmarks. Working patterns provide for even relatively long periods of part-time activity (compensated by part-time salary), for workers normally in full-time employment who face specific family needs, often involving care; workers mobility is facilitated; education and on the job training are encouraged; discriminatory practices are effectively discouraged.

With respect to retirement, "good" flexibility means granting workers a wider choice of retirement timing and patterns, as well as giving them greater responsibility in the build-up and use of retirement savings, provided the pension benefit is actuarially adjusted to their choice. It also means abandoning the somewhat "totalitarian" approach implying a sudden shift from full-time employment to full-time retirement. Flexibility should indeed be extended to accommodate gradual retirement. This was obviously more difficult to achieve in the traditional industrial system based on "assembly line" productions, where human resources were just a complement to the machine. It should, and easily could, become an achievable goal in post industrial/ service economies. Flexible retirement age and part retirement are perceived as two separate instruments, while they should be more integrated and designed in order to encourage (or at least not to discourage) a longer stay in the labour force. Finally, to enhance the positive aspects of flexible retirement, education to pension savings, in its various components, is fundamental.
Of course, when retirement flexibility is based – as it should be – upon actuarial fairness, equity problems may arise, as the actuarial principle cannot in itself adequately cope with disadvantaged working conditions and histories (i.e. shorter life expectancy connected to certain types of jobs; shorter and more discontinuous women careers). These will continue to require public support through social protection schemes, financed by progressive taxation.
The path towards this "good flexibility" is not necessarily an easy one, especially if workers are led to consider flexibility essentially as a worsening of their status and a loss of the safety nets upon which they (or their parents) have implicitly relied. This could imply resistance to change and even severe social conflicts. It is however the only viable road: in order to break the dead-end of a stagnant society, Europe needs first and foremost to focus on more growth-consistent labour market, human capital and a new type of welfare system.

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