



# Europe's Economic Crisis

## Transatlantic Perspectives



ROBERT M. SOLOW AND DANIEL S. HAMILTON, EDITORS



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*Transatlantic Perspectives*

Edited by  
Robert M. Solow and Daniel S. Hamilton

Center for Transatlantic Relations  
Paul H. Nitze School of Advanced International Studies  
Johns Hopkins University

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**Center for Transatlantic Relations**

The Paul H. Nitze School of Advanced International Studies

The Johns Hopkins University

1717 Massachusetts Ave., NW, Suite 525

Washington, DC 20036

Tel: (202) 663-5880

Fax (202) 663-5879

Email: [transatlantic@jhu.edu](mailto:transatlantic@jhu.edu)

<http://transatlantic.sais-jhu.edu>

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## Preface and Acknowledgements

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Our authors express their own views, and do not necessarily reflect views of any institution or government.

*Robert M. Solow*

*Daniel S. Hamilton*



# Introduction

*Robert M. Solow and Daniel S. Hamilton*

When the euro was introduced, it was heralded as the symbol of a unified Europe. Not enough consideration was given at the time, however, to how member economies could adjust in response to disparate performance, or how debt crises could be avoided. Today, amidst a broader North Atlantic financial and economic crisis, many European economies face daunting challenges of debts and deficits. Governments have fallen, and the eurozone is in turmoil. Such strains and stresses could challenge Europe's very construction.

How should eurozone countries tackle their current crisis? How did it come about, and how may it be resolved? What does it mean for Europe's historic experiment in political and economic integration? Will the eurozone crisis be remembered as the moment when the EU finally cracked? Or as the spur to a more integrated and competitive Union?

We asked the authors in this volume to address these questions. Their varying perspectives complement each other and offer the reader a range of views on the continuing crisis. Martin Neil Baily, Natalie McGarry, Xavier Ragot and Hans-Helmut Kotz examine the roots of the crisis and its links to the U.S. financial crisis, evaluate European responses, and suggest solutions. David Calleo casts the eurozone crisis in the context of enduring European debates about the nature of their experiment in integration, including the role of the dollar and the rise of China. John Gabriel Goddard and Daniel S. Hamilton each look at what the economic crisis means for Europe's economic prospects in an increasingly competitive and connected world.

Given the tumultuous pace of developments, it may seem premature to present a book of this type. Yet there is considerable interest in understanding the roots of Europe's economic crisis, how the crisis may evolve, how it relates to economic difficulties in the United

States, and what it means for Europe's role in the world. We thus offer these perspectives as guide and orientation in turbulent times.

Martin Neil Baily and Natalie McGarry detail EU countries' discretionary and automatic fiscal response to the crisis as well as the accompanying monetary policy; present what they call the expansionary fiscal contraction hypothesis, and contrast it with standard approaches; and discuss the difficulties some EU countries will have repaying the debt they accumulated before and during the crisis due to their uncompetitive labor unit costs. They argue that fiscal austerity does not solve the problem of a deep recession, and that Keynesianism remains highly relevant.

Baily, McGarry and Kotz discuss the role of Europe's automatic stabilizers and why Europe's response to the crisis differed from that of the United States. While European and U.S. monetary policy responses to the crisis were similar, fiscal policies diverged significantly, largely due to structural differences between the U.S. and EU countries. The EU did not have to rely as heavily as the U.S. on stimulus packages during the recession, since European economies have more countercyclical policies built into their budgetary structures than the U.S. does. EU countries relied on automatic and discretionary fiscal policy in nearly equal proportion, while the U.S. was forced to pass a much larger temporary stimulus package.

There is considerable commentary on how to improve eurozone governance. Hans-Helmut Kotz is skeptical of proposals to make the strictures of the Stability and Growth Pact more automatic and rules-based. He argues that once the crisis is contained the euro area has to think of building a macro and financial framework that acknowledges spillovers and takes account of the aggregate impact of national fiscal policies, of financial market integration as well as regional current account imbalances. He suggests that the European Commission's Excessive Deficit Procedure is a start in that direction. He contends that European financial regulation and its implementation also have to become more effective, and that the eurozone needs a fiscal insurance mechanism in addition to responsive labor markets and enhanced labor mobility.

The crisis has revealed the key weakness at the heart of the eurozone, namely the uneasy coexistence of a unified monetary policy with

disparate fiscal policies. Many have questioned this split system and have suggested that either a European fiscal union is needed to complement the monetary union, or that the common currency itself should be dissolved. The status quo seems untenable, and yet either alternative course is fraught with economic and political difficulties. Kotz and Xavier Ragot argue that Europe must agree on fiscal governance. Eurozone leaders have in fact set in motion a process that could lead to a fiscal union as a next historic step in European integration. It is unclear whether European voters and taxpayers will go along. Yet Kotz goes even further, arguing that effective macro policies must go hand-in-glove with supply-side policy—a two-handed approach that not only deals more effectively with labor market conditions but extends to appropriate policies in infrastructure, education, innovation, and European networks.

Ragot, David Calleo and Daniel Hamilton also underscore the central point that Europe's crisis is as much political as economic. As Calleo notes, it is the failure to control budgets and supervise banks—two fundamental tasks of government. In addition, there is growing concern that EU institutions are too weak to provide the leadership necessary to navigate the shoals of today's financial crisis. Calleo places the current economic and monetary crisis in the context of decades-old debates between rival 'federal' and 'confederal' visions for Europe, or what he calls Europe's 'constitutional dilemma.' He argues that European efforts to reconcile those differing visions has resulted in a hybrid construction, part supranational and part confederal, the inner contradictions of which are facing renewed strains due to the eurozone crisis, the gyrations of the dollar, and the rise of emerging powers, particularly China.

As a result, Europe is paying a high economic price for its inability to decide politically what the European experiment means today, and to make difficult decisions that would either take the EU along a path of deeper integration, with all that means for the sovereignty of individual countries, or down a road of far looser arrangements, which carry the risk of fragmentation as well as eroding competitiveness for a substantial number of European economies. Voters and markets are uncertain whether the EU can evolve institutions and habits strong enough to constrain states, firms and markets from the runaway accumulation of ailments characteristic of recent years.

Hamilton and John Gabriel Goddard put the current economic crisis in the context of Europe's broader economic challenges. Hamilton offers a summary analysis of the EU's economic strengths and weaknesses, while keeping Europe's tremendous diversity in mind. He argues that Europe is stronger in more areas than its critics acknowledge, but also weaker in more areas than its proponents are prepared to admit. He argues that European leaders cannot afford to focus only on the economic crisis itself, no matter how absorbing it has become; they must simultaneously lay the foundations for continued European competitiveness in an increasingly interconnected world. He urges that priority attention be given to boosting European productivity; capitalizing on European strengths in services and energy economics; and completing the Single Market. He discusses the rather severe challenges Europe faces in terms of demography. Europe has become a magnet for the unskilled, and has trouble attracting and retaining high-skilled migrants. He argues that the EU needs to develop a pan-European talent strategy that attracts skilled foreign labor; ensures the free movement of people among member states; facilitates better links between business and education; improves access to and harmonizes key features of the labor market; promotes higher education and training in key enabling technologies; and boosts overall skills training and re-skilling across the Union.

Both Hamilton and Goddard argue that the EU's Europe 2020 Strategy is taking Europe in the right direction in terms of innovation policies, but that it needs to be developed with far more specific strategies to ensure effective implementation. Such strategies, they argue, must be based on firm expenditure commitments by individual countries that can turn the Strategy's goals into reality. They must reinforce links between overall R&D targets and national and European innovation policies; draw on best practice in basic research, and dispel the lingering aversion to risk-taking and entrepreneurship, which could boost much-needed private sector R&D.

For fifty years, the European project was about internal reconciliation and reconstruction following the collapse of an earlier era of globalization into war and depression. It was a grand experiment in harnessing closer economic integration to build prosperity and peace. Over the past twenty years it has extended those benefits to more of

the European continent than ever thought possible. Today, Europe's deep economic crisis is again raising fundamental questions about the nature and future of its grand experiment. We believe this set of essays add light to those debates.



# *Chapter One*

## **European Macroeconomic Policy**

*Martin Neil Baily and Natalie McGarry*

The fact that the European Union is not only an international political organization but also a monetary union poses a unique challenge to addressing the financial crisis, the subsequent recession, and planning a recovery. Every eurozone country shares a common currency, and so their monetary policies are all the same, as set by the European Central Bank (ECB). The ECB responded quickly to the crisis working with the U.S. Federal Reserve and the Bank of England to orchestrate a coordinated interest rate cut in October 2008. On the fiscal side, each country can set its own policy and nearly every EU country engaged in stimulus, although the discretionary fiscal packages of the EU were significantly smaller than the U.S. stimulus, due in part to the larger automatic stabilizers built into European economies. While both the monetary and fiscal responses were necessary to stem the crisis, the accumulation of debt as a result of declines in tax revenues and the increase in spending has made the road to recovery less clear. Most EU countries increased their debt burdens during the crisis, and now most members are struggling to balance the two goals of promoting growth and paying off debt. Due to the European debt crisis, many have questioned the split system and have suggested that either a European fiscal union is needed to complement the monetary union, or that the common currency itself should be dissolved. It has become apparent that although unified monetary policy during the crash eased the shock to Europe, the status quo is untenable in times of economic stress

The traditional theory of recovery in an economy with weak demand says that countries in a recession should lower taxes and/or increase government spending as a way to increase growth. Only after a recovery is underway should governments curb fiscal and monetary stimulus to keep the economy from overheating. A competing theory,

known as the “expansionary fiscal contraction hypothesis,” proposes that when high debt burdens put government solvency into question, fiscal consolidation can increase confidence in the economy and consequently increase investment and growth. In the last year, many European countries have begun to engage in fiscal consolidation in the hopes that restoring confidence will simultaneously decrease their debt burdens and increase growth more than any direct offsetting impact on demand of higher taxes or spending cuts.

Even though the ECB acted quickly to offset the crisis, the existence of a common currency necessitates a one-size-fits-all monetary policy for the eurozone, despite the substantial variations among member countries in their levels of economic slack. And of course their exchange rates are fixed, despite major differences in their competitiveness within and outside the EU. The lack of competitiveness of some of the countries is of added importance if they have issued large amounts of sovereign debt that is held outside the country. The only ways to service foreign debt are either to keep borrowing or to increase net exports and transfer real resources overseas. In the wake of the crisis, it is difficult or impossible for the weaker countries to keep borrowing from private markets. And unfortunately, most of the countries trying to service debt are also the least competitive in the EU. This uneven burden has stressed the single currency system and prompted many to question whether the system can survive, or should. The combination of fiscal contraction and monetary restraints has set the stage for an uneven, slow, and for some, uncertain and painful road to recovery.

This chapter will (1) detail the EU countries’ discretionary and automatic fiscal response to the crisis as well as the accompanying monetary policy; (2) present the standard view and the expansionary fiscal contraction hypothesis debate; and (3) discuss the difficulties some EU countries will have repaying the debt they accumulated before and during the crisis due to their uncompetitive labor unit costs.

## **The Macroeconomic Response to the Crisis**

The difference between the European and U.S. responses to the crisis and global recession did not lie in the remedies used, but in what

proportion they were prescribed. Both the EU and the U.S. used a combination of monetary policy and discretionary and automatic fiscal policy. The ECB and the Federal Reserve took both conventional and extraordinary action in the face of the crisis in order to increase the availability of credit. They also cut interest rates to ease the increasing pressure on the banking and financial systems. While European and U.S. monetary policy were similar, the fiscal policies used diverged significantly, largely due to structural differences between EU countries and the U.S. EU countries have more countercyclical policies built into their budgetary structures than the U.S. does, meaning that the EU did not have to rely as heavily on stimulus packages during the recession. EU countries relied on automatic and discretionary fiscal policy in nearly equal proportion, while the U.S. was forced to pass a much larger temporary stimulus package.<sup>1</sup> In sum, a combination of swift monetary and fiscal policy helped EU countries to avoid an even worse downturn than the one that actually has occurred.

The ECB's response to the financial crisis began as early as August 9, 2007, when growing uncertainty and a lack of confidence pervaded interbank markets and caused a gridlock in the payment system.<sup>2</sup> In response, the ECB lent a total of €95 billion<sup>3</sup> to banks to aid in refinancing. The ECB used other extraordinary credit support policies to address financial turmoil, including: extending the maximum maturity on refinancing from three months to one year, expanding the list of acceptable collateral assets, providing liquidity in U.S. dollars, and making direct purchases in the covered bond market.<sup>4</sup> But after the collapse of Lehman Brothers on September 15, 2008, it became clear that the financial crisis would drag the real economy into a recession. On October 8, 2008, in an unprecedented move, the ECB reduced eurozone interest rates by 50 basis points in concert with the Bank of England, the Bank of Canada, the Swiss National Bank, the Sveriges

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<sup>1</sup> The decline in state and local spending partly offset the federal stimulus package, however.

<sup>2</sup> ECB, "The ECB's Response to the Financial Crisis," *Monthly Bulletin*, October 2010.

<sup>3</sup> Ibid.

<sup>4</sup> ECB, "The ECB's Monetary Policy Stance During the Financial Crisis," *Monthly Bulletin*, January 2010.

Riksbank, and the Federal Reserve. All told, the crisis forced the ECB to cut interest rates by 325 basis points to 1.00% between October 2008 and May 2009.<sup>5</sup> The ECB's swift and extraordinary actions helped to lessen the blow of the financial crisis and the downturn of the real economy, but were not enough to fully address the severity of the crash.

In a crisis, both automatic stabilizers and discretionary policies are intended to cushion a negative shock to the economy. Automatic stabilizers are a facet of a country's budgetary structure, as opposed to discretionary stimulus policies, which are temporary measures enacted during recessionary periods and intended to expire once normal economic activity resumes. EU countries have larger social safety nets, stricter labor laws, and more progressive tax systems than the U.S., which all help to mitigate the effects of a recession. Unemployment benefits are a traditional example of automatic stabilizers since benefit claims necessarily increase during periods of high unemployment and depressed economic times. EU unemployment benefits are generous; in addition, most EU countries have stringent labor laws that restrict firing. Both structural policies help to stabilize gross income, and therefore consumption. In Germany, for example, severance notice periods are lengthy, firing employees is expensive, and access to government subsidies is strictly controlled, all of which incentivize scaling back worker hours instead of firing. To counteract the income effects of decreased work hours, Germany has implemented what is known as a "working time corridors" policy. Working corridors allow employers to create overtime accounts for every employee, so companies can pay the standard wage for overtime into the employee accounts and pay them out during times of financial stress. German companies are therefore able to save up labor costs during periods of high output and spend them when they want to decrease worker hours. This policy allows companies to either delay or avoid layoffs in recessions, easing the burden on both the private sector and government expenditures.<sup>6</sup> These types of countercyclical policies benefit from their institutional-ity; there is no need for political consensus or action during periods of

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<sup>5</sup> ECB, "The ECB's Response to the Financial Crisis," *Monthly Bulletin*, October 2010.

<sup>6</sup> Michael Burda and Jennifer Hunt, "What Explains the German Labor Market Miracle in the Great Recession?" BPEA, Fall 2010.

economic stress and no implementation lag, unlike discretionary policy that must be passed, organized, and implemented during a crisis.

Using microsimulation techniques, Dolls et al.<sup>7</sup> were able to estimate that automatic stabilizers in the eurozone are able to absorb 49% of a 5% decline in household income and a 5% unemployment shock, whereas the U.S. is only able to absorb 34%. This disparity in automatic stabilization effects has significant implications for the amount of discretionary fiscal policy necessary in the EU versus the U.S. during downturns. The Organization for Economic Cooperation and Development's (OECD) Economic Outlook Interim Report from March 2009 estimated the unweighted average of OECD countries' discretionary stimulus packages at 2.5% of GDP between 2008–2010, with the U.S. stimulus of 5.5% of GDP being the largest. Figure 1 shows that European countries in the OECD benefited from larger positive automatic stabilization effects and implemented smaller stimulus packages than the U.S. did. In addition, the ECB estimated that eurozone fiscal stimulus amounted to 4.9% of GDP in 2008–2009, with 2.4% attributed to automatic stabilizers.<sup>8</sup>

Nevertheless, not all countries were able to implement stimulus measures—some relied solely on automatic stabilizers. Italy, Greece, and Ireland all suffered from budgetary constraints and did not implement fiscal stimuli; Ireland actually passed contractionary measures.

During the crisis and accompanying recession, European countries have benefited from swift monetary policy and automatic stabilizers, supported by some discretionary fiscal stimulus.

## The Expansionary Fiscal Contraction Hypothesis

Once the crisis free-fall stopped and the recovery was underway, ballooning deficits became a cause for concern. Ireland saw the largest increase in debt as a percentage of GDP, a 61 percentage point jump

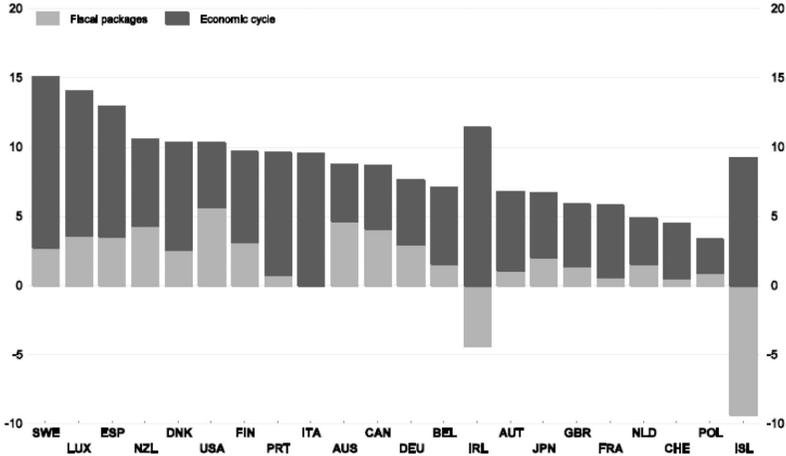
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<sup>7</sup> M. Dolls, C. Fuest, and A. Peichl (2010b), "Automatic Stabilizers and Economic Crisis: US vs. Europe", *NBER Working Paper 16275*, August 2010.

<sup>8</sup> Afonso, Antonio et al., "Euro Area Fiscal Policies: Response to the Economic Crisis", Euro Area Fiscal Policies and the Crisis, ECB Occasional Paper Series No 109, April 2010.

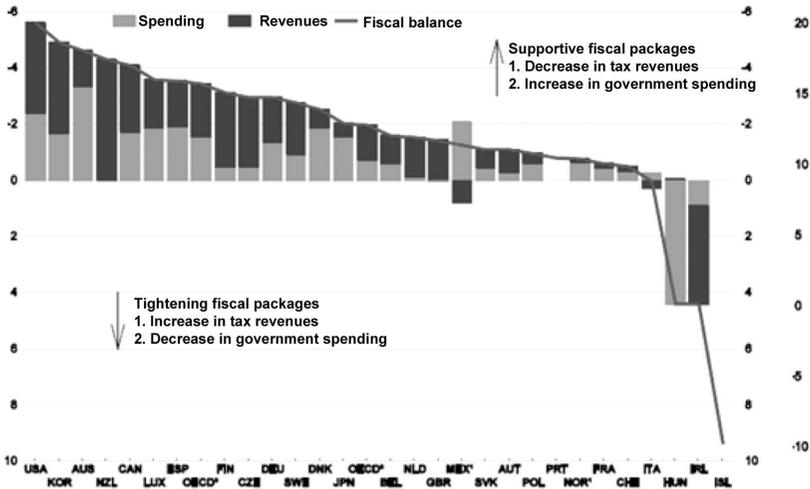
**Figure 1A. Automatic and Discretionary Fiscal Impulse in Response to the Crisis**

Impacts on fiscal deficits accumulated over the period 2008–2010 as a percentage of 2008 GDP.



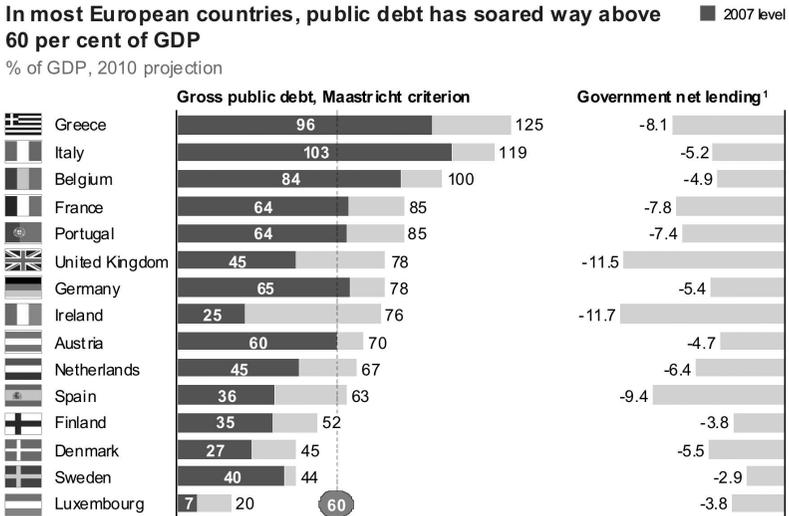
**Figure 1B. Size and Composition of Fiscal Packages**

Cumulative impact of fiscal packages over the period 2008–2010 on fiscal balances as a percentage of GDP



Notes: Only 2008–2009 data available for Mexico and Norway. Simple average of above countries except Greece, Iceland, Mexico, Norway, Portugal, and Turkey. Weighted average of above countries except Greece, Iceland, Mexico, Norway, Portugal, and Turkey.

Source: OECD Economic Outlook, Interim Report, March 2009.

**Figure 2. Gross Public Debt and Government Lending**

<sup>1</sup>Differs from the Maastricht definition in that it does not include streams of payments and receipts from swap agreements and forward rate agreements.

Source: OECD Economic Outlook Database 2010.

from 25% to 76%, although Greece and Italy had the largest absolute levels of debt of 125% and 119% respectively.<sup>9</sup> Although these are three stand-out cases, they are by no means isolated; most European countries' public debt has soared way above 60% of GDP.

While the debt was necessary to enact stimulus measures, once the recession was deemed to have ended, governments were forced to confront the challenge of balancing growth and debt reduction simultaneously. This dilemma led to an international and academic debate over traditional Keynesian theory and the expansionary fiscal contraction hypothesis. Ultimately, a majority of EU countries chose to implement policies in line with the expansionary–contraction hypothesis.

It is easy to see why the expansionary–contraction hypothesis appeals to the EU. It asserts that a country can solve two problems—slow growth and high debt—with one policy: fiscal contraction. On

<sup>9</sup> OECD *Economic Outlook, Interim Report*, March 2009.

the other hand, Keynesian theory argues that fiscal stimulus increases aggregate demand, and requires that governments run large deficits until the economy returns to normal conditions. In contrast, the expansionary–contraction hypothesis relies on the private sector, rather than the government, to kick-start the economy. The hypothesis states that during times of fiscal crisis when government solvency is in question, decreasing the debt burden will ease fears and uncertainty in the private sector, which will increase confidence and consequently investment. Therefore, consolidation policies are meant to decrease the debt directly, while their effect on the private sector is intended to boost growth.

Initially, the United States took a more Keynesian approach to recovery. President Barack Obama even wrote a letter warning against a premature withdrawal from stimulus at the June 2010 G20 meeting in Canada. Obama's letter was met with a negative response from many Europeans, including the then-President of the ECB Jean-Claude Trichet who said,

*As regards the economy, the idea that austerity measures could trigger stagnation is incorrect. I firmly believe that in the current circumstances, confidence-inspiring policies will foster and not hamper economic recovery, because confidence is the key factor today.<sup>10</sup>*

But in 2011, a series of budget fights, debate over raising the debt ceiling, and congressional gridlock have made it all but impossible to maintain current economic stimulus (i.e. unemployment benefits and the payroll tax cut) and greatly increased the likelihood of drastic spending cuts. Most European nations have followed Trichet's prescription for growth and have or plan to implement fiscal consolidation. In 2009, Ireland was one of the first countries to start consolidating with deficit reductions equivalent to 5% of GDP, and in 2010 added 2.6% in consolidation measures. By 2010, Greece had followed suit with a consolidation of 7.8% of GDP, along with Portugal at 2.3%, Spain at 2.7%, and the UK at 0.6% in 2010–2011. In 2011,

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<sup>10</sup> Hughes, Krista, "ECB's Trichet: austerity plans don't risk stagnation," *Reuters*, June 2010. <http://in.reuters.com/article/2010/06/24/idINIndia-49598120100624>.

France, Germany, Greece, Ireland, Italy, Portugal, Spain, and the UK will all be consolidating in an attempt to comply with the Stability and Growth Program by 2014, which mandates that all EU countries maintain a budget deficit of no more than 3% of GDP.<sup>11</sup> Greece passed an austerity package in June 2011 and Italy took similar action in September with legislation that would cut their deficit by \$70 billion over three years. Although countries that violate the Program are subject to pressure from other EU countries, and theoretically face sanctions if they refuse to comply, historically, the penalty of breaching the agreement has not been applied universally. Ironically, Germany was the main advocate of the rule, but in 2003 when both France and Germany were running large deficits, neither complied with the EU Commission's recommendations nor ceded to its threats, which were ultimately abandoned. In contrast, in 2002 Portugal was forced to reign in its budget under the threat of sanctions.

Alberto Alesina is one of the most prominent supporters of the expansionary–contraction hypothesis and has made several regression analyses of the effects of fiscal contraction. Alesina and Ardagna (1998) found that

*...regardless of the initial level of debt, a large fiscal adjustment that is expenditure based and is accompanied by wage moderation and devaluation is expansionary. However, no large tax-based fiscal adjustment can be expansionary even if it is accompanied by a devaluation.*<sup>12</sup>

The same study found two cases of fiscal consolidation in Ireland and Australia to be “unambiguously expansionary.” The authors also noted that exchange rate devaluations helped to sustain growth, which could make fiscal consolidation in the EU monetary union more contractionary and wage moderation mechanisms even more important.

The International Monetary Fund (IMF) did a study on the expansionary–contraction hypothesis in October 2010. It found flaws in Alesina's case selection and got very different results using an alterna-

<sup>11</sup> OECD, *Restoring Public Finances*, 2011.

<sup>12</sup> Alesina, Alberto et al, “Tales of Fiscal Adjustment,” *Economic Policy*, Vol. 13, No. 27 (October 1998), pp. 487-545, here p. 516.

tive selection method. Alesina (1998) used swings in the cyclically adjusted primary budget balance (CAPB) to identify periods of fiscal consolidation. The IMF noted two major biases present in this selection method: (1) measurement errors in the CAPB are likely correlated with economic developments, that is, they are more likely to include asset price booms during times of economic expansion and exclude asset price busts, and (2) the CAPB tends to omit cases of consolidation that are followed by adverse shocks and addressed with discretionary stimulus, since there is little to no rise in the CAPB. In sum, the CAPB approach

*...tends to select periods associated with favorable outcomes but during which no austerity measures were taken. It also tends to omit cases of fiscal austerity associated with unfavorable outcomes.*<sup>13</sup>

In contrast to the Alesina studies, the IMF attempted to identify cases using policy *actions* “motivated by deficit reduction” instead of budget *outcomes* that show successful budget deficit reductions not necessarily related to austerity measures. The IMF used a selection method similar to the “narrative approach” proposed by Romer and Romer.<sup>14</sup>

The study found that there are five major macroeconomic effects of fiscal consolidation. (1) Consolidation has a contractionary effect on output and raises the unemployment rate. (2) Interest rate reductions usually support output during consolidation. (3) Currency depreciation typically diminishes the contractionary effect by spurring net exports. Since not all countries can depreciate their currencies and increase their net exports at the same time, the contractionary effect of fiscal policy will be more painful when multiple countries attempt consolidation at once. (4) Consolidation that relies on spending cuts has a smaller contractionary effect than tax increases. (5) Consolidation is less contractionary in countries that face the risk of sovereign default. Overall, the study found that a consolidation equivalent to 1%

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<sup>13</sup> IMF, “World Economic Outlook: Recovery, Risk, and Rebalancing” October 2010, p. 96.

<sup>14</sup> Christina D. Romer and David H. Romer, “The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks,” *American Economic Review*, June 2010.

of GDP results in a 0.5% real reduction in GDP and a 0.3% increase in the unemployment rate after two years. As the economic recovery weakens in Europe, countries could face an increase in their debt-to-GDP ratios despite deficit reducing policies. They may end up slowing the denominator of the ratio (GDP) more than the numerator (debt). In fact, Germany's 2012 GDP growth forecast has been downgraded from 2% to 0.8%, a dramatic fall from the 2.9% growth that Germany saw in 2011.<sup>15</sup> This forecast downgrade is especially troubling since Germany is one of Europe's strongest economies and faces a smaller debt burden than most. Europe's debt crisis and anemic growth are not just weighing down the weakest economies, but threaten to bring down the entire Union.

Both studies agree that devaluation and lowering interest rates are helpful in either supporting expansionary–contraction or cushioning the contractionary effects of consolidation. In terms of intra-European trade, however, eurozone countries will not benefit from devaluation. Multiple EU countries are implementing fiscal consolidation packages at the same time, which will make export-led growth even more difficult. While the ECB lowered rates quickly, it has not dropped them as much as the Federal Reserve has; it, in fact, raised rates in April 2011<sup>16</sup> and again in July 2011.<sup>17</sup> If the IMF study is correct, however, the fact that most countries are implementing spending-based consolidations,<sup>18</sup> makes the consolidation less contractionary.

On balance, we agree with the IMF study's findings that confirm the longstanding view that raising taxes and cutting spending will reduce demand and worsen a recession. Herbert Hoover's economics did not work in the Great Depression and things have not changed since.

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<sup>15</sup> *Bloomberg Business Week* "German Institutes Cut 2012 Forecast, See No Recession" <http://www.businessweek.com/news/2011-10-13/german-institutes-cut-2012-forecast-see-no-recession.html>.

<sup>16</sup> Blackston, Brian, "ECB Raises Interest Rates", *Wall Street Journal*, April 7, 2010. <http://online.wsj.com/article/SB10001424052748704013604576248374097070658.html>.

<sup>17</sup> Kollewe, Julia, "ECB raises interest rates despite debt crisis", *The Guardian*, July 7, 2011. <http://www.guardian.co.uk/business/2011/jul/07/ebc-raise-interest-rates-debt-crisis>.

<sup>18</sup> OECD, *Restoring Public Finances*, 2011.

## Policy for Countries that Risk Sovereign Default

It is fine to advocate expansionary fiscal policies for countries that have the resources and borrowing capacity to finance the resulting rise in debt, but several European economies face the real possibility of default on their debts. They are caught between Scylla and Charybdis, pursuing fiscal consolidation and pushing their economies further into recession, or fiscal expansion and possible default.

A key question therefore is how much debt is too much? Unfortunately, there is no agreement over a specific debt threshold that threatens the solvency of a government and the health of an economy. A tipping point on debt is difficult to identify since so much of the risk is dependent upon the type and maturity rate of the debt itself, in addition to economic conditions. Carmen Reinhart and Kenneth Rogoff, however, found that

*...the relationship between government debt and real GDP growth is weak for debt/GDP ratios below a threshold of 90% of GDP. Above 90%, median growth rates fall by one percent, and average growth falls considerably more.<sup>19</sup>*

The authors also found the threshold to be lower for emerging economies, at 60%, likely due to these countries' debt typically being denominated in foreign currency.

The Reinhart and Rogoff study has received criticism for a number of issues, notably regarding the question of whether or not the authors assume correlation implies causality in claiming that debt exceeding 90% of GDP *causes* slow growth. The problem is that slow growth could in fact be the cause of increasing debt/GDP ratios. Their study also includes data points from the United States after World War II. There was a spike in U.S. debt during the war, and slow growth immediately at the war's end as troops were demobilized; it took some time for them to be absorbed into civilian jobs. Other critics have pointed out that the authors' threshold levels did not emerge naturally from the data, but were chosen by the 30%, 60%, and 90% buckets

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<sup>19</sup> Carmen Reinhart and Kenneth Rogoff, "Growth in a Time of Debt", National Bureau of Economic Research, Working Paper 15639, January 2010.

that the authors used to divide the data—not in our judgment a serious problem. In 2010, Greece, Italy, and Belgium all exceeded the 90% threshold, while France and Portugal got close at 85%, levels high enough at least to raise concern in the respective governments about the dangers they were facing from increased indebtedness.<sup>20</sup>

The honest answer is that we do not know exactly the point at which a given country will face the prospect of sovereign default, and it surely depends on several factors, not just the debt-to-GDP ratio. Every country must weigh the risk of high levels of debt against the danger of weak demand and anemic growth in a recovery. The European countries are engaging in fiscal consolidation in an unforgiving environment and without the necessary monetary flexibility to cushion contraction. It is possible that one or more countries will be forced into default, even if it is disguised as a form of debt restructuring. In some cases, default may be the best option, better than endless recession. The greatest risk of default and restructuring is the threat of contagion, which could potentially throw the world into another recession. The EU has been reluctant to take bold actions that would either break up the monetary union or force countries to relinquish a significant amount of national sovereignty, but might save Europe, the US, and the world from another recession. It appears that the current series of half measures and patch jobs will be unsustainable and the EU will either be forced to action or suffer through another crisis.

## **An Uneven Recovery and the Competitiveness Problem**

The only ways for a country to service debt held by foreigners, as we noted earlier, are to borrow more to make interest and debt service payments, or to export more or import less. Borrowing to make debt payments can catalyze a vicious cycle, since taking on additional loans only increases the debt burden and provides no clear path to a sustainable, long-run solution.

There is one loophole, however. If a country has issued debt in its own currency, it does have the option of printing money to pay its debts, increasing the money supply rather than borrowing more—

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<sup>20</sup> From debt/GDP chart.

borrowing at a zero nominal interest rate. And this extra degree of freedom has been cited as one advantage for countries like the UK that are not part of the eurozone. With the power to issue money, a country will always have the ability to repay its debt, at least nominally. Although printing money appears to be a simple solution, it has the severe downside risk of inflation. In the case of the UK, for example, inflation is already higher than the target rate set by the Bank of England, and it is very unlikely in practice that the Bank would agree to monetize the UK Treasury debt. So the “printing money” option is of only modest value in practice.<sup>21</sup>

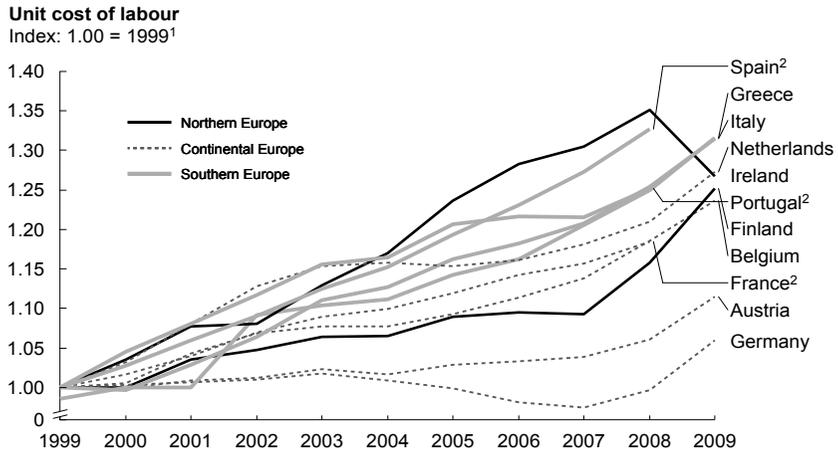
Regardless, the eurozone countries do not have control of their money supplies and do not have the option of printing money. They are thus left with the option of servicing their debt by increasing net exports. Unfortunately, the eurozone countries suffering most under the strain of holding “foreign” debt are also the countries least able to support export-led growth. In addition to facing the growing threat of insolvency, Greece, Italy, Spain and Portugal are also the least labor-cost competitive countries in the EU. High unit labor costs make domestic goods and services costly and exports more expensive relative to other countries’ products (see Figure 3).

To increase the attractiveness of exports, uncompetitive countries need to bring down unit labor costs relative to other EU countries. In the absence of a variable currency, there are only difficult options to do this: increase productivity and/or decrease wages. Increasing productivity quickly implies streamlining production processes and decreasing labor costs through firings. While layoffs may be the quickest way to decrease costs, they aren’t always easy to orchestrate since European labor laws make large-scale firings expensive, if not impossible. Finally, wage decreases for current employees are also impractical since European labor laws often dictate that union wages apply everywhere. Even if the laws were changed to allow easier layoffs and wage cuts, the social and political environment may make these impossible. Moreover, encouraging layoffs and wage cuts when a country is in a deep recession will have adverse effects on its *domestic*

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<sup>21</sup> Japan has suffered from chronic deflation, and so the option of printing money to deal with high indebtedness is of more value to them. Japan’s sovereign debt is also held domestically.

**Figure 3. Different Trends in Unit Labor Costs Contributed to Eurozone Imbalances.**



<sup>1</sup>Instead of 1999 = 1.00, Greece is indexed to 2000 = 1.00. This is because the exchange rate between the Greek drachma and the euro was fixed in June 2000.

<sup>2</sup>2009 data not available.

Source: OECD.

demand, making its recessions worse for a while and even potentially creating economic instability to go with the likely political instability. The difficulty of improving competitiveness in the absence of devaluation is not unique to the eurozone—even in places where wage and employment cuts are allowed, wages are often “sticky” and difficult to change.

Depreciation is traditionally the least painful option for countries attempting to service debt and decrease labor costs, but eurozone countries cannot follow this route without leaving the euro.

## Conclusion

A wave of enthusiasm accompanied the introduction of the euro, which was seen as a sign of a unified Europe. Given the history of conflict in Europe, achieving that unity was an important goal, one worth supporting and sustaining. Nevertheless, there was not enough consideration given at the time to the question of how internal adjustments would take place and how debt crises would be avoided.

A single currency means that all countries face the same monetary policy and they do not have the option of devaluation when they lose competitiveness. The United States has a single currency and has faced some of the problems that the eurozone faces today. Cyclical economic performance has varied by state and region historically, and in the current crisis and recession there is wide variation in unemployment and home prices within the economy. The United States does have the advantages of a powerful federal Treasury, and mobility within the country is greater than it is within Europe. The eurozone must take seriously the need for adjustment mechanisms among member economies in response to disparate performance.

Greece used various budget and accounting devices to meet the criteria for euro membership, but it is certainly facing retribution for its failures now. Ireland has tried to make good on the folly of its banks and follow the path of austerity, but it is still dealing with a very weak economy. Fiscal austerity does not solve the problem of a deep recession, despite what some bankers may tell you. There is no case for turning Keynes on his head.

Our purpose in this chapter is not to tell European policymakers what to do; after all, the U.S. economy has serious problems of its own and has been one source of the problems in Europe, as Wall Street sold bad mortgages to the world. But it is important that we use sound economics to deal with the problems on both sides of the Atlantic. Debt restructuring seems inevitable for Greece, likely for Ireland, and possible for other economies. It is probably the first step towards a slow path to greater competitiveness for the high-cost economies, a path which will involve more labor mobility or more flexible labor markets once stability has been restored. The ECB must set its monetary policy with an eye on the European periphery, not just a focus on Germany.

### **An Epilogue on Recent Events**

The situation in the eurozone is changing so rapidly that what we have written here is somewhat behind the times although the basic issues we raise are still very important. There is an old Irish joke in which a traveler stops at a village and asks directions to Dublin. The

villager says: “Well, if I were going to Dublin, I would not start from here.” Policymakers trying to curb budget deficits and enact structural reforms to improve competitiveness would not have chosen to start their new policy regimes at a time of high unemployment and weak demand. Those policies are making things worse before they have a chance to make them better. Greece has been pushed into a controlled default and this has spread contagion to Italy where interest rates on sovereign debt increased to 7.5%. Creditors are now concerned not only about the viability of Spain, Portugal, and Ireland, but even France, so the threat of a broad financial meltdown is very real.

Is there an optimistic scenario? As this is written, there seems to be progress towards an approach that would unify the eurozone sovereign debt markets (a form of Eurobond, but not using this name). Eurozone countries would place their sovereign bonds, of an amount by which their debts exceed 60% of GDP, into a debt pool that would be guaranteed by all the countries. Rules would be enacted under which this excess debt is paid off over time with supervision of the program by the IMF, the European Central Bank and the European Commission. Inspectors would be posted to participating countries to ensure that tax revenues and other fiscal data were accurate (this has already happened for Greece). The German electorate is clearly very resistant to bailing out other eurozone countries, but the German Council of Economic Advisers has expressed support for the proposal just described and German Chancellor Angela Merkel has said that there has to be a big and comprehensive solution to Europe’s problems. If the program works, Italy and other beneficiaries of the program would pay off their own debts. Germany would only be on the hook if another country were to default, something that is less likely if the plan is able to bring interest rates down.

The European Central Bank in recent weeks has purchased Italian debt to keep interest rates down. Reports indicate that Mario Draghi, the new ECB President, stopped buying Italian debt when Silvio Berlusconi clung to power and made it clear that he would only resume purchases if Italy chose Mario Monti (or someone like him) to succeed Berlusconi as prime minister. As the former European Commissioner for competition policy, Monti understands the structural reforms that Italy must make to become competitive. With Monti now in place, the ECB is likely to provide some breathing room for Italy to

manage its debt crisis. Italy, after all, has a primary budget surplus, so that getting interest rates down is key to a solution.

The pessimistic outcome is the case where the big plan fails and individual countries try to muddle through. In that case, there is a significant danger that financial institutions that have sovereign debt on their books will be liquidity constrained because no one wants to lend to them (this is already a problem). Their own governments could be unable to borrow additional funds to keep the institutions from failing. A cascading series of institutional failures could endanger the whole European financial system and slow or end the U.S. recovery.

## *Chapter Two*

# **European Heterogeneity and the Crisis: The Need for Good Macroeconomic Policy**

*Xavier Ragot*

This chapter considers the economic crisis from a macroeconomic perspective. It does not dwell on financial instability or the changes that need to be made in financial regulation. The first part focuses on macroeconomic problems raised to understand how much room there is for demand-side policies. The second part presents some key dimensions of European heterogeneity, which calls for fiscal transfers. Such transfers, between countries or between banks, can be achieved only after political consensus. Rarely has political uncertainty been as strong as it is today: macroeconomic outcomes in Europe depend heavily on political options, mainly through levels of transfer within Europe.

### **The Nature of the Problems We Face**

Today, consumption is very low, savings rates are increasing and unemployment is high. The first step is to understand why private demand is low. There are two main viewpoints. It could be a necessary adjustment process for U.S. households to restore their wealth after a financial bust and expected increasing taxes. A second view is that high unemployment and precautionary savings may be detrimental to economic activity and welfare.

I will first consider the cause of low private demand and then discuss the uncertainty about potential output. I will then discuss the limits of the macroeconomic tools that can be used to increase private demand: fiscal and monetary policies. Both are highly constrained in Europe today.

### 1) *Low Private Demand*

There are three main explanations for low private demand in the United States today, and their impact on policy action varies greatly.

#### *a) Uncertainty about future taxes (Ricardian Equivalence)*

The first explanation is that the uncertainty of fiscal policy in the future is the main cause of low private demand today. Public intervention to sustain the economy has created huge public debt, which must be reduced. If not, high future taxes will only cover the interest payments on the public debt. Will taxes rise in the short run or not? Faced with such questions, households are inclined to save now to cope with a possible increase in taxes later. This is the classical Ricardian Equivalence argument.<sup>1</sup> The main issue here is thus the macroeconomic impact of fiscal consolidation. A lot of theoretical and empirical work has been done on the effects of changes in the level of public debt. Two works that stand out in the literature and present opposing viewpoints are Alesina and Ardagna and that of the International Monetary Fund.<sup>2</sup> In their 2009 study, Alesina and Ardagna find that in many cases fiscal adjustments that relied on spending cuts spurred growth, even in the short run. The IMF, on the other hand, in its October 2010 World Economic Outlook, states that fiscal consolidation will not increase private consumption, but will in fact decrease it, and decrease growth. Most importantly, the data showing that increasing taxes increases private consumption are not convincing. Although there may be a few specific cases in which that may be true, most works, such as that of Olivier Blanchard and Roberto Perotti,<sup>3</sup> tend to show the opposite.

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<sup>1</sup> According to this economic theory, when a government tries to stimulate demand by increasing debt-financed government spending, demand remains unchanged. That is because the public is saving its excess money to pay for future tax increases that will be initiated to pay off the debt.

<sup>2</sup> Alberto Alesina and Silvia Ardagna, "Large Changes in Fiscal Policy: Taxes versus Spending," NBER Working Paper No. 15438 (2009), revised January 2010; International Monetary Fund, "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation," in *World Economic Outlook: Recovery, Risk and Rebalancing*, Chapter 3 (October 2010).

<sup>3</sup> Olivier Blanchard and Roberto Perotti, "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output," *The Quarterly Journal of Economics*, MIT Press, 117 (4) (November 2002), pp. 1329–68.

*b) Reduction in permanent income: correction of a wealth effect after the housing bubble—deleveraging*

The second explanation is that low private demand in the U.S. and Europe may be the effect of a re-evaluation of before-tax wealth by households. From Europe, the diagnosis is simple: the crisis originated in the United States, with a big macro shock, and then reached Europe. Europe in turn responded to the shock. There was no real European macroeconomic crisis, however, before the sovereign debt problem. The U.S. crisis destroyed a lot of wealth due to its real consequences and the correction of past expectations of high growth, which may have been too optimistic. Now we are seeing a correction of the wealth effect: people thought their wealth was high, so they consumed a lot, and now they are correcting for that period. This is a deleveraging issue, that is, people decrease their debt, because they realize that they are less rich than they thought they were.

These first two explanations do not require major policy intervention. Low private demand is a necessary response of households that realize that they are poorer than before. Implementing demand-side policy in this case would be like swimming against the current. In other words, there are no market failures in these first two explanations.

*c) Precautionary savings (Paradox of thrift)*

The third explanation is based on a Keynesian viewpoint, in the more modern sense of the term, which may be called “precautionary savings.” There is a lot of uncertainty on European labor markets. Consequently, households save to self-insure against unemployment risk. Faced with demand uncertainty, firms stop investing in order to keep some cash, as a form of self-insurance. Low investment reduces employment, which negatively affects consumption. In response to the precautionary savings issue, some arguments support active fiscal or monetary policy.

One could have a statistical debate about the relevance of the three viewpoints presented here. For me, the first view lacks relevance, the third is the most pertinent, but the second also deserves consideration.

**2) *Uncertainty about the output gap***

Broadly speaking, the output gap is the difference between actual growth and the highest growth possible given technical progress, capi-

tal stock and labor market forces. A low output gap means that the economy is functioning below its potential growth. There is a lot of uncertainty about what the output gap is today in Europe. More precisely, we do not know what current potential output is, and the situation appears to be similar in the U.S. from what I have read about the debates going on in central banks. This is thus a highly debated issue. What will be the long-run growth and productivity trends in the coming periods? Will it be the same as the past growth trend? In central banks, a lot of policy mistakes were made in the 1970s—a period of high inflation—because central banks did not realize that the productivity trends had been drifting downwards for a very long time.<sup>4</sup> Defining the long-run productivity trend and long-run growth is crucial for assessing the cyclical component. Numerous studies by the IMF and central banks confirm the high uncertainty about the relevant output gap. This is problematic, because one's assessment of the output gap defines the monetary and fiscal policy action to be taken.

Now I will consider this issue along two dimensions: capital stock and the composition of the labour force.

*What type of capital has been destroyed by the crisis?*

Since the burst of the housing bubble, consumption has been collapsing and GDP has been falling. Nonetheless, nothing has been destroyed in the economy: plants are still running and a lot of human capital remains. Studies were carried out to examine which type of capital had been destroyed. In the U.S., one focus was to look at the destruction of human capital in the labor market due to long-term unemployment. In Europe, debate centered on the sclerosis of labor markets and how long-run unemployment is destroying human capital, which will eventually lead to a collapse of potential growth in output. Reviewing such studies a few years later reveals that long-run unemployment does not convincingly explain a huge fall in human capital.

*Human capital destruction, skills mismatching, break in the Beveridge Curve*

Some argue that skills mismatching and a break in the Beveridge Curve are sufficient for explaining that the current problems lie

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<sup>4</sup> See Athanasios Orphanides, "Monetary Policy Rules and the Great Inflation," *American Economic Review*, Papers and Proceedings, 92 (2) (May 2002), pp. 115–120.

within the labor market. Those who believe that a lot of capital has been destroyed in the crisis will favor supply-side economics rather than demand-side economics, which are fiscal or monetary policies. This broad debate may seem abstract, but it is necessary for assessing how far to go with demand-side tools in Europe and the U.S. today.

Although no hard data favor the supply or demand side today, many economists think that some demand-side policies are necessary to foster investment and consumption. The Federal Reserve Board (the Fed), for instance, has engaged in strong monetary actions to sustain growth. The U.S. federal government has delayed fiscal consolidation in order to avoid reducing demand in the short run. Once again, no strong quantification has prescribed the optimal demand-side policies that need to be implemented. Such policies are rather the result of a global macroeconomic assessment.

I will now turn to the constraints facing demand-side policy.

### ***3) High public debt***

It is difficult to identify whether high public debt is a problem or not. There used to be a consensus that high public debt requires high taxes to pay interest on the debt, the only problem being the distortion raised by those taxes. After the crisis, a new fear emerged—the default of a large country. A lot of focus has been on Greece, but it is not a big country, and a partial default on its debt would not have a huge impact on the banking sector outside of Greece. More frightening would be the default of a country such as Italy. Although unlikely, the fear alone of a default by world investors would be enough to prevent the proper allocation of capital in Europe.

In Italy, public debt has been above 100% for over 10 years now. Nevertheless, it is inaccurate to say that public debt is Italy's main problem. No one will deny that it is a problem, but it is not the main one. The same is true for Japan and Greece, which also have public debts of over 100%. A closer look at Greece and Italy shows that the problem is not the public debt per se, but the fiscal base and political stability, in other words, those countries' ability to raise fiscal revenue through political consensus in order to pay the taxes by way of their citizens.

There is more room for maneuver in countries like Germany. The condition for delaying fiscal consolidation is a credible commitment to raising taxes in the medium run. The main economic problem in Europe, however, is this lack of credibility. Indeed, delaying fiscal consolidation generates a high transitory public debt. This high public debt can be financed at a low interest rate only if the countries can credibly announce that they will raise taxes in the near future. One must recognize that some European countries have not shown in the past a strong ability to reduce public debt. In sum, fiscal consolidation needs to be on the agenda, but there is still some room for maneuver in the very short run. There needs to be a communication strategy of the EU countries to anchor expectations about sovereign default. A short-run increase in public debts can be used to sustain economic activity only if Europe as a whole finds a way to commit to fiscal consolidation in the countries with high public debts. This is now a European problem, which does not necessarily involve transfers among European countries.

I will now turn to monetary policy and what it could do when the aim is increasing private demand in the short run.

#### *4) Zero lower bound*

The zero lower bound—that the nominal interest rate cannot decrease below zero—is another problem to be addressed. The issue is bigger than is currently being presented. The eurozone is very close to the zero lower bound. Before that, however, other tools can be used, such as quantitative easing—buying bonds or private debt, or injecting money into the banking system or the economy as a whole. Careful examination shows, however, that the goal of quantitative easing is difficult to define. Is it to fight deflation, for which it has proved a powerful tool? Is it to provide liquidity to the banking sector? Unconventional monetary policies, such as quantitative easing, were used successfully in Europe to restore financial stability and avoid banks from going bankrupt (like those too big to fail). Such policies were used as a fiscal transfer towards some banks, which proved to be much more efficient than using drawn-out political processes. Quantitative easing is also used in demand-side economics to increase credit, through the credit channels, and private spending.

The unconventional monetary policies of quantitative easing are efficient in two cases—fighting deflation and providing liquidity to the banking sector. The latter was particularly used in Europe. They are less effective, however, for creating short-run expansionary policies. The problem with quantitative easing in the latter case is that it does not ensure that the money being injected will end up where planned. In the wrong hands, it may end up on the markets to increase individuals' balance sheets and financial returns, rather than to increase the credit of firms and households. The transmission channels of monetary policy close to the zero lower bound are thus very low. Fiscal policy, on the other hand, is a more efficient tool when trying to increase private demand in the short run. I will now present the nature of problems that Europe is facing.

## **The Need for Transfers Inside Europe**

### ***1) The dimensions of heterogeneity***

Heterogeneity is the main problem in the eurozone. It contains both one of the strongest economies in the world—Germany—and one of the weakest—Greece. In this section, I will explore the dimensions of Europe's heterogeneity that are problematic today.

#### *a) Strong and weak banking systems*

The eurozone has countries with strong banking systems, which are often helped by their governments, and fragmented banking systems. Such heterogeneity strongly affects the transmission mechanism of monetary policy and the actions that need to be taken.

#### *b) Exchange rate exposure*

Different industrial structures of eurozone countries can cause wide variation in their exposure to the exchange rate. Germany, for example, does not fear exchange rate movement much, because it exports high-quality goods and produces mostly in Germany. Its neighbor France, on the other hand, is much more vulnerable to such movements, because it produces abroad and repatriates its profits.

*c) Countries with (relatively) low public debt vs. countries with high public debt*

Within the eurozone, there are also large differences in countries' public debt level. Some, like Greece and Italy, have high public debt while others, like Germany and France, have *relatively* low public debt of around 60-70%.

All this heterogeneity therefore creates a problem for the eurozone, which is often reduced to the moral hazard issue. The moral hazard arguments can be summarized as follows: one should prevent any transfers that could create incentives to cheat in the future, so as to benefit from these transfers a second time. There is some truth to that, but I will also criticize this viewpoint. To understand moral hazard, one has to grasp the dimensions of heterogeneity described above. Within this framework, the next section first explores monetary policy and the issue of "persistent banks," and then turns to the subject of fiscal policy.

## **2) Heterogeneity and moral hazard**

*a) Monetary policy and persistent banks in the euro area*

First, let us look at monetary policy. The moral hazard described above is that of persistent banks. There is an interbank market, which works well from time to time. Recently, the sovereign debt crisis has created fears within the interbank market, in which the same bank lends to the others. The market is segmented, because some banks rely heavily on money from the European Central Bank (ECB). In that case, they are excluded from the interbank market, because they are weak and the other banks are afraid to lend to them.

The ECB believes that applying loose monetary policy over a long period of time will result in such banks not being able to clean up their balance sheets. The fear is that they will have lots of hidden risks, so that even a small adverse shock will end up being a great credit risk on the asset side of such weak banks. In response, the ECB has asked national governments to help those banking sectors by injecting public money. This has political costs, however: given the recent financial turmoil caused by the banking system, it is difficult for governments to justify to voters that they now need to help that same banking sys-

tem. If governments decide not to help, they can rely on the money of the ECB, which does not cost them much in the short run. There is thus a complicated game going on between national governments and the ECB as they try to clean up the whole banking system in the euro-zone. This is the first dimension of moral hazard. It also explains the recent extreme discourse of some top Bundesbank executives on whether or not national governments should take the responsibility of putting citizens' money into the banking system.

*b) Fiscal policy in the euro area*

The second moral hazard issue concerns fiscal policy. There will be fiscal transfers to some indebted countries to cope with the crisis. Many countries fear that such transfers will become structural due to those countries' inability to pay back the borrowed money within the given time limit. A lot of sanctions are being put on such countries to pay back their debt, rather than default.

This moral hazard issue is a new way of putting old arguments about political economy in front of the heterogeneity of interests across the euro area. Germany is rich and powerful and can deal with its banking system problems on its own. Like France, however, it must inject money into other countries in order to diffuse the crisis that is taking over its neighbors. But what is Germany, or France's interest in doing that? Which rules can be enforced to ensure, for example, the long-run interests of the German tax payer? This is a very difficult issue, and a political one: what are German voters' long-run interests in building Europe? The rise of nationalism that is scaring Europe shows that there is a serious need for European governments to understand long-run interests when dealing with the short-run problems caused by the crisis.

## **Conclusion**

In sum, the central problem in the euro area is the political one of understanding what the common project is today for the European Union. It is the only way to justify the transfers that need to take place within Europe. Fiscal tools are more efficient in times of crises than monetary ones, and they need to be used. Indeed, there are some

arguments about increasing private demand in the short run. Consolidation must happen, but in incremental steps. The next big step for Europe is to agree on fiscal governance. Many economists would like to see an agreement reached fast, but this is a complex process that will take some time. It is vital to find the right institutional tools for dealing with these moral hazard issues in the euro area.

Europe is moving in the right direction, because there is discussion at the political level about transfers in this time of crisis. EU policymakers are focusing on how to obtain a more homogenous economy and reach an optimal currency area. This nonetheless remains only a goal today, and does not represent the current state of affairs in the euro area.

## *Chapter Three*

# **EMU's Response to the North Atlantic Financial Crisis: Policymaking from Incompatible Views**

*Hans-Helmut Kotz*

### **Prologue: Initial Financial Market Tremors**

We now date the beginnings of the North Atlantic Financial Crisis (a term coined by Willem Buiter) to August 2007.<sup>1</sup> While, from today's angle this might seem evident, considerable hindsight is implied in this dating convention. In fact, contemporaneously, as the situation evolved, public talk was of turbulence or tremors. And the crisis was declared to be over whenever markets appeared to calm down, i.e. a number of times. For some time, developments were seen as difficult, but ultimately manageable by conventional means. In retrospect, two primary yet perplexing arguments were used to make the case. First, a strongly held view was that *no contagion* would arise from the implosion of the U.S. subprime bubble. This was, in light of Finance's most basic no-arbitrage principle—identical structures go ultimately by the same price—a strong proposition indeed. Second, while in late 2007 some pondered the idea that the U.S. might be facing a recession, the surprising consensus view on the other side of the Atlantic was that even if that were the case a de-coupling of European economies would happen, mainly courtesy of China.

Of course, things happened very differently. As of this writing, in the fall of 2011, Europe is seen to be in its deepest crisis since World War II. A destructive dynamic laid bare the institutional flaws in the European Monetary System, admittedly under indeed severe conditions. Sovereign debt problems in Europe's (ever increasing) periphery have come to be seen as a major threat to the recovery of the world

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<sup>1</sup> Of course, as events unfolded, this became very much a real-economy crisis also.

economy. The financial crisis, which initially affected only a number of financial institutions substantially engaged in structured financial products, radiated through interbank markets and spilled over into the real goods- and services-producing economy in the fall of 2008 and early 2009. To limit the immediate damage arising from negative externalities, bail-outs of financial (and even some real economy) institutions became inevitable. Moreover, confronted with a very substantial widening of output gaps, public budgets came under enormous pressure. Automatic stabilizers, being particularly important in the European case, kicked in strongly. In addition, though only quite reluctantly, countercyclical (discretionary) fiscal policies were implemented. As a logical byproduct, public deficits and debt ballooned. The economic shock emanating from the financial crisis has been so devastating that in most European economies output is still below its level of Q1/2007.<sup>2</sup> Almost inexorably, and in line with too many historical precedents, this situation morphed in a number of cases into a sovereign debt crisis. Incidentally, average euro area public debt numbers do compare rather well with the U.S. as well as the UK. But averages of course do not count in Europe's case.

This brief chapter, written very much *al fresco*, first describes how the crisis broke. It goes on to sketch the containment response in the European Economic and Monetary Union, as EMU is officially called. Monetary as well as fiscal policy actions are evaluated. In a concluding section, written in the midst of a wide open environment, we highlight rather fundamental differences on what policies should be applied. These divergences are not at all new. In fact, such conflicting views on what policies to pursue and what objectives to achieve just reassert themselves.<sup>3</sup> But they now have literally become crucial.

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<sup>2</sup> In the case of Greece, Ireland and Portugal it are almost 10 percentage points, Italy and Spain are some 5 percent away from the 2007 level; see IMF, *Europe. Navigating stormy waters, Regional Economic Outlook*, October 2011, p. 2.

<sup>3</sup> See Hans-Helmut Kotz and Wim Kösters, "Perspectives on the Policy Mix in EMU," in Rolf Caesar and Hans-Eckart Scharrer (eds.), *European Economic and Monetary Union: Regional and Global Challenges* (Baden-Baden: Nomos, 2001), pp. 13-23 where we compare in particular positions held by the German Council of Economic Experts and the French Conseil d'Analyse Économique.

## **The Crisis Erupts: Fragile Banks, Vulnerable Economies**

Spillovers from the U.S. subprime crisis hit European economies rather unevenly. They were initially transmitted through those European banks that had significant exposures to U.S. structured products, allegedly, of course, of highest credit quality. Rather unsurprisingly they were in particular German banks, competing in a highly contested (i.e. low margin) market and from a home base with continuously accumulating current account surpluses as well as increasing net asset positions. The same holds true for Dutch-Belgian and, to a lesser degree, Austrian credit institutions. Banks from the UK and Switzerland, given the importance of the financial sector in both economies, were also, rather consequentially, implied first in line. Spanish, Italian and French banks, however, took much less of a hit, at least initially. Spanish supervisors simply refused allow putting loans, which had been taken out by banks to be immediately offloaded, into off-balance sheet constructs. In this way they blocked a very attractive path to arbitrage differential capital requirements for functionally equivalent positions. Banca d'Italia has obviously been similarly conservative.

Moreover, in both the Spanish and Italian markets, not unlike the French one, concentration ratios, as measured by the share of the largest 5 banks, are comparatively high. Quite logically, such market structures entail less compressed margins, i.e. a wider gap between marginal revenues and costs. Hence, given return on equity expectations (certainly excessive), as they prevailed in markets, there was less of an urge to move out in the risk-return space.<sup>4</sup>

The unraveling of the U.S. subprime market thus was initially a proto-typical asymmetric shock. Of course, and in blatant contradiction to contemporaneously confessed consensus views, the market correction, by force of arbitrage, rapidly weighed down on all structured products—as it should have, since they were engineered according to

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<sup>4</sup> The conflicting relation between contestedness/competition and stability has been long acknowledged; on this see Xavier Vives, “Competition and Stability in Banking,” *CEPR Policy Insight*, No. 50 (2010); Thorsten Beck, et al., “Bailing out the Banks: Reconciling Stability and Competition,” *CEPR Report* (2009); and Adrian Blundell-Wignall, Gert Wehinger and Patrick Slovic, “The Elephant in the Room: The Need to Deal with What Banks Do,” *OECD Financial Market Trends*, 2009/2, pp. 1-27.

the same principles. The shock was first felt only in a few exposed European financial institutions, in fact at the outset two comparatively small German banks were concerned (not counting quite significant hedge funds, affiliated with bulge bracket U.S. investment banks, one of them, Bear Stearns, ultimately vanishing barely more than half a year later). This suggested a reassuring interpretation: while some unsophisticated institutions always run into trouble, this is not only controllable but in particular of no systemic concern. But it became quickly public knowledge that, of course, the real problems had to do with the *cognoscenti*, among them the most sophisticated investment and commercial banks. The ensuing, unprecedented write-downs, as well as a very significant deleveraging, testify to this.

Nonetheless, the fallout for the real economy was protracted. In Europe, consequences took almost a year to become undeniably observable, again in an uneven way. These lags in the recognition of the impact become evident when one re-reads contemporaneous press articles or speeches of officials. Up until Lehman, in those economies with some distance to the financial centers, a perception dominated that this was a financial sector issue only and that one might get by without need for significant counteracting policies. If things went well, the financial crisis might turn out to be barely more than a sideshow. These economies in the second row (from a financial markets perspective), however, were then affected as much as anybody else. Being innocent bystanders only, they became nonetheless victimized. Indeed, given the strong integration of European goods and financial markets—obviously basic objectives of the European Union—anything else would have been quite rather surprising. There are simply no islands of the happy few.

### **Ordre Dispersé: European Crisis Response**

Ultimately, highly integrated financial markets brought home this point. And they did it with exponential intensity. As structured credit products became ever more fragile, institutions deemed to be substantially involved had greater trouble accessing funds. On top of growing uncertainty about counterparties, problems arose in judging future bank-funding needs, as they resulted from contingent credit lines or the obligation to back-up tenuous off-balance sheet conduits. For those

banks involved, this implied a precautionary hoarding of liquidity. In short, interbank markets became the canary in the mine. It is here where central banks were called upon to play their financial stabilization role. And the European Central Bank (ECB) responded vigorously.

### ***The Response of the ECB***

On August 9, 2007, interpreting what was going on as a run on the wholesale market (along the lines of the canonical Diamond-Dybvig-Rajan analysis) the ECB met all liquidity demand (given that it was backed by eligible collateral) at a fixed rate. At the time, this was unconventional indeed. The aim was to quell uncertainty. This was classical lender-of-last-resort behavior.

At the time, this policy was not at all well-received. There was substantial critique of an “overactive response,” even of “hyper-activity” on the part of the ECB. In fact, the prevailing view internationally, which again one can easily distill from contemporaneous newspaper articles, was that such a policy would potentially provoke a major risk: it was liable to redouble the financial system’s inherent moral hazard problems. This reading of the situation was only adapted, though rapidly and indeed fundamentally, when the run of retail clients on Northern Rock took place.<sup>5</sup> Quite obviously, the frequent images of lines of customers in front of the bank’s doors were, however, only the apparent reason for a reorientation of monetary policies pursued. Later on it became evident that the decisive run on Northern Rock—the fatal loss of confidence—of course happened earlier, in interbank wholesale markets. Its high capital ratio notwithstanding, rolling-over of maturing (very short-term) debt, mainly overnight funds, became impossible for Northern Rock. This forced the hands of the Bank of England. The insolvency of the fourth largest mortgage bank in the UK would have implied a systemic risk.

Going into a bit more detail, the financial-monetary background scenario can be divided into two phases. A pre-Lehman, phase 1 began in early August 2007. At that time interbank money markets showed substantial stress (see graph: *Money market stress*). Spreads between

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<sup>5</sup> Hyun Song Shin, “Reflections on Northern Rock: The Bank Run that Heralded the Global Financial Crisis,” in *Journal of Economic Perspectives*, vol. 23, no. 1 (2009), pp. 101-119.

secured and unsecured interbank lending rose to unprecedented levels. These data lend themselves to two conflicting interpretations. They could be read as (a) an information asymmetry or (b) a wholesale run of banks (on themselves). This *ex ante* interpretative uncertainty is important to note since decision makers have to decide upon the basis of real-time data—and, quite obviously, without knowing what will going to happen. They do not have, so to speak, the information contained in the right hand part of the graph.

Both diagnoses had fundamentally differing implications. The asymmetric information/moral hazard diagnosis (a) suggested doing nothing. The silent run view (b) called for liquidity provision significantly above the banking systems needs (arising from minimum reserve requirements and cash, see graph: *MRO allotment*). The Eurosystem (i.e. including the national central banks with immediate exposure to market pressure and resulting market intelligence) was convinced of diagnosis (b) and, consequently, conducted—to calm markets—a refinancing operation with full-allotment at a fixed rate.

The second phase then began in mid-September 2008. With the demise of Lehman, things turned decisively for the worse. In the wake of the Lehman/AIG collapse, money markets almost completely ground to a halt. The increased roll-over risk translated into widening of spreads that had never been seen before, and haven't been seen since. Simultaneously trading volumes in markets, reflecting fundamental uncertainty, fell drastically, in particular in the longer durations. Markets became shallow (bid-offer spreads were wide), narrow (volumes were very low) and incapable of absorbing normal volumes (without price impact). This reflected predominantly uncertainty about counterparties in interbank markets. Their potential risk exposures was seen as obscure and difficult to decipher: Investors had to put a judgment (value) on the respective institution's risk implied in (a) its involvement in the structured credit domain as well as possibly arising from (b) feedbacks from its implication in the network with other institutions.

Initially, that is in phase 1, in order to keep interbank rates in close vicinity to its policy rate, the ECB frontloaded liquidity supply—but only temporarily, absorbing surplus liquidity over the course of the reserve maintenance period. In the course of the crisis, the dysfunc-

tionality became more pertinent along the yield curve. In response, funds with longer duration were also made available by the ECB (see graph: *Liquidity provision*). Moreover, the ECB also broadened its—already large—list of eligible collateral and it also reduced the minimum required credit quality.

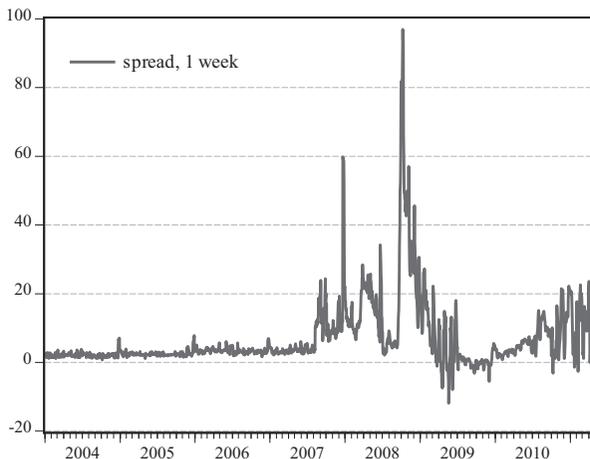
Essentially, the ECB was accepting an intermediary role, i.e. using its enlarged balance sheet to underwrite financial market stability—though substantially less so than the FED or the BoE did (see graph: *Central banks' balance sheets*). It was substituting a “missing market,” missing for reasons of a fundamental lack of trust. These “enhanced credit support measures,” as the ECB came to call them, were of course *extraordinary*—which implied that the ECB would prefer getting back to normal (ordinary) operational procedures as soon as possible.

### *Fiscal Policy Reactions*

Monetary policy is, to state the obvious, Europeanized by design—fiscal policies are however decentralized in Europe, belonging to the remit of national policy makers. It is here where *ordre dispersé* comes

#### ***Money Market Tensions***

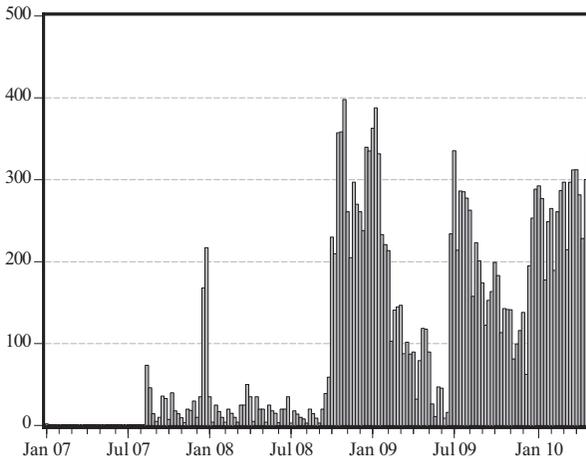
Difference between secured (Euribor) and secured (Eurepo) interbank loans



*As a result of counterparty risk (or uncertainty about own refinancing needs) spreads in money markets widened out strongly in August 2007. They reached unprecedented heights in the wake of the Lehman demise.*

**MRO Allotment over Benchmark**

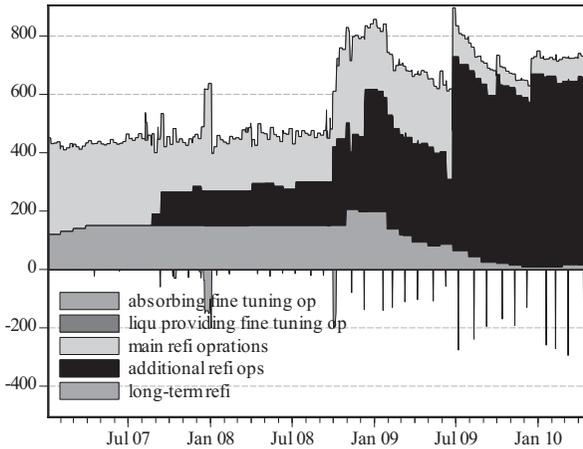
Billion Euro



*ECB provided liquidity substantially above the banking system's needs (arising from minimum reserve requirements and cash) ... and also relaxed conditions with regard to eligibility of collateral.*

**ECB: Liquidity Provision**

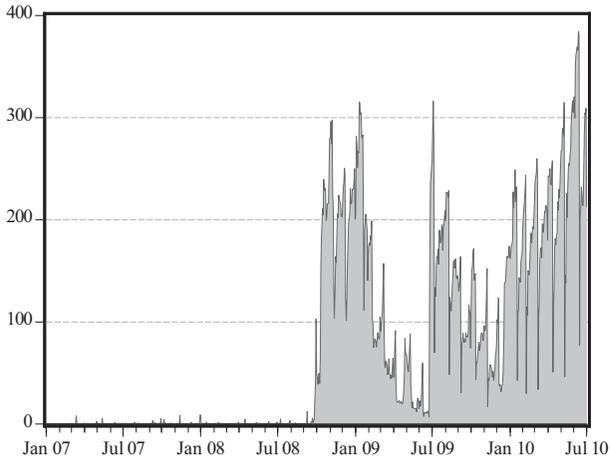
Billion Euro



*ECB's separation principle: monetary policy (= control of policy rate) is strictly separated from liquidity management. Graph shows substantial change in structure of liquidity provision towards longer-term funding.*

### Deposit Facility

Billion Euro

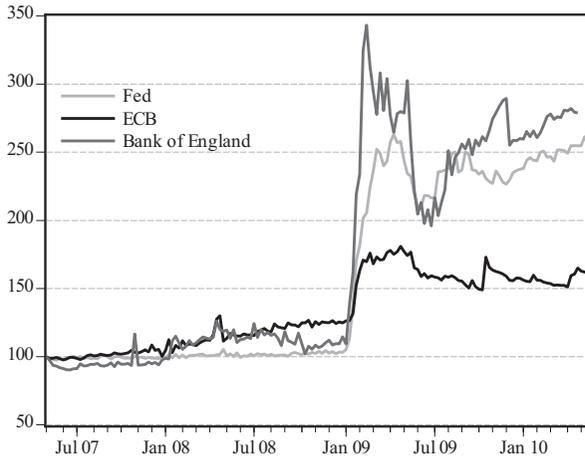


Source: ECB

*Deposit facility reflects ECB's taking up an intermediation role amongst banks ... which are reluctant to lend to each other for reasons of substantial uncertainty.*

### Central Bank Balance Sheets

Billion Euro; Jan 2007 = 100



Sources: Federal Reserve System, ECB, BoE.

*Balance sheet growth (compared to Jan 2007). Enhanced credit support vs. QE 1, 2 and 3: ECB has intervened on a substantially lower scale. Quantitative easing implies subsidies (relative to market rates). This is beyond classical monetary policy, in the realm of fiscal policy.*

in. It is also here where in particular diverging views do not only exist—as they might with regard to monetary policy—but also come to bear. Budgetary policies are “negatively integrated” (Jan Tinbergen) through the Stability and Growth Pact. There is also some, not very effective, positive integration through peer-group review (Broad Economic Guidelines). But the aggregate dimension comes about only by default in EMU. Monetary policy has no explicit euro area level counterpart—on purpose. Rules were deemed to be sufficient. And any institutional counterpart on EMU-level was seen as potentially endangering the ECB’s autonomy.

Hence, all the perennial issues known from international policy coordination arise. Two are particularly pertinent: They concern the interaction of fiscal policies amongst EMU members. In addition, an EMU specific dimension arises: the relationship between seventeen fiscal policies and the single European monetary policy. These questions are clearly fraught with very conflicting views, and the response to the crisis of 2007/8 is a first-hand example. First of all, national background conditions were initially quite diverse. Moreover, the asymmetric shock, emanating from the financial crisis, was mediated by a significant variety (heterogeneity) in economic structures. On impact, this led to rather different responses—without effectively accounting for cross-border externalities. When push comes to shove, national constraints dominate. This is important, since diverging national perspectives and evaluations are crucial for policy formation in EMU. The deep “structural interdependence” (Richard Cooper) notwithstanding, there was no EMU level institution which could effectively coordinate fiscal policies.

The Stability and Growth Pact (SGP) is geared at preventing unsustainable debt dynamics (via controlling annual deficits). However, it neglects short-run macro-policy coordination (as well as possible private debt overhangs or regional current account imbalances). This it does on purpose, since at the time of its conception, in the mid-1990s, countercyclical fiscal policies were seen as being of largely no avail. At best, automatic stabilizers were allowed for, as long as they remained within the SGP bounds (of 3% of deficit over GDP and 60% of debt over GDP). Betraying an institutionalized distrust in macro financial policies, one might read the SGP therefore as an

immediate application of the Sargent-Wallace policy-ineffectiveness proposition of the mid-1970s.

Incidentally, from this PIP-perspective it is also much easier to understand the German government's reluctance to launch a counter-cyclical fiscal impulse in the fall of 2008—as it was strongly asked to do, for example, in G20 meetings. It rigorously declined such benevolent proposals because in Germany the suggested measures were seen as producing at best *Strohfeuer-effekte* (flashes in the pan). And in this debate considerable references were made to academic studies that showed fiscal multipliers substantially below 1. Ultimately, however, the German government did respond in the wake of the fallout of the Lehman crisis (indeed, with the downfall gaining speed, even a second *Konjunkturpaket* was launched.) This was done at a time when the prevailing consensus view actually posited that Germany would most probably escape trouble. In fact, still in November 2008 the independent *Council of Economic Experts* held in its annual report to the government that the German economy would barely stagnate during the first half of 2009 and return to a flat growth path during the rest of the year. Only a tiny minority saw the threat of a substantial downturn. In reality, the German economy ultimately of course fell off the cliff, in line with other export-oriented economies. GDP shrank in 2009 by 5%.

It is important to acknowledge this debate in Europe's largest economy, since it would have been very difficult indeed for the German government to disregard prevailing expert opinion. While forecasters (as well as their clients) know that one should beware of the consensus, policymakers are basically compelled to go with the median view. They have to disregard skeptics, even though taking such views into account might lead to a more prudent, regret-minimizing policy.

Nonetheless (and at long last), and separately from monetary policy's crisis containment activities, fiscal policy reluctantly intervened. First, in a number of European countries there were interventions to shore up fragile financial institutions through guarantee schemes or outright bail-out activities. Staying on the sidelines, letting nature run its course, was deemed to have potentially prohibitive social opportunity costs. In the case of Germany, a *Financial Market Stabilization Fund* was established in October 2008 (with a gross volume of some 480 bn euros). As of January 2010, this fund had taken out guarantees amount-

ing to €150 billion to financial institutions, had recapitalized a number of banks in difficulty (€28 billion) and had assumed risk positions where needed to bolster confidence in the banking system. The purpose of these measures was to support an orderly deleveraging process in those banks that had been particularly exposed to problematic assets. This specifically meant a buttressing of capital adequacy ratios, an improvement in liquidity positions, a reduction in leverage, as well as allowing for an appropriate level of write-downs. Overall, this re-dimensioning was to be engineered in a way that would not have too negative of an impact on the non-financial part of the economy.

Moreover, public sector budgets became highly expansionary, the second dimension in which fiscal policy was obviously involved. Deficits were run—had to be accepted—on a scale not seen for a long time. Obviously, SGP requirements were honored in breaking. The aim of these highly discretionary counteracting measures was to cope with the very substantial shock to aggregate demand that emanated from the crisis. In fact, the force of this shock came, as already mentioned, as a complete surprise. Contemporaneous forecasts at that time largely underestimated the crisis' impact. In any case, after a probably unavoidable recognition lag—things are always in doubt and politics, for reasons briefly alluded to, takes its cue from the median evaluation—substantial, large-scale discretionary stimulus programs were launched. In Germany, for example, two fiscal policy “packages” of €32 billion (equivalent to 1.5% of GDP in November 2008) and €50 billion (equivalent to 2% of GDP in March 2009) were implemented—admittedly with some reluctance, against the background of the rather positive forecasts already mentioned. But obviously given the importance in the German case of unemployment insurance and the social safety net more generally, as well as a progressive income tax system, a substantial cushioning impulse also came from automatic stabilizers.

These policies were apparently deployed effectively: while the German economy, being deeply integrated internationally (having a large exposed sector), contracted in 2009 in an unprecedented way, the recovery was almost as impressive. After shrinking by some 5%, substantially more than in most other advanced economies, growth was forecasted to be around 1.5%. As a matter of fact, it turned out that

the German rebound was much more impressive. German GDP grew by some 3.5% in 2010, reflecting its strong world market focus with an emphasis on capital goods in particular.

### **By Way of Concluding—Rethinking EMU's Institutions**

Since spring 2009 substantial, internationally coordinated (via G20 and more precisely the Financial Stability Board) reform efforts were also advanced to deal with the flaws in the regulation and supervision of financial institutions. While we here do not have the space to go into details, these efforts to increase capital buffers (self-insurance of institutions), address roll-over risk and maturity mismatches (liquidity coverage ratio, net stable funding ratio) and get a handle on the systemic dimension (macro-prudential risk) all go in the right direction. Of course, their implementation should account for the interaction between the different efforts. It should also be contingent on the economic environment. (The fall of 2011 appears to be a particularly inopportune background against which to tighten requirements and advance their implementation. But that is what is explicitly done in Europe.) Nonetheless, in principle these policies have been oriented in the right direction.

In fact, one can argue that a window of opportunity might have not been appropriately used. In any case, these regulatory efforts—as well as those to build new supervisory institutions in Europe—have been overshadowed recently by the deteriorating sovereign debt situation. In 2010, the crisis came back with a vengeance. The situation in Greece became untenable in May. This forced the ECB's hand, unless it was prepared to see a repeat of the Lehman scenario in the fall of 2008. Under such circumstances the strongest institution is always the weakest. Claiming incapacity to move, its 17 partners from fiscal policy dominated. Ireland and Portugal were forced to seek help from an institution created from scratch and against much resistance: the European Financial Stability Facility. The genesis of this (intergovernmental and not Community-based) institution is instructive. Only very protractedly was it given the instruments to make it—in view of markets—a possibly effective device for stemming a liquidity run. But only in terms of tools, not of size. All of this, again, reflecting funda-

mentally different views on which policies to pursue. Compromise attempts to buoy its capacity by providing insurance for a first piece of loss, instead of putting up more paid-in capital, are apparently not convincing. And how could they? Investors have an obvious interest in piercing through the veil of financial alchemy. For them, what ultimately counts, is not accounting or the ways promises are packaged but the expected value of the insurance provided in the case of default. To be convincing, investors would have to believe the assurance that a larger share of losses will be covered by taxpayers. Otherwise they refrain from rolling-over. From this angle all the talk about firepower (or more oomph), which sometimes appears to amount to the claim of getting more from less, is obviously dubious. Given the experience of private sector involvement, investors are apparently not prepared to accept such propositions at face value. In any case, the European Financial Stability Facility, with Spain and Italy in trouble, is judged by financial markets as not up to the mark.

This could lead to self-fulfilling vicious circles, sapping confidence ever more. This is particularly relevant for the case of Italy which from a rather conservative view is of course not a case of insolvency. Financial markets are however dys-synchronized from political processes. They work on a different time scale. We are therefore unfortunately entitled to some doubts whether structural reforms and austerity measures can re-establish confidence quickly enough to squeeze the premium of deep distrust as it is currently embedded in interest-rate spreads.

Against this background it cannot be taken for granted anymore that EMU will survive, although for all of EMU's members, from a purely selfish point of view, an unraveling would be prohibitively costly. As a consequence, it is not at all obvious what options are left. The German government, representing in a way the Northern European view, is in principle against (a) the pooling of sovereign risk as well as (b) the ECB taking up the role of a lender of last resort also for sovereigns (in denial of the EU Treaty) [or (c) giving the EFSF a bank license and hence access to ECB funding]. Quite obviously, given its independence, guaranteed by an international treaty, the ECB would have to decide on its own which policy to pursue. But that still leaves

EMU's future—via its weaker, but ever growing, parts—vulnerable to potentially devastating financial market dynamics.

One can of course make a strong case for both Northern European positions. Eurobonds without a commensurate degree of political union and therefore democratically legitimized conditionality are literally putting the cart before the horse. Moreover, now, after all the foot-dragging, they might be insufficient to quell the silent liquidity run that apparently is starting. The call for the ECB to take up a lender of last resort function also for sovereigns—to face the sovereign debt crisis—clearly is not only not within the ECB's legal mandate. It is explicitly prohibited. Moreover, a substantial problem would arise in terms of conditions to be attached to such support: The ECB has no legitimate role in fiscal policy. And it could not sanction misbehavior credibly. Finally, the ECB has a clear mandate: to provide price stability. This could be potentially endangered through such a role also.

But economics is about tradeoffs. Given that solvent, but illiquid EMU member governments can be driven in a self-fulfilling way into default (as the second-generation crisis models have shown) and given that the consequences of an EMU unraveling are dire indeed, insisting on principles comes at a potentially prohibitive price.

In any case, what is at this time offered as a solution—initiatives to strengthen the Stability and Growth Pact, making it more rule-based as well as emphasizing automaticity—for sure will not do. After this crisis has been contained, the euro area has to think of building a macro and financial framework that acknowledges spillovers and takes account of the aggregate impact of national fiscal policies, of financial market integration as well as regional current account imbalances.<sup>6</sup> The EU Commission's Excessive Deficit Procedure is a start in that direction, though one wonders how the so-called corrected arm should work.

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<sup>6</sup> This is a very important issue to which we only refer in passing. These regional current account imbalances mirror underlying structural deficiencies in competitiveness. They have been accumulating ever since EMU's beginning in a number of Southern European economies. And they result from the appreciation of local real-effective exchange rates, i.e. of the ratio of non-tradable to tradable prices. Adjustment is inevitable but also very time consuming. It cannot be achieved on the time-scale financial markets currently request it.

Macroeconomic policies by default, as they have been conducted over the first decade of EMU's existence, are patently suboptimal. Therefore, as the Centre Cournot has argued twice before in manifestos, it is essential to think about the EU-level stance of fiscal policy. This is even more true in the wake of this crisis. Effective macro policies must go hand-in-glove with supply-side policy—a two-handed approach. This implies much more than an effective matching process in labor markets. It has to do with appropriate policies in infrastructure, education, innovation, and European networks. This is especially pertinent for the debt-burdened economies. (It is here where reference to the Marshall plan is pertinent.) In addition to that, financial regulation and its implementation have to become more effective. They have to deliver a robust, effective financial system (making finance conducive to growth). Here there are blatant flaws in the European supervisory landscape. They have to do with financial institutions engaged in a European dimension. Finally, given the lack of nominal exchange rates to absorb regional shocks, EMU also needs at least a minimal level of a fiscal insurance mechanism in addition to responsive labor markets and enhanced labor mobility.

To sum up, EMU cannot continue the way it was originally conceived, in intentional neglect of the economic script book.<sup>7</sup> The financial crisis has forcefully underlined this. Instability does not only arise in the public domain. Financially integrated markets call for integrated surveillance of area-wide institutions. Moral hazard is by no means a sufficient argument against effective crisis management and crisis prevention institutions. The external constraint—current accounts—matters also in monetary union. And a monetary union without a minimum, complementary level of fiscal union is a vulnerable proposition indeed.

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<sup>7</sup> See Klaus Gretschmann and Hans-Helmut Kotz, "The Politics of EMU: Problems in Creating Wahlverwandschaften," in Hans-Hermann Francke, Eberhart Ketzel and Hans-Helmut Kotz (eds), *Europäische Währungsunion—von der Konzeption zur Gestaltung*, Beihefte zu Kredit und Kapital, Heft 14 (Berlin: Duncker & Humblot, 1998), pp. 123–136.

## *Chapter Four*

# Monetary Crisis in a Less Than Perfect Union

*David Calleo*

A decade ago, it was still commonplace to write optimistically about the future of the European Union. My own book at the time, *Rethinking Europe's Future*, some critics thought remarkable merely for observing that no ineluctable process made a European federal union inevitable.<sup>1</sup> My caution was long-standing. I had begun writing about Europe's integration in the 1960s, in the heyday of Monnet's "spillover" theory. Although I did my best to present the Brussels pioneers sympathetically, I thought their vision, a centralized "supranational" Europe, unrealistic. And while it was only natural for an integrating Europe to seek inspiration from the American model, I found the parallels treacherously misleading. Europe is far more diverse than the U.S., culturally, linguistically, and institutionally. Throughout modern history, the continent has been resolutely divided into separate states. Since the nineteenth century, these have mostly been nation-states, which has made them even more distinctive and divided. Their economic policies have frequently been dominated by mercantilist ideas—featuring histories of protectionism, with separate national currencies, sometimes manipulated as weapons in trade wars conducted as a zero-sum game. Given this past, not much seemed to me inevitable about European economic integration. Certainly a union could not be imposed on Europe simply by erecting a "supranational" federal authority. But I had found de Gaulle's vision for European Union—a confederal "Europe of States"—a richer and more persuasive model.

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<sup>1</sup> David Calleo, *Rethinking Europe's Future* (Princeton: Princeton University Press, 2000, 2003); "European Unity: But Can it Last?" *The Economist*, November 1, 2001.

As de Gaulle saw things, Europe's national states remained the political structures able to mobilize public consensus and legitimacy. The traditional states were therefore the proper stakeholders and players for the new Europe. They would participate in a union insofar as doing so enhanced their own national aims. Common European policies would have to be bargains thrashed out among these states. They could not be imposed by a technocracy without national roots, no matter how skillful and dedicated. A federal state with a supranational government stretching across the continent would be unable to generate and sustain a coherent general will. Internal and foreign-based pressure groups might flourish, but such a system would perpetuate Europe's disunity and impotence rather than cure it. Only a confederal constitution—one based on a durable and active consensus among Europe's states—could provide a European Union in conformity with the continent's political realities. Logically, de Gaulle could probably not have denied that his confederacy, to succeed, would itself require the makings of a "European" general will. But he would have insisted that such a collective will was most likely to be reliably discovered through the bargaining of states, and could only be given legitimacy by their agreement.

Convinced by de Gaulle's eloquence, and despite the intense quarrels of the 1960s, I thought Europe's project for confederal Union would go forward. All through the Cold War, three great impulses continued to favor it. One was historical memory. Postwar West-European elites—in France and Germany above all—were determined to build an institutional structure that would prevent the fratricidal wars of the past. Another unifying impulse was fear of the Soviets, which bound the West European states not only to their American protector but to each other. A third was widespread determination to escape from the economic stagnation of the interwar years, a goal believed to require a European Economic Community, which continental Europeans saw as their natural counterbalance to the American colossus.

De Gaulle's "nationalist" view of European unification also carried a critical practical lesson—the European project's continuing need for broad political support from the public at large. De Gaulle was particularly sensitive to the danger of popular disaffection if European integration began to seem an elite project aiming to install a Mandarin

government. Hence his notorious dislike of the supranational rhetoric of the Brussels bureaucracy. A European Union, he insisted, could not be governed effectively by an “*aeropage*” of experts installed in the glass palaces of Brussels.

While I believe de Gaulle had the better arguments, it would be foolish to deny the vital role Monnet’s vision played in launching and continuing to energize the European Community. That vision is particularly enshrined in the European Commission and Court. But even the European Council—the most Gaullist of all the Brussels institutions—is seeded with Monnet-like functionaries—European and national—who ceaselessly propose the policies of confederal Europe. Given France’s bureaucratic traditions, not to mention his own career, de Gaulle understood how the new European system would work. He took care to install France’s own best and brightest throughout the Brussels bureaucracy, a practice continued by his successors. Brussels bureaucrats, in turn, have carefully cultivated ties with the national bureaucracies of member states.

While it is difficult to overestimate Monnet’s influence in the early days of the European Community, it nevertheless seems true that the constitutional structure that emerged from the 1960s and 1970s was essentially Gaullist. The European Community remained an assemblage of sovereign states. But those states increasingly found it in their interest to “pool” sovereignty in a European Union. Paradoxically, this seemed the only way to give reality to their formal sovereignty, and was the most effective way to establish some degree of practical control over their own regional environment. As a result, that Union developed as a hybrid—part supranational and part confederal—each part necessary to the other.

This evolution naturally gave rise to a fundamental constitutional issue, which has kept recurring in Europe’s evolving Union: Is a structure that remains confederal in so many respects a distinctive model on its own, or does it merely indicate the European Union’s incomplete development? In other words, is today’s hybrid confederacy a form appropriate to the durable political realities of continental Europe? Or must the EU, to succeed, move on to something approximating America’s centralized federation?

Reviewing these issues three decades later, as I wrote *Rethinking Europe's Future*, I found the European project even more necessary than during the Cold War. But I also found de Gaulle's political arguments about the nature of that Union still convincing. In many respects, the opening up of Eastern Europe was making the General's ideas more compelling than in the 1960s. Moreover, given Europe's stubbornly pluralistic nature, its hybrid superstructure had, in my view, been a great strength. But it was obvious that it could, on occasion, also be a dangerous weakness. Reaching agreement among bargaining states is inevitably a lengthy and delicate process. In some truly severe crisis it could prove a fatal disability. Of course, Europe's decision-making had been greatly refined over years of practice. Governments had grown used to discussing their problems patiently within the confederal structures until solutions were found. Monnet's experts, often consulting closely with the bureaucracies of the member states, were on hand to point discussion away from intractable confrontations and toward common interests. The process worked best in economic matters. It was far less impressive for security issues. But the Cold War had shielded the European Community from its shortcomings in the defense field. NATO greatly reduced Europe's need for any serious defense run collectively by the Europeans themselves. And whenever transatlantic differences over defense grew acute, the looming Soviet presence discouraged demands that could not be reconciled. In effect, the European Community had adapted successfully to the geopolitical realities of the bipolar strategic system. The U.S. protected Europe against Russia, but Russia also provided leverage for Europe in its relations with America. In many respects, the European Community had made the postwar Euro-Atlantic system tripolar rather than bipolar. This, I came to believe, was probably what de Gaulle had always intended.

The Soviet collapse ended Europe's Cold War shelter. Understandably, the Soviet contribution to European and transatlantic stability was not fully recognized during the Cold War. As a result, the Soviet Union in dying posed a greater threat to the West than in the Cold War. Deprived of its Soviet rival, the U.S. fell into a state of geopolitical and financial euphoria, and soon was enchanted by a unipolar vision of itself as the world's hegemon. NATO was enlarged to assume responsibility for much of the old Soviet sphere. The atrocities of 9/11

inspired America to undertake a global War on Terror, with its proliferation of new enemies and threats. War in Afghanistan was soon followed by war in Iraq. Fiscal discipline collapsed as taxes were cut and absolute military spending returned to or, by at least one estimate, exceeded Cold War levels.<sup>2</sup> Meanwhile, America's huge external deficit kept growing, while the dollar's exchange rate fitfully but relentlessly declined following September 11th.<sup>3</sup> Starting in the mid-1990s, the American economy began experiencing a series of speculative bubbles and crashes, a propensity which by now has gradually matured into an endemic financial and monetary crisis, reminiscent of the 1930s.<sup>4</sup>

Europe, meanwhile, experienced its own post-Soviet crisis. The disappearance of the Soviet threat reanimated geopolitical problems well-known in Europe's past. The reunification of Germany threatened to restore the familiar "German Problem"—a country too big for any internal European balance. Fear of a revived German threat was compounded by the opening up of the rest of Central and Eastern Europe—a region of relatively weak states intrinsically dependent on Germany. To guard against conflict, Europe needed to construct a new relationship with Russia. But West European states and newly liberated East European states had quite different notions about what this new relationship might be. Europe's collective reaction to the Soviet demise was therefore contradictory. The initial member states of the European Community believed the best way to meet the challenges of the Soviet collapse was to accelerate Europe's political and economic integration. Accordingly, they proposed the Treaty of Maastricht (1993), which renamed the European Community the European Union and was, on balance, a militant reaffirmation of Europe's federal aspirations. A radical upgrading of collective European tasks and institutions was designed to master the new situation.

For a start, the EU was to extend its functions to include common defense. Eventually, it was to take the leading role in dealing with

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<sup>2</sup> World Bank Databank, accessed on November 8, 2011. See also Heritage Foundation Report by Mackenzie Eaglen, "U.S. Defense Spending: The Mismatch Between Plans and Resources," June 7, 2010.

<sup>3</sup> The U.S. Dollar index, DXY, is used as a proxy for global dollar strength.

<sup>4</sup> Jon Hilsenrath, Serena Ng and Damian Paletta, "Worst Crisis Since '30s, With No End in Sight," *The Wall Street Journal*, September 18, 2008.

security challenges within its own regional space. European states, however, were deeply divided over these security arrangements. Some wished to go on depending heavily on America's Cold War guarantees; others looked for a more indigenous, inclusive and collaborative European security system—one that united the European states rather than divided them into opposing camps.

NATO, meanwhile, was busy reinventing itself as a global intervention force under traditional American leadership. This had particular appeal for East European states. In general, they were fearful of Russia and eager to join the EU, but skeptical of plans for a more European-based security system, and desperate to cling to American guarantees.

Maastricht also called for European states to collaborate more closely over border controls and immigration. The European project asserted its primacy by setting in train a major enlargement of the EU's membership. Joining the Union was seen as a process for transforming East European states into successful participants in Western Europe's liberal capitalism. Along with enlargement of EU membership, Maastricht's most striking initiative was the euro, the Economic and Monetary Union in Europe (EMU). This was a bold assertion of Europe's collective identity as well as a forceful response to the dollar's frequent gyrations, and the disruptive reactions that followed among Europe's national currencies.

In due course, Maastricht's bold ambitions began to seem contradictory. Enlargement of membership was working at cross-purposes with enlargement of functions. On the one hand the EU was taking on more challenging tasks, presumably requiring firmer and more centralized leadership. On the other hand, enlarging the membership seemed fated to weaken the capacity of a still confederal system to reach any central consensus. Extending the membership to countries emerging from lengthy communist dictatorships would inevitably change the political dynamics of the Union and make the already lengthy decision-making processes still more dilatory. To be sure, the reformist criteria imposed on the new members helped to bring about an impressive transformation in their political-economic systems. Arguably, the new members had to be absorbed into the new European system. Taking them into the EU was the best and perhaps the only solution. Nevertheless it came at a heavy cost to the efficiency of

the confederal institutions at precisely the moment when they were confronting their most severe challenges. Under these circumstances, the Gaullist hybrid constitution inherited from the 1960s began to seem inadequate for the ambitions of the 1990s. Half-hearted efforts at constitutional reform undertaken at Amsterdam (1999) and at Nice (2003) seemed inadequate. Events seemed to be presenting the enlarged European Union with a potentially fatal dilemma: Either abandon Maastricht's ambitions or abandon the Gaullist confederal model and move on to a more centralized federation. The first course meant giving up goals thought necessary if the EU were to meet the historic challenges posed by the Soviet collapse. The second course risked shattering the consensus upon which the Union's survival and advancement had come to depend. As Europe continues to struggle, events grow more and more challenging.

Europe's constitutional dilemma is well illustrated in the current crisis of its Economic and Monetary Union (EMU). A cacophony of expert advice explains how to deal with the immediate emergency, and presents a far greater knowledge of markets and banking than I can offer. Nevertheless there are some larger political and geopolitical dimensions to the present crisis that might be useful to consider—at least as questions if not as answers. For a start, it is important to notice that, strictly speaking, it is not the euro that is in crisis. The eurozone and the EU as a whole are in rough equilibrium with the rest of the world economy. The euro has kept its value remarkably well. The actual crisis is inside the eurozone itself—among the European states that compose the EMU. The danger is not that the euro will lose its value for economic reasons. Rather it is that the EMU, or perhaps the EU itself, will disintegrate.

Much contemporary commentary links the EU's monetary crisis with what I have called its constitutional dilemma. In theory, it might be easier to resolve the crisis if the EU had some sovereign authority capable of deciding the issues rapidly and suppressing opposition thereafter. But if the EU is to remain a liberal construction of liberal states, where legitimate leadership remains based on consensus, it is not clear that a different constitution could have produced a different result. It might be worth noting that the American federation has not been any more successful at generating a clear and decisive solution to America's long-standing fiscal crisis. America's constitutional parts

simply do not agree on what course to follow. In Europe's case, not only are the member states divided, the issues themselves are far from amenable to a straightforward solution. There is no indisputably correct answer waiting to be proclaimed. A substantial body of professional opinion believes, for example, that Europe's monetary union was a mistake from the start. They argue that states like Greece, Spain or even Italy would be better off outside the EMU. It is therefore not easy to argue that the outcomes currently championed by Germany, France, the European Commission, the European Central Bank or the International Monetary Fund are self-evidently correct, or equally in the interest of all parties concerned.

The heart of the problem is often said to be that Europe's monetary union lacks a fiscal union. What is usually meant is that fiscal policy is not subordinated to monetary policy. It is relatively easy to make the case that countries whose fiscal spending shows a large and persisting deficit will have growing difficulty financing that fiscal deficit in bond markets, especially if monetary policy is primarily concerned with preventing inflation.

A sovereign state not in the monetary union would have the option of printing more money—inflating the money supply to cover its swelling deficit. Inflating the currency would presumably put downward pressure on the exchange rate. In due course the currency would devalue which, hopefully, would restore its competitiveness by boosting exports and discouraging imports. Greater growth should then follow. In considering these scenarios, it is worth remembering that devaluations were frequent through the 1950s, 1960s and 1970s, often with unhappy longer term consequences.

In any event, a state in a monetary union cannot follow its own inflationary course unless it can persuade whoever controls monetary policy to inflate the common currency. If the errant state defies the fiscal discipline appropriate for the reigning monetary policy, and others resist financing its rebellion, sooner or later it will very likely face a financial crisis. Then banks, and others who hold its debt, will fear for their capital.

One commonly advanced solution is constitutional, a more robust Stability and Growth Pact, one that effectively limits debt and deficits. The issue is whether publics will be willing to endure the regime of

prolonged austerity that the current anti-inflationary bias of the European Central Bank (ECB) requires from states like Greece. Of course, the adjustment of such states would presumably be easier if the ECB permitted more inflation. In the end, some greater inflation seems likely to be part of any successful resolution of the present debt crisis. At the moment it is said to be unacceptable to the more virtuous core states, Germany above all. Germans are commonly said to be traumatized by their own Great Inflation of 1923—a hyperinflation provoked and sustained by their own government. The present ECB policy very much reflects the hegemony of the “German model.” At Maastricht that model enjoyed an intellectual predominance among the French as well as the Germans and their traditional allies. By now, however, it is unclear that the model is compatible with the political-economic cultures of all European countries, or indeed suits their actual economic situations. Italy, for example, followed a model of frequent depreciation for several prosperous decades. It seems unlikely to remain yoked to a Germanic monetary regime if Italians come to believe that doing so condemns them to a long period of high unemployment and mediocre growth.

It would be easier if it were possible to dismiss revolts against Germanic monetary discipline simply as populist uprisings against a self-evidently correct economic discipline. Critics of EMU and its Germanic discipline, however, are not so easily dismissed. Today’s populist agitation against austerity comes armed with a powerful and persuasive Keynesian economic tradition of its own. That tradition, forged in the Depression, is still out of fashion but unlikely to remain so during an era that more and more resembles the 1930s themselves. Keynes’ basic message was that deflation is worse than inflation. He admitted that hyperinflation was still worse, but was unlikely without the positive connivance of the monetary authorities themselves. A strong fear of inflation nevertheless remains lurking in today’s markets and reinforces the hegemony of the German model. What helps give that fear credence is the explosion of footloose liquidity in the global economy over recent decades. Here the principal culprit is the central bank of the postwar global hegemon—the U.S. Federal Reserve. The story of the euro is inseparable from the story of the dollar.

Considering the lingering fear of global inflation should remind us that Europe’s modern crisis is more than a contest between rival eco-

conomic theories or cultures, but takes place within a global framework that is undergoing revolutionary changes. It may be worth speculating on how these changes affect Europe's monetary crisis. Today's geopolitical scene presents a clash between multiple emerging and declining superpowers and their geo-economic blocs. Of particular significance for Europe's future are the roles of the U.S. and China. Each poses distinctive challenges, opportunities and threats for Europe.

Arguably, it was the threat to Europe posed by the U.S. dollar that was the principal inducement for the European states to create the euro. The dollar has been unstable since the middle of the 1960s. Fear of the inflated dollar and calls for European monetary solidarity were linked explicitly in 1965 by no less a figure than General de Gaulle. It was in that year that de Gaulle issued his famous warnings about how the monetary abuses permitted by the Bretton Woods system were not only politically unjust but were building up inflation for the future, and pointing toward the collapse of the dollar's value. In raising these charges he was resurrecting French grievances of the 1920s, given their classic statement in the writings of the French economist who served as de Gaulle's economic adviser, Jacques Rueff.<sup>5</sup> Rueff's complaints centered on the "gold-exchange standard" for according an "exorbitant privilege" to the so-called "reserve currencies"—the dollar and the British pound. That privilege was the right to use dollars or pounds, which American and British governments could themselves create at will, as money that other countries were expected to accept in place of gold. In the French view of monetary history, it was this diseased system, installed in 1923, that had paved the way for the inflation of the later 1920s and the financial collapse of the 1930s. That same system had been re-installed at Bretton Woods. As a result, de Gaulle warned, the world economy was set on the same path as in the interwar years. De Gaulle's objections were partly economic: the system encouraged the U.S. to spend and invest freely around the world and to consume imports at home. De Gaulle admitted that this had been highly beneficial to the world economy initially, but claimed it was now exporting inflation to Europe. As de Gaulle had implied, within a few years world currency markets were refusing to support

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<sup>5</sup> Christopher Chivvis, *The Monetary Conservation: Jacques Rueff and Twentieth Century Free Market Thought* (DeKalb: Northern Illinois Press, 2010).

the dollar's official exchange rate. In theory the Americans were supposed to back up their exported dollars with gold. U.S. gold reserves dwindled and by 1971, they were no longer able to do so. Accordingly, the Nixon administration abandoned Bretton Woods for a floating dollar. In effect, the gold-exchange standard of Bretton Woods was replaced by a simple dollar standard. The dollar continued its role as the world's principal reserve currency. The U.S. continued its global free-spending, but abandoned any obligation to support the exchange rate. The American current-account deficit grew steadily worse, despite continuing depreciation. The dollar's exchange rate grew more and more unstable, depending mostly on the vagaries of domestic American politics. The dollar's instability fell unevenly on Europe's diverse national currencies, with distorting consequences on prices, savings, and investments within the Common Market. Not surprisingly, plans for European Monetary Union date from this period.

De Gaulle's critique of Bretton Woods was, above all, geopolitical. The right to spend abroad as it pleased encouraged the U.S. not only to buy up the industries of others but to intervene militarily around the world. The 1960s and early 1970s were, of course, the time of *le défi américain* and of Vietnam. Half a century later, the U.S. deficit with the world economy had reached levels unimaginable in the 1960s. De Gaulle would doubtless be surprised and horrified to learn how good a prophet he had been. The U.S., no longer defending the world against communism, was now presenting itself as the unipolar keeper of world order—the indispensable foe of terrorism and nuclear proliferation wherever it was suspected. Accordingly, U.S. defense spending was greater than that of all the rest of the world combined. The fiscal consequence was a huge budget deficit. Europeans today doubtless have ambivalent feelings about America's role as hegemon. They are nevertheless glad to have the Americans around as a balancer against Russia, China and Iran. It allows them to play both the role of faithful but limited ally, as they are continuing to do in Afghanistan, but also to distance themselves from unpopular American moves that alienate Europe's strategic neighbors, like Russia, Iran or the Arabs. Europeans must also wonder how long the U.S. will be able to sustain the huge deficit that goes with its world role. Hence the continuous, if not very compelling, pressure for the EU to develop its own capacities for collective defense.

Europe's American Problem is, of course, closely related to its China Problem. Not only does the U.S. spend freely everywhere but it has proclaimed itself the world's 'consumer of last resort.' Inevitably great pools of exported dollars have accumulated around the world—above all in China. This has made China the guardian of the dollar's exchange rate. Should China cease to hold its huge annual dollar earnings in its reserves, the dollar's exchange rate would likely collapse. Given America's huge current account deficit, the dollar has no real support. What the Chinese do with their dollars must therefore be of great concern to the Europeans. Successive American governments have been pressing the Chinese to let the dollar fall. But it would fall not just against the Chinese renminbi but also against the euro. China, with its still drastically cheaper labor costs, would remain highly competitive. Europe would presumably be more vulnerable—to American as well as Chinese competition, at home as well as overseas.

Retaining a competitive exchange rate is important for a Europe competing with America for the high end of manufacturing and services. A dollar depreciating rapidly is something Europeans have to take seriously. Meanwhile, their own trade relations with China have been growing increasingly important. Europe is already China's largest export market, and China is Europe's second-largest trading partner after the U.S.<sup>6</sup> Europe's trade deficit with China has been growing rapidly over the past few years, although its external trade with the rest of the world remains roughly in balance overall [Figures 1 and 2]. This distinguishes the EU from the U.S., which has run an increasing deficit with China as well as a steady current account deficit with the world in general.

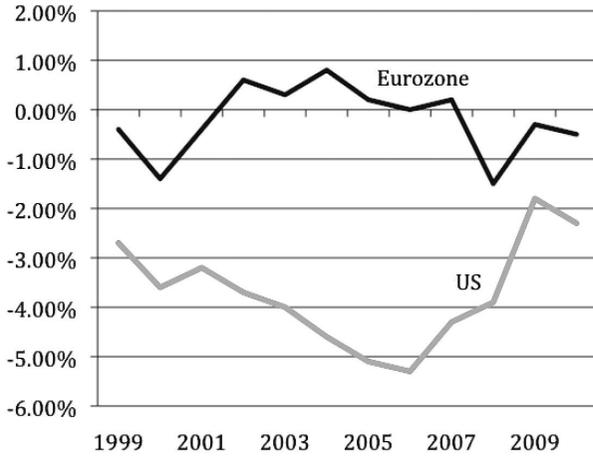
A more detailed breakdown of EU trade suggests the complex interdependency among EU states. Europe's overall balance with the world depends heavily on the bilateral surpluses of a few major exporting countries—Germany in particular, which is the 2<sup>nd</sup> largest exporter in the world.<sup>7</sup> However, the better part of Germany's exports

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<sup>6</sup> Eurostat news release, "Strong Increase in EU27 exports to China in the first half of 2010," October 5, 2010.

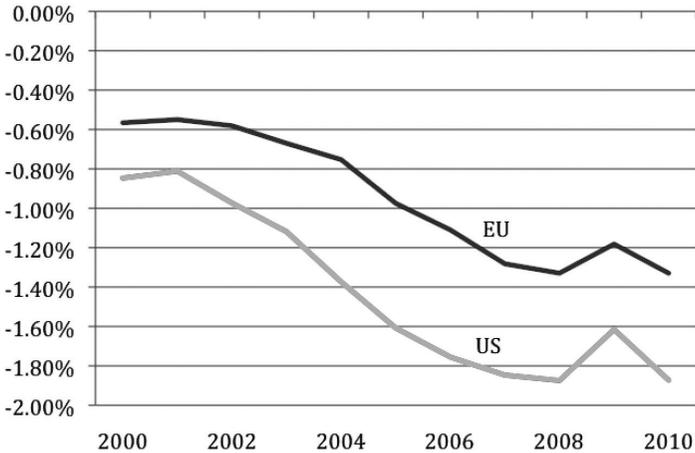
<sup>7</sup> CIA World Factbook.

**Figure 1. Current Account as a Percentage of GDP**



Source: ECB Statistical Data Warehouse, World Bank World Development Indicators, U.S. Bureau of Economic Analysis International Transactions Accounts Data. Note that eurozone figures are for external trade, and the index changes based on adoption of the euro.

**Figure 2. Trade Deficit with China as a Percentage of GDP**



Source: ECB Statistical Data Warehouse, World Bank World Development Indicators, U.S. Bureau of Economic Analysis International Transactions Accounts Data. Note that the EU index changes on accession.

are sold within the eurozone and the EU itself.<sup>8</sup> Therefore, in brief, the EU is a large collective economy whose member states trade mostly with each other. EU trade is, however, so large that its member states collectively are also the world's leading exporters and importers for trade beyond Europe.<sup>9</sup> Prowess in maintaining these internal as well as external exports is of particular importance to many of several of the EU's member states—including France, Italy and, of course, Germany. These big continental countries continue to have a large industrial segment to their economies, a section that employs a significant proportion of the workforce. In 2007, before the crisis, the industrial base of the EU27 accounted for 37.1% of its GDP and 39.6% of its employment.<sup>10</sup> The need to protect the competitiveness of its industrial sector helps to explain Germany's historic aversion to domestic inflation, an aversion enshrined in the policies of the ECB. It also highlights Europe's vulnerability to the huge dollar overhang, which could easily cause the dollar to depreciate sharply.

The interesting question for our purposes is whether America's dollar's potential crisis promotes or weakens European solidarity. Whereas the EU on the whole and the eurozone in particular form a large integrated and relatively closed economy, individual member states can nevertheless continue to see themselves as relatively small and open economies, searching for a niche in a global market. Does the dollar threat thus work to set the European states against one another? The weaker exporting Europeans might want a weak euro that follows the downward path of the dollar. The stronger exporters, like Germany, are traditionally more fearful of inflation and want a stronger currency. Of course, it might be argued that the stronger European states, with their outsized trade surpluses, are protected by the weaker with their big trade deficits. Without that protection, the euro might very likely be extremely overvalued in relation to the

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<sup>8</sup> Germany's exports to the EU as a percentage of total exports accounted for 71% in 2010. Statistisches Bundesamt Deutschland, "Foreign Trade: Ranking of Germany's trading partners in foreign trade."

<sup>9</sup> The World Trade Organization, [http://www.wto.org/english/news\\_e/pres10\\_e/pr598\\_e.htm](http://www.wto.org/english/news_e/pres10_e/pr598_e.htm), accessed on August 11, 2011.

<sup>10</sup> Figures derived from the European Commission for Enterprise and Industry, "EU Manufacturing Industry: What are the Challenges and Opportunities for the Coming Years?," April 26, 2010.

depreciation-prone dollar. Should a severe dollar collapse lie in the future, the advantages of a closely integrated European political and economic bloc are not difficult to imagine.

To see this putative harmony of interests, however, Europeans probably need a constitution that permits them to visualize themselves less as separate states and more as the union they are, and presumably wish to be. But reinforcing this shared interest and identity calls for either a better balance of trade and investment among the EU states, or for an arrangement whereby the surplus states, recognizing their interdependence, share their bounty with the deficit states.

Along with the decline in America's trade balance, probably the most dramatic event in the world economy has been Asia's rise. How will Asia's rise affect Europe's federal experiment? This topic is vast and elusive, but a few observations may be useful. "Emerging" Asian economies, China above all, but also India and several others, are highly competitive and have grown very rapidly. While all face serious problems with inflation, political dissension and environmental pollution, their labor costs, even if rising rapidly, will remain at a fraction of European and American levels for the foreseeable future. Given the world's environmental problems, together with the shortage of energy and raw materials, world growth seems unlikely to accommodate both a continuing Asian rise, together with enough growth to sustain customary postwar expectations in the West. As a result, the world will continue to witness a fundamental shift in wealth and income from the West to Asia. From a longer historical perspective, there seems nothing remarkable in this. For most centuries of recorded history China has been the world's richest and largest country. Its outrageous humiliation of the past two centuries is now being reversed. Given the high living standards that prevail in the West, China's rise hardly needs to end in catastrophe. But in addition to the daunting demographic and environmental problems that lie in store for the world in general, the West and Japan will also face an uncomfortable political, social and cultural adjustment to slow growth and arduous competition. Avoiding violent conflict will require imaginative structures for global governance. Indeed, Europe's experience with regional federation may have a good deal to offer the rest of the world.

Like the weak dollar, rising Asia presumably makes all the more desirable the development of a harmonious European region, able to reconcile and assert its interests. Will a more competitive world eventually require a more centralized federalism than the Gaullist model allows? It might. Much will depend on how China itself evolves politically and socially, or on how much West and East are disposed to accommodate each other, or are capable of carrying out their own good intentions. A world locked in combat over scarce resources may well require more authoritarian governments all around. Ideally, some enlightened combination of technology and diplomacy will deliver an environment where liberal governments based on consensus can survive. In any event the global dimension of today's economic crisis, while it may make Europe's federal aspirations more difficult to achieve, should also make them more self-evidently beneficial to pursue.

Europe's financial crisis is, at heart, political. It is the failure to control budgets and supervise banks—two fundamental tasks of government. What gives rational support to pessimism about the euro, if not any corresponding faith in the dollar, is the fear that the EU's confederal institutions are too weak to provide the timely and steady leadership required to steer through the rapids of today's financial crisis. Over the longer term, can the EU evolve institutions and habits strong enough to constrain states, firms and markets from the runaway accumulation of ailments characteristic of recent years? Many commentators have been highly critical of the EU's governing institutions in the current crisis. Not surprisingly, there have been heated and often confused disagreements among the partner states. New institutions and practices have evolved rapidly in the past few years. Policy has often stumbled. But it is not clear that Europe's performance has been inferior to that of the U.S. To see U.S. federal institutions as regularly more capable of successful market regulation or coherent macroeconomic policies seems a considerable exaggeration. Given our recent experience, it is not self-evident that appropriate regulatory, monetary and fiscal policies would be easier for Europe to achieve if it had a more centralized federal system, like our own.

There are, after all, other models for successful unions of sovereign states. One comes from the monetary sphere itself—the Gold Standard that de Gaulle celebrated in his press conference on the dollar. For several decades in the nineteenth century the major European

states did collectively manage gold as a stable and successful common currency, without a federal government or, arguably, without even a single hegemonic power. The major financial centers of the world—London, Paris, Berlin, Vienna, and New York—collaborated to sustain rules that more or less automatically kept themselves in balance with each other—rules that amounted to an early Stability and Growth Pact. London, the biggest and most active center, nevertheless remained in equilibrium with the rest. In crises, the major centers did sometimes actively cooperate in the general interest—as when the Bank of France on occasion quietly bailed out the sometimes overextended Bank of England.<sup>11</sup> This collegial model of voluntary monetary cooperation died in World War I—a time when Europeans abandoned any pretension to impose on themselves rational self-restraint in the common interest. After the great madness of 1914 came the renewed insanity of 1939. Arguably, Europe has never really recovered from these two great wars of the last century. Instead, Europe came close to destroying its prosperity and civilization forever—a lesson that we can hope France, Germany, and the rest of Europe have not forgotten. Similarly we can hope that today’s world offers ample evidence of how vulnerable a rich but divided and therefore weak Europe can be. We can hope that the dangers appear vivid enough to dampen any serious rebirth of narrow old-fashioned nationalism on the part of the Germans, the French, the British, or indeed the Americans.

Since the end of World War II Europe’s states have been in the midst of a great experiment to reestablish and stabilize the relative order and comity that prevailed among them before 1914. Europe’s experiment with federalism, of course, recalls our own but is in some respects very different. When we look at Europe’s federal model, we cannot help but note its relative lack of a strong central power. As a result, we tend to see Europe’s Union as an early, incomplete or perhaps failed version of our own. Our own history teaches us to see things in this way, whereas Europe’s history suggests a different perspective. European states have struggled for centuries to prevent the rise of a dominant central power. That determination has continued, even as they set about building their Monetary Union. At the outset,

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<sup>11</sup> Marcello De Cecco, “From Monopoly to Oligopoly: Lessons from the Pre-1914 Experience,” in Eric Helleiner and Jonathan Kirshner, eds., *The Future of the Dollar*, (Ithaca: Cornell University Press, 2009).

most member states might have preferred to stop with a reinforced European Monetary System, rather than a single currency. They felt compelled to go on to a single currency because they lived in a world system dominated by the dollar. To protect themselves from the thrashings of the imperial dollar, Europeans had to go on to create the euro. Monsters, we might say, beget monsters.

Under the circumstances, we should perhaps try harder to avoid seeing the European Union as a continental nation state in the making, a primitive, incomplete or decadent version of ourselves. Instead, we might consider it a new political formula for a new world order—one that builds on the achievements of nation states and links them in a fashion that brings a stable peace to their relationships. For our own sake, we should wish them well.

## *Chapter Five*

# **Rekindling the EU's Economic Growth through Science and Innovation: Can the Europe 2020 Strategy Step Up to the Challenge?**

*John Gabriel Goddard*

The Europe 2020 Strategy, which was approved by the European Council in June 2010, proposes a coordinated policy framework to rekindle economic growth in the EU. Its focus is on resolving long-standing structural weaknesses—the innovation gap, skills shortages, long-term unemployment—and prioritizing global public goods linked to climate change.<sup>1</sup> That such a comprehensive agreement could be reached is a remarkable achievement at a time when EU policymakers are confronted with a crisis of confidence in the euro and the specter of sovereign default. It suggests that the Europe 2020's predecessor, the Lisbon Strategy, has helped to construct a common, European agenda for growth—although this consensus did not automatically translate into commitments to reach the agreed targets.

The critical question is whether the Europe 2020 Strategy will remain a call for action, or whether it will develop into an effective action plan that truly contributes to the region's recovery and long-term competitiveness. Serious challenges stand in the way of “operationalizing” the Europe 2020 Strategy. If the decade since the Lisbon Strategy was launched is an indication, there is a serious risk of not meeting the

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<sup>1</sup> The long-term growth vision embedded in the EU 2020 Strategy stands on three legs: first, “smart growth,” meaning an economy that is based on knowledge and innovation; second, “sustainable growth,” by promoting a more resource-efficient, greener, and competitive economy; and third, “inclusive growth,” fostering a high-employment economy resulting in social and territorial cohesion. For details, see “Europe 2020. A strategy for smart, sustainable and inclusive growth,” Communication from the Commission, Brussels: European Commission, 2010 and [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm).

targets this time around. Whether this happens will depend on governments making good on their pledges to raise budgetary expenditures, and, just as importantly, on implementing effective partnerships with the private sector. EU funds could play an important complementary role if they are scaled-up, as these resources can target the most pressing market failures and coordination problems. But for this to happen, the institutional failures that have constrained absorption of EU funds would need to be addressed through systemic reforms.

The stakes are high, as there is a continuing productivity gap between the EU and the U.S., and income convergence *within* the EU has stalled as a result of the global financial crisis. Long-term data collected by Madison<sup>2</sup> and analyzed by Gordon<sup>3</sup> reveal that after a century of secular decline, western Europe closed the gap in GDP per capita and labor productivity starting in the 1950s (Figure 1). But from the 1970s, as Europe's "golden growth" era petered out, output per capita stalled at 75% of U.S. levels. And, within the EU, GDP per capita of post-transition economies increased relative to the EU-15 until the hard landing in many of these countries dampened the convergence process (Figure 2).

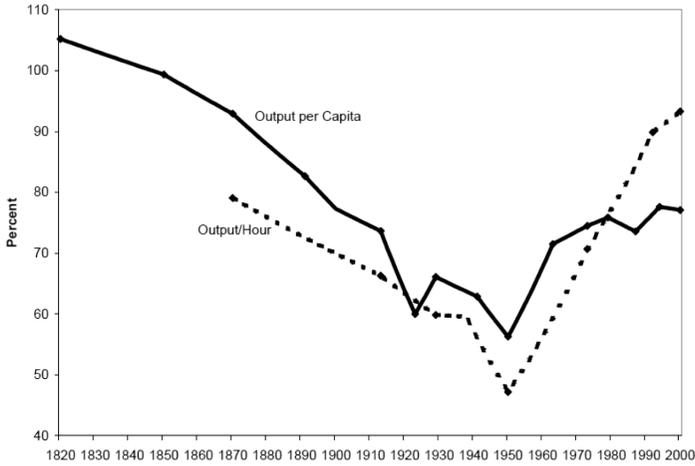
Multiple ingredients would be needed to reactivate the convergence process, but innovation is likely to be one of the most potent ones if we believe recent studies explaining the factors behind the transatlantic productivity gap as well as that inside Europe. Using a GDP accounting approach, Mourre estimates that two-thirds of the gap in GDP per capita with the U.S. is explained by lower labor utilization in the EU15 and euro area (see Figure 4), whereas hourly labor productivity accounts for the remaining third; when it comes to new member states, 90% of the gap is attributable to labor productivity.<sup>4</sup> What is behind the disparity in labor productivity? The answer

<sup>2</sup> Angus Maddison, *The World Economy. A Millennial Perspective (Vol. 1). Historical Statistics (Vol. 2)* (Paris: OECD, 2006), p. 629.

<sup>3</sup> Robert J. Gordon, "Two Centuries of Economic Growth: Europe Chasing the American Frontier," NBER Working Paper 10662 p. 49 (Cambridge, MA: National Bureau of Economic Research, 2004).

<sup>4</sup> Gilles Mourre, "What explains the differences in income and labour utilisation and drives labour and economic growth in Europe? A GDP accounting perspective," *Economic Papers*, No. 354 (Brussels: European Commission, Directorate-General for Economic and Financial Affairs, 2009).

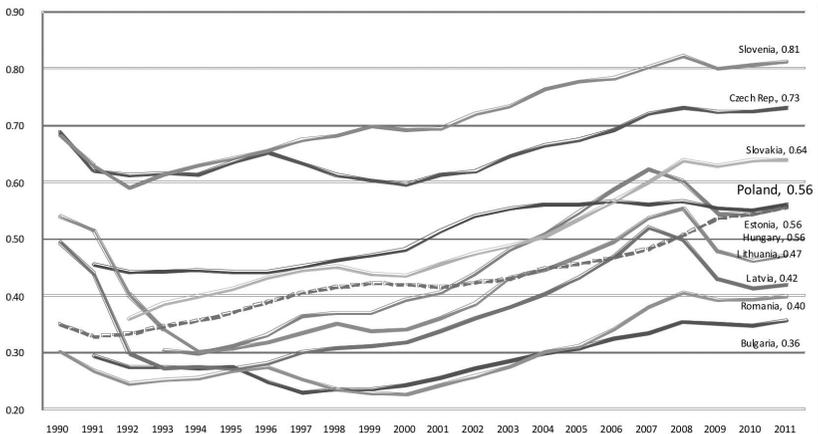
**Figure 1. Ratio of Labor Productivity in Europe Compared to the United States**



Source: Gordon, op. cit.

Note: This ratio takes Europe to include: Austria, Belgium, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom.

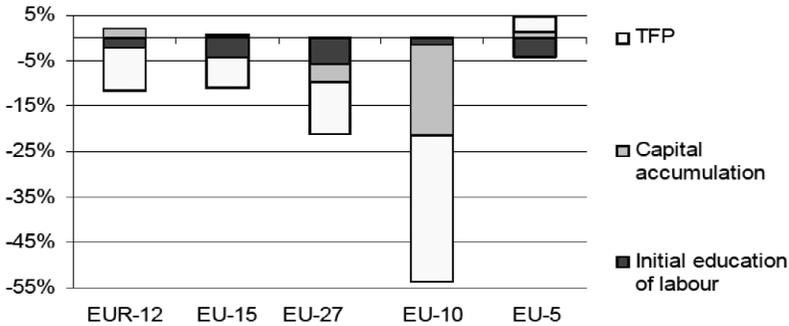
**Figure 2. GDP Per Capita in EU-10 Countries (EU-15 = 100), 1990–2011**



Source: World Bank, Europe 2020: The Employment, Skills and Innovation Agenda, p. 9 (Washington, DC: World Bank, 2011).

Note: Eurostat, GDP Per Capita in Purchasing Power Standard.

**Figure 3. Driving Forces Behind the EU's Labor Productivity Gap Relative to the U.S.**



Source: Mourre, *op. cit.*

turns out to be much lower total factor productivity (TFP), which is a result of legacy issues such as specialization in low value-added manufacturing, the substantial market share of companies with outdated technologies/products, and weak commercialization of scientific research results.

The developmental experience of knowledge-driven economies like Israel, Finland and Korea has created a global consensus about the importance of innovation as a source of growth. But even those who believe that innovation can solve the long-term growth conundrum facing Europe have a hard time explaining how to do it. This is because innovation is no “silver bullet.” It depends on intangible factors, such as getting the incentives right inside scientific organizations. And because it is hard to define and measure innovation in a way that everyone agrees with, it can be difficult for government officials or managers to justify the necessary investment. In addition, even though the private and social rewards of innovation can be huge, they are highly uncertain, making it a hazardous investment, especially for smaller companies that cannot diversify their risks.

This chapter will argue that the Europe 2020 Strategy (henceforth “Europe 2020”) moves the debate about scientific research and innovation policy in the right direction. Nevertheless, to successfully cre-

ate a *focal point*<sup>5</sup> for multi-national R&D investments that are funded and performed by a variety of public and private actors, there is a need for concrete steps that clarify the “how to.” The insights from successful (as well as failed) experiences offer options that can increase the chances of success of Europe 2020. In particular, this will mean efforts to: (i) reinforce the links between the overall R&D targets and national and European innovation policies; (ii) make the most of the tradition of excellence in basic research, by replicating successful institutional and governance models that already operate in the EU; and (iii) greatly stimulate R&D from private sources.

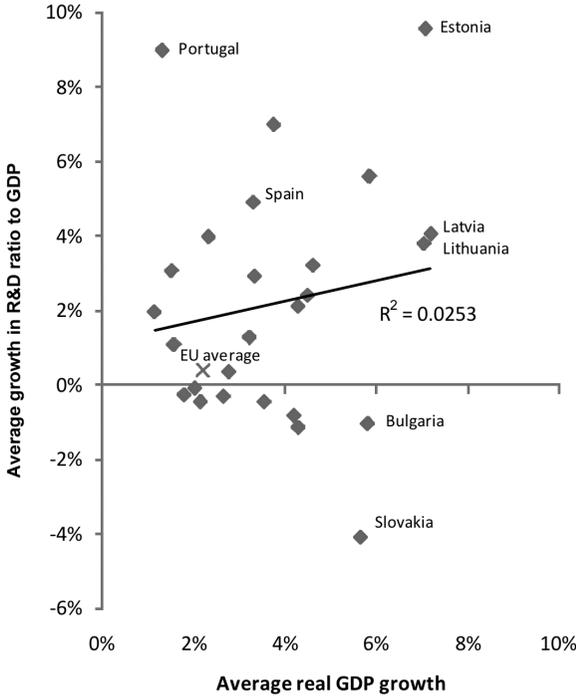
### **Turning EU-Level Coordination into National and EC Commitments on Research and Innovation Policy**

What goals have been formally agreed at the EU level with regard to research and innovation? Most importantly, Europe 2020 reinstates the Lisbon Strategy target to increase R&D from 2% of the EU’s GDP in 2010 to 3% by 2020. The track record suggests this announcement, by itself, is unlikely to produce the expected results. From 2000 to 2008, the EU and the U.S. had very similar growth rates in GDP (around 2.2% per year in real terms) and R&D intensity (only 0.4% per year). Growing at this rate, the EU’s R&D intensity would barely reach 2.4% in 2050. Within Europe, fast-growing countries in the Baltics and the Iberian Peninsula managed to increase their R&D intensity, but in other new member states (Poland, Bulgaria, Slovakia) the R&D expenditures failed to keep pace with growth (see Figure 4). What this means is that the 2000s were marked not only by de-industrialization, with manufacturing progressively moved to lower cost destinations, but also by “de-R&D-ization.” Of Europe’s innovation leaders, only Finland and

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<sup>5</sup> The description of a *focal point* made by Schelling continues to be relevant: “Once agreement is formally reached, it constitutes the only possible focal point for the necessary subsequent tacit collaboration; no one has a unilateral preference now to do anything but what he is expected to do. In the absence of any other means of enforcement, then, parties might well be advised to try to find agreements that enjoy this property of interdependent expectations.” Thomas Schelling, *The Strategy of Conflict* (Cambridge, MA: Harvard University Press, 1960), p. 135.

**Figure 4. Growth in GDP and in the R&D to GDP Ratio in the EU (%), 2000-2008**



Source: Author's calculations using Eurostat.

Germany saw R&D intensify during the good years, whereas the UK and France actually fell behind.

One drawback of the 3% R&D intensity target agreed in the Lisbon Strategy is that it was irrelevant for well-established knowledge economies like Finland and Sweden (already above 3%) and unrealistic for a majority of countries that started from low levels (below 1%). This made it an implausible focal point. The architects of the Europe 2020 moved in the right direction by recognizing that every country has a different starting point and therefore national governments should set their own targets. Unfortunately, in the midst of a down-

turn, this choice was conducive to conservatism.<sup>6</sup> First, governments selected targets that are within a close range of their existing R&D levels—for example, Finland set itself a target of 4% by 2020 yet it is already at 3.9% today. Second, the national plans envision a slow (linear) increase in R&D, which will reduce the impact on growth as it takes time for the economic benefits from R&D to materialize.<sup>7</sup>

For Europe 2020 to boost R&D, the national targets need to translate into real—i.e., fiscal—commitments by countries. Even during the time when countries had more fiscal space than they do today, public spending on R&D barely kept up with tax revenue in many EU countries. And during the bad times, the reduction in science and innovation programs proved disproportionate. This has resulted in skepticism by policymakers like Wim Kok, who in a 2011 policy brief stated that “there appears to be a structural lack of connectivity between what is said in Brussels and what is perceived as being urgent in the member states.”<sup>8</sup>

What will it take to have adequate follow-through on the national R&D targets? Periodic monitoring of Europe 2020 is an improvement over the Lisbon Strategy, but because the recommendations made by the EC are not binding and carry no penalties, it will only be effective

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<sup>6</sup> The European Commission has criticized this in its first progress report on the Europe 2020 Strategy: “there is a risk of relatively low level of ambition in setting national targets and of an excessive focus on the short term... the aggregation of the provisional national targets shows that the EU still has some way to travel to meet the EU headline targets agreed by the European Council.” European Commission, “Annual Growth Survey 2011: Advancing the EU’s comprehensive response to the crisis,” including “Progress Report on Europe 2020 (Annex 1),” Communication from the Commission (Brussels: European Commission, 2011).

<sup>7</sup> A macroeconomic simulation conducted by staff at DG-ECFIN concludes that the policy actions in the innovation area of the Europe 2020 strategy would result in a modest 0.5% increase in GDP by 2025, whereas the long-term impact 20 years later could be 2%. The exact numbers are subject to great uncertainty, but what’s clear is that innovation requires a longer time to deliver the benefits. See Alexandr Hobza and Gilles Mourre, “Quantifying the potential macroeconomic effects of the Europe 2020 Strategy: stylised scenarios,” *Economic Papers*, No. 424 (Brussels: European Commission, Directorate-General for Economic and Financial Affairs, 2010).

<sup>8</sup> Lisbon Council, *An Action Plan for Europe 2020: Strategic Advice for the Post-Crisis World* (Brussels, 2011).

if it creates an incentive to “move up the scoreboard.”<sup>9</sup> Finland’s experience suggests that active participation by top policymakers (the Prime Minister, Minister of Finance) in key coordination bodies is critical. This participation is essential for funding needs of scientific institutions and innovation programs to be properly represented in budget appropriation discussions and to motivate action on the reform front.

In the current economic environment, central and eastern European governments have a unique opportunity to assume leadership for the EU’s innovation agenda. A major stumbling block is that most member states that increased their R&D intensity in the 2000s have faced a serious downturn that has led to sharp reductions in public spending and private investment. In particular, these include the Baltic states, Ireland, Spain and Portugal. For these countries, just getting to the pre-crisis R&D levels could take several more years. Given this context, Poland, a large and growing economy with a low and declining R&D-to-GDP (0.8%), could play a catalytic role. The Czech Republic, Slovakia and Bulgaria also fared better and could use this opportunity to dramatically narrow their R&D gap, thereby accelerating convergence in productivity and income.

To grasp this opportunity, central and eastern European member states would have to frontload their planned budget increases for scientific research and innovation and, more importantly, start to tackle structural issues that are a legacy of the system that was in place before the transition. Specifically, there are three legacy issues that seriously constrain the performance of the innovation system: first, weak institutional capacity and lack of experience with innovation support programs; second, a low share of private R&D in comparison to OECD and EU standards; third, the isolation of, and outdated governance in, many public research organizations (PROs). A sharp increase in public R&D, without building capacity in the public administration, new measures to stimulate private R&D, or systemic reforms of the PROs, will likely lead to an erosion in the quality of subsidized projects given the low absorption capacity that exists today.

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<sup>9</sup> This type of incentive has been created by the World Bank’s Doing Business report and the World Economic Forum’s Global Competitiveness Index, as countries see that these rankings affect investor perceptions. It is unlikely such competition will be aroused by Europe 2020 because of its regional scope and thematic focus.

The experience in Israel suggests that having a simple institutional set-up with clear leadership for the research and innovation agenda—in the form of the Office of the Chief Scientist—can improve the implementation of innovation support programs, as well as help to mobilize political support and stabilize funding. Having a single ministry or agency that can champion this agenda mitigates cross-ministerial coordination problems that plague many EU countries, in which science and innovation policies take a second place, because the ministry is responsible for other priorities as well—this could be primary and secondary education, energy, foreign investment, and so on.<sup>10</sup>

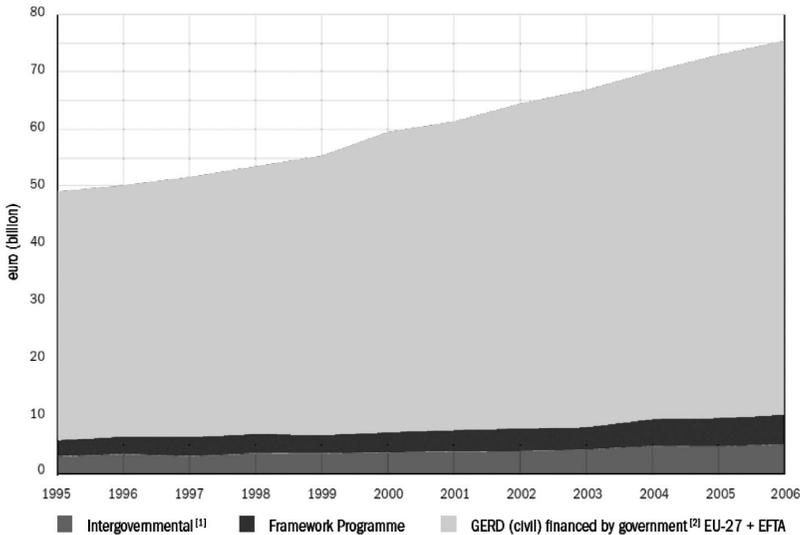
Another lesson from Israel is that it is more likely that policymakers and legislators will see the merits of investing public resources in science and innovation if there is a convincing case about the quality of public R&D expenditures—to put it in American slang, they need to see “bang for the buck.” This means much more effective monitoring and evaluation of the results when there is public funding; it also implies taking concrete action so that successful programs are scaled-up, or transferred to the private sector, and failing programs are closed. Serious evaluations of innovation programs simply do not take place in many EU countries, and without them it is impossible to corroborate the direct and indirect impact of the subsidies.

EU funds earmarked to scientific research and innovation could themselves play a central role in achieving the Europe 2020 targets.

Up to now, the EC’s Framework Programmes (FP) to support research and technological development have accounted for a relatively small piece of the pie (see figure 5, table 1). Even so, they have been important because FPs are less affected by cyclical ups and downs and they can support long-term R&D projects, as the funding envelope is decided for a multi-year period. FPs have also proved

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<sup>10</sup> But it is worth remembering that unlike in other economic policy areas, there is as yet no consensus at the European level about the right institutional and governance model for coordinating/ implementing innovation policy. If the history of central banks is anything to go by, it will take several decades before there is enough accumulated experience by practitioners and academics to arrive at a unique EU model. The fact that *Research Policy*, the first specialized journal for innovation policy, was founded in 1971 is an illustration of how young this branch of social sciences is, as before this time there were only scattered articles on this topic.

**Figure 5. Structure of Public Funding of R&D in Europe**

Source: Commission of the European Communities, "A more research-intensive and integrated European Research Area: Science, Technology and Competitiveness key figures report 2008/2009," p. 103 (Brussels: European Communities, 2008).

**Table 1. The EC Framework Programme for Research and Technological Development**

Framework Programme	Period	FP Budget (billion euros)	% of total EU budget <sup>1</sup>
First	1984–1987	3.8	2.9%
Second	1987–1991	5.4	3.3%
Third	1990–1994	6.6	2.7%
Fourth	1994–1998	13.2	4.2%
Fifth	1998–2002	15	4.4%
Sixth <sup>2</sup>	2002–2006	17.5	4.3%
Seventh <sup>2</sup>	2007–2013	53.3	5.5%
Eighth <sup>3</sup>	2014–2020	80	7.8%

<sup>1</sup> This takes account of EU enlargement; the numbers shown are also adjusted for the overlap existing between FPs, but this has a small impact (below 1%).

<sup>2</sup> Includes Euratom.

<sup>3</sup> Estimated.

Source: Author's calculations based on EC financial participations in FPs in the Decisions of the European Parliament and of the Council; and EU budget data in Annex 2 of the EU budget 2008 Financial Report<sup>a</sup>

<sup>a</sup> Commission of the European Communities, *EU Budget 2008 Financial Report* (Luxembourg: European Communities, 2009).

effective at fostering international cooperation, filling a critical gap in the funding space, as national governments are reluctant to cross-subsidize foreign researchers and firms unless there is a clear benefit at the local level.<sup>11</sup> Scaling-up the FP that will cover the period 2014-2020 (this will be called the “Horizon 2020 Programme”) is recognized as a priority by the Barroso Commission, which has announced an ambitious proposal to set aside €80 billion for FP8. If approved, it would represent a 46% increase from the current FP7, and it would mean that 7.8% of the total EC budget for 2014-2020 would flow towards research and innovation. The decisions about the EC budget at the European Parliament and the Council will determine the fate of this proposal.

Besides the FPs, the Structural Funds (SFs) have become a major source of EU funds in this area. Whereas the FP focus on research excellence and encouraging mobility of the best researchers, which means that Europe’s “innovation periphery” gets only a small fraction of the available resources, the SFs can be designed to respond to national needs, and help raise the average capacity of domestic research organizations and firms. There is room to increase the share of SFs allocated to research and innovation and doing so would catalyze national commitments because the co-financing rules require national beneficiaries to put matching contributions on the table. But there are bottlenecks in absorption capacity that need to be dealt with.<sup>12</sup> Furthermore, there will be a greater long-term impact if additional funds target the demand-side of innovation, encouraging risk-taking by private firms so they undertake breakthrough innovations instead of co-financing run-of-the-mill technology upgrading.

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<sup>11</sup> This can seriously undermine cooperation, as the benefits from knowledge and technology transfer tend to be asymmetric: they are greater for the partner that has less to offer, and usually counts with fewer resources.

<sup>12</sup> Recent figures reported in the *Financial Times* indicate that the EU as a whole has spent 21% of the €347 billion in structural funds four years into the seven-year programming cycle, but that several central and eastern European countries have not absorbed even 10% of their quota (“Growth funds fail to reach poor countries,” *Financial Times*, Oct. 18, 2011). The take-up rate is lower when it comes to innovation rather than in infrastructure, because projects tend to be smaller and involve multiple beneficiaries.

## Making the Most of Europe's Science Base

One of the most resilient strengths of Europe's research and innovation landscape is its science base. A telling statistic is that Europe's total R&D in nominal terms is 71% of the U.S. level and 80% of the level in Asia, yet it produces  $\frac{1}{3}$  of the world scientific publications, about the same as the U.S., and 1.5 times that in Asia.<sup>13</sup> And the quality of scientific output as measured by citations remains high, although not quite as high as the U.S., and Asia is closing in.

As many innovation scholars based in Europe have pointed out, however, the picture is more complex and challenging than it appears at first blush when looking at the EU's massive production of scientific publications in well-ranked journals.

First, the EU has far fewer "star scientists." While the U.S. accounts for 55% of the papers making it to the top 1 percentile in terms of citations, the EU is responsible for just 29%.<sup>14</sup> It is also reflected in the declining number of Nobel laureates. When it comes to physics, chemistry, physiology or medicine, the leading European countries fell behind the U.S. from the 1950s onwards, but after the 1970s, this margin grew very wide. What is worrying is that this trend has been the result of a failure to retain its emerging stars or attract others from the rest of the world. In the U.S., of the 314 laureates who won the Nobel Prize while working in the U.S., about one-third were foreign-born, including 15 Germans, 12 Canadians and 10 British. By contrast, just 15% of Nobel Prize winners in Germany were born abroad.<sup>15</sup> The challenge is to have more balanced 'brain circulation,' because right now the direction is predominantly from Europe to the U.S.

Second, scientific output and patenting are highly concentrated in a minority of research organizations located in a few EU countries. In central and eastern Europe, for example, patenting measures suggest a disproportionate concentration of this inventive activity in more

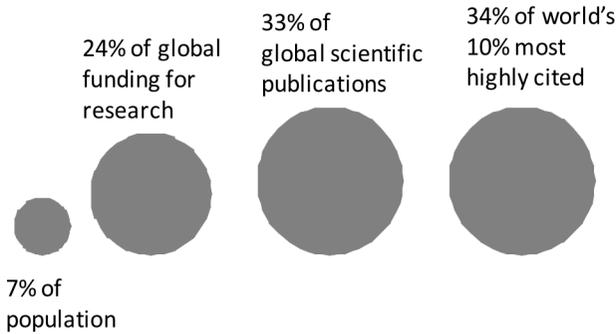
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<sup>13</sup> National Science Board, *Science and Engineering Indicators 2010* (Arlington, VA: National Science Foundation, 2010).

<sup>14</sup> Veugelers, op. cit.

<sup>15</sup> <http://www.forbes.com/sites/jonbruner/2011/10/05/nobel-prizes-and-american-leadership-in-science-infographic/>. For more details see <http://www.nobelprize.org>.

**Figure 6. The EU and U.S. Share of Global Science**



Source: Author's calculations based on Eurostat; NSB (2010), op. cit.; Reinhilde Veugelers (2008), "An evidence-based reform process of EU universities," Presentation at the Third MWP-ACO Conference on University Autonomy and the Globalisation of Academic Careers, <http://www.eui.eu/Documents/MWP/Conferences/VeugelersPPP.pdf>.

advanced economies like Hungary, the Czech Republic and Poland.<sup>16</sup> Path dependence provides a good explanation for the growing divergence in scientific and technological productivity at the level of research units: initial advantages get bigger over time when funding mechanisms reward performance and researchers have the option to move to the organizations with the best reputation and infrastructure. The challenge is two-fold: to leverage the capabilities that exist in the top scientific institutions by facilitating connections to the second- and third-tier institutions; and to increase the economic impact of scientific results by supporting technology commercialization.

Third, when science leads to inventive activity that has commercial applications, it is likely to be part of an international effort that includes private partners. According to patenting data, international cooperation is one of the most important drivers of inventive activity is, particularly when this cuts across public and private spheres. An example is when scientists become part of a larger project funded by a foreign firm that has its own R&D team. In a recent analysis, we found that fully one-half of all patents granted to inventors based in central and eastern Europe and Russia are a result of multinational teams and

<sup>16</sup> World Bank, *Igniting Innovation: Rethinking the Role of Government in Emerging Europe and Central Asia* (Washington DC: World Bank, 2011).

**Table 2. Partners for International Co-Invention with Post-Transition Countries**

Country	Percent
Germany	30
United States	13
Switzerland	8
Finland	7
Austria	6
France	6
Sweden	5
Belgium	5
Netherlands	4
Great Britain	4
Canada	3

Source: World Bank (2011).

that multinational enterprises (MNEs) play a key role in these joint efforts.<sup>17</sup> The study also shows that the main partners are in western Europe, and Germany plays an exceptional role in these networks. This is a new trend, as traditionally the most active networks were transatlantic, especially between the U.S. and UK, or connecting advanced European countries.<sup>18</sup> The challenge is facilitating collaboration by establishing the right intellectual property rights (IPR) policies in scientific institutions and by introducing new instruments that can help with transaction costs (e.g., technology transfer offices).

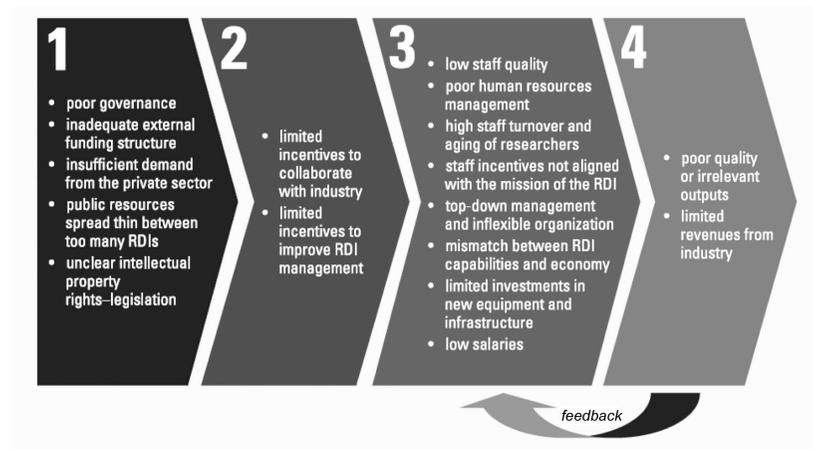
Fourth, the scientific productivity and impact of research organizations is hampered by outdated institutional and governance models, especially in the new member states. In a recent book, we undertook case studies of 21 public R&D institutes (RDIs) in Croatia, Lithuania, Poland, the Russian Federation, Serbia, Turkey, and Ukraine. The main conclusion is that RDIs in these countries have yet to complete

<sup>17</sup> World Bank, "Globalization and Technology Absorption: Role of Trade, FDI and Cross-Border Knowledge Flows," World Bank Working Papers No. 150 (Washington DC: World Bank, 2008).

<sup>18</sup> Royal Society, *Knowledge, Networks and Nations: Global Scientific Collaboration in the 21st Century* (London: Royal Society, 2011).

<sup>19</sup> World Bank, "Restructuring of Research and Development Institutes in Europe and central Asia" (Washington DC: World Bank, 2009); World Bank (2011), op. cit., Figure 7.

**Figure 7. Chain of Events Leading to Ineffective R&D Institutes**



Source: World Bank (2011).

the transition to the region’s new economic realities.<sup>19</sup> Prior to 1990, RDIs were oriented toward the technological needs of large state-owned enterprises. Two different types of RDIs appear to have emerged with different core activities and funding sources. On one hand, there are RDIs that are predominantly funded by public sources and are rather isolated from knowledge commercialization activities, yet at the same time have not shown sufficient results in regards to publications and training. On the other hand, some RDIs are largely financed through the goods and services they offer the private sector, but these goods and services seem to be at the lower-end of the knowledge value chain. The challenge is to reform public research organizations to make them more flexible, refashion internal incentive structures depending on their core mission and improve the connectivity to enterprises.

Reforming the governance of public R&D institutes has proved extremely hard, but at the minimum countries could work on two fronts: helping organizations to better define their missions and operational models according to whether they primarily produce scientific outputs and public goods, or technological services for the business sector; and increasing the share of public funding that is competitive or

tied to performance (e.g., in return for specific outputs, or matching external financing from EU sources or commercialization activities).

The final takeaway is that stepping up to these challenges will take much more than a boost in R&D spending and the specific proposals made in Europe 2020—in particular those in the *Innovation Union* flagship initiative—may not go far enough. At the heart of it, the difficulty is balancing the fundamental tension between two priorities: (i) excellence—helping the best scientific institutions to become even better so the EU can maintain a leading place in the global scientific landscape, because if this is not accomplished, Europe may forego making the scientific breakthroughs that will be the basis for the next generation of transformative innovations;<sup>20</sup> (ii) cohesion—constructing a more integrated European Research Area that takes advantage of the full distribution of scientific capabilities, which range from 38,000 researchers in higher education in Poland all the way to Slovenia with 2,000.<sup>21</sup>

To give but one example, the *Innovation Union's* commitment to removing mobility obstacles will most certainly have a positive effect for priority (i) excellence, but will only strengthen (ii) cohesion if there is a simultaneous push to equalize researcher career prospects across countries—without this, the impact will not be healthy brain circulation<sup>22</sup> but additional brain drain from east to west and from

<sup>20</sup> Also called “general purpose technologies” (GPTs) because of their pervasive diffusion into all industries and broad based productivity impact. Besides IT (the computer, the Internet), economists have argued that examples of GPTs include the steam engine, electricity, the railroad, etc.

<sup>21</sup> Eurostat data about total number of researchers, measured in full-time equivalent.

<sup>22</sup> The idea behind brain circulation is that highly-skilled workers who are globally mobile do not just migrate in the direction of OECD economies; they respond to emerging opportunities in different parts of the world. Increasingly, the trend is for younger people to leave their countries to obtain a better graduate education, get some work experience and accumulate capital, and later return home to start a business, work in the subsidiary of a MNE, join a university, and so on. AnnaLee Saxenian provides many examples of scientists and engineers that headed back to China and India in “From Brain Drain to Brain Circulation: Transnational Communities and Regional Upgrading in India and China,” *Studies in Comparative International Development*, Volume 40, 2005.

south to north, reinforcing the differences in scientific productivity and impact.

## **Stimulating Innovation in the Private Sector**

In the Lisbon Strategy, besides the 3% R&D-to-GDP target, there was a target to increase the private R&D share to two-thirds. This is no longer an explicit target in the Europe 2020 Strategy, but it is clear that a sustained and concerted effort by public and private actors will be needed to succeed in making innovation the basis for future growth.

However, the bottom line is that the share of business R&D in total R&D has actually declined in the EU during the last decade—from 56.4% in 2000 to 54.7% in 2008. The new member states lag further behind in this dimension, so not only do they spend less on R&D, but also the private contribution is very weak. The reason is that growth in many of these countries was anchored on business investments in services, financial sector, construction and real estate, which tend to have low R&D intensity. The stubbornly low levels of private R&D have translated into a low effectiveness of R&D spending, as measured by any of the main innovation outputs (patents, publications, citations to patents and publications, high-tech exports, and so on). The R&D “cost” for each patent provides a good illustration of the extent of this structural weakness across Europe (Figure 8).

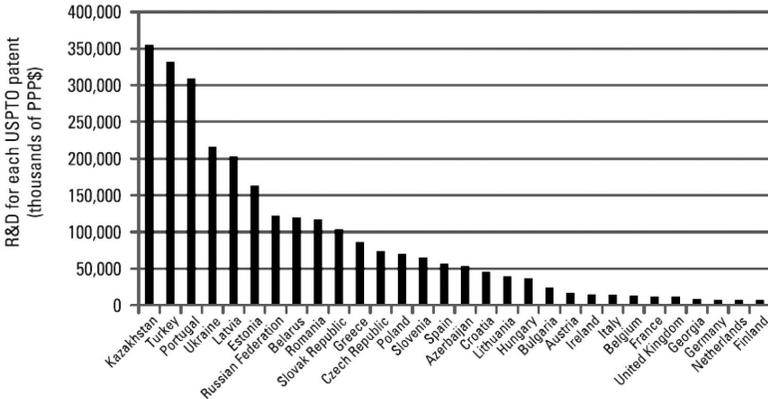
Meanwhile other countries moved further ahead, including the U.S., where business R&D already accounted for 72% of total R&D in 2000, a ratio that held steady over the last decade. What is remarkable is that this was achieved endogenously, without any big shift in the basic parameters of U.S. research and innovation policy. What is behind this transatlantic divergence? There is no single answer to this question, but the numbers suggest that the incredible growth achieved by U.S. high-tech firms is a central part of the explanation. These com-

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<sup>23</sup> NSB (2010), *op. cit.*, provides relevant indicators:

- “Over the past 20 years, growth in [US] R&D spending has averaged 5.6% in current dollars and 3.1% in constant dollars—somewhat ahead of the average pace of GDP growth over the same period (in both current and constant dollars).”
- “Over three-fourths of business R&D is performed in six business sectors. The R&D-to-sales ratio for these sectors as a group was 8.0% in 2007, compared with 1.4% for all other business sectors.”

**Figure 8. How Much Does a Patent “Cost”? Evidence from the EU and Neighboring Countries**



Source: World Bank (2011).

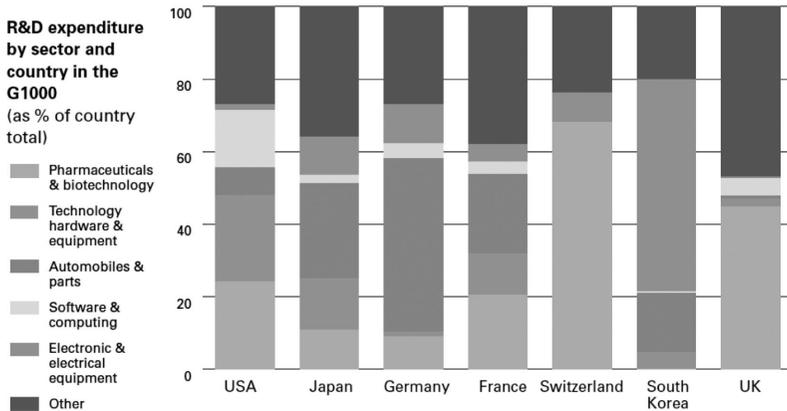
panies have much higher R&D-to-sales ratios than companies in traditional manufacturing or services, and as their weight in the economy is growing, and indeed growing much faster than public R&D expenditures, this has lifted the business R&D share for the U.S. as a whole.<sup>23</sup>

The late start and slow growth of an indigenous Information Technology (IT) sector is probably the Achilles' heel of private innovation in Europe. This structural weakness is noticeable in the *2010 R&D Scoreboard*, which surveyed the top 1,000 UK and the top 1,000 global companies by R&D (see Figure 9). The share of R&D undertaken by the software and computing sector in the U.S. is around 3-4 times that in the UK, Germany and France.

As with scientific productivity, path dependence could reinforce this pattern of R&D specialization as time goes by, making it increasingly difficult for the EU innovation policy to counteract the U.S.

<sup>24</sup> In layman's terms, a patent thicket has been defined as a "dense web of overlapping intellectual property rights that a company must hack its way through in order to actually commercialize new technology." Carl Shapiro, "Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting," *Innovation Policy and the Economy*, No. 1 (2000), pp. 119-150.

**Figure 9. The Sectoral Breakdown of Business R&D across Countries**



Source: UK Department for Business Innovation and Skills, The 2010 R&D Scoreboard (London, 2010).

technological dominance in these sectors. For example, the accretion of “patent thickets”<sup>24</sup> by leading companies will make it much harder for second-movers from the EU (or other regions) to develop a competitive advantage. On account of barriers to market entry related to IPR and marketing, as well as weak initial capabilities, IT companies in Europe that integrated into software development supply chains have generally not managed to develop proprietary technologies and brands. Patent thicket can also interfere with the development of scientific research, as they impose extra search and transaction costs on scientists—such as licenses.<sup>25</sup>

One way to counteract this trend will be to attract global IT leaders to set up large R&D facilities in Europe. Thanks to their lower wages and availability of qualified engineers, central and eastern European countries could be prime locations for these investments—Krakow in Poland is already recognized as an emerging IT hub, with a range of IT services, business process outsourcing (BPO) and R&D labs estab-

<sup>25</sup> Paul David, “The Economic Logic of “Open Science” and the Balance Between Private Property Rights and the Public Domain in Scientific Data and Information: A Primer,” Stanford Institute for Economic Policy Research (SIEPR) Discussion Paper No. 02-30 (2003).

lished by, for example, IBM, Motorola, and Google. To stimulate this process, it's important that governments put in place incentives that are tailored to R&D-intensive FDI. How is this different from manufacturing FDI? The key difference is that R&D-intensive FDI is about bringing together a pool of advanced human capital and connecting it at a global level. This has several implications. First, without a pipeline of well-educated graduates, companies will be unwilling to establish a base; diaspora programs may be useful in the short term but the quality of domestic education eventually needs to attain global standards. Second, the business environment needs are very specific, including streamlined work permits and a rock-solid IPR framework that facilitates collaboration with public research organizations. Third, scientific institutions need to get the legal and financial support to effectively use R&D contracts, patenting, and licensing when they cooperate with large FDI companies. Fourth, the location needs to be attractive for foreign inventors and developers that will relocate from cities such as Palo Alto or Boston. So if the government is planning a science and technology park, it would need to have excellent access to the main universities, airports and international schools.

In the long term, however, helping indigenous European companies to catch up through activist innovation policies may be less important than understanding the underlying conditions that discourage EU-based entrepreneurs from making the first move or growing as fast as their U.S. peers. It's important to highlight one fundamental difference that has been widely discussed, namely, the different attitudes to risk and entrepreneurship. Outside of Scandinavia, many Europeans seem deeply averse to risk-taking and often have an unfavorable opinion about entrepreneurs. The Flash Eurobarometer<sup>26</sup> conducted annually by Gallup on behalf of the EC's DG Enterprise offers some insightful numbers:

- “The fear of bankruptcy is one of the largest obstacles for many people to start a business. Nevertheless 65% of Europeans

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<sup>26</sup> European attitudes to Entrepreneurship, EC MEMO/10/232, Date 04/06/2010, available online at <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/10/232>; Flash Eurobarometer Series #283, *Entrepreneurship in the EU and beyond*, Analytic report, 2009.

declare that they are generally willing to take risks. In the US about 82% of those questioned are willing to take risks.”

- EU citizens are less likely to say they are risk-takers and liked competition (around 60%) compared to American respondents (around 80%).
- A large majority of Danes and Finns report a positive opinion of entrepreneurs (around 80%), similar to the US—but less than 30% of people in Hungary share this opinion.
- The lack of finances for self-employment is a major obstacle for 24% of EU citizens, compared to 14% in the US.

There are three facets of Europe’s aversion to risk and entrepreneurship that the EC and national governments would need to tackle to unleash private innovation. First, there is aversion at the micro level, among potential innovators and entrepreneurs. This has a cultural root that will take time to change—and it’s unlikely to happen until there is a large enough number of role models and the education system implant innovation and risk-taking as positive traits. But there is a financial dimension as well. By having a basic universal safety net, countries in Scandinavia mitigated the potential downside of innovating, which makes it easier to take certain risks. There is a danger that the current economic downturn further dampens risk-taking, as the safety nets are cut back.

Second, there is aversion to risk-taking within Europe’s financial institutions and investor community. The reason is that when it comes to R&D investments, banks or insurance companies are not in the presence of the standard risks that they can measure and cover. Innovation finance needs to look beyond measurable risks and returns, cashflow and collateral. The US and a few other countries have managed to develop a pool of early stage technology funds and venture capital (VC), and this has been one of the catalysts for the emergence and growth of the IT industry. According to a new report on the VC industry, the supply of VC as a share of GDP is 0.15% in the U.S., six-times larger than in the EU, where it is 0.026%. It’s not just a question of size. When it comes to evaluating the potential economic value of innovations, there is no substitute for industry and entrepreneurial experience. The same report points out that the U.S. has 50+ year his-

tory of VC against 10+ in the EU, which means that US teams have now managed 6 or more generations of funds. As with entrepreneurs, one of the side effects of the abnormally high volatility experienced since 2008 is that investors are induced into a “flight to safety,” and this has a disproportionately strong impact on VC as IPOs constitute the main “exit” mechanism to realize these investments.

Third, there seems to be a low tolerance to risk in the public sector as well. The volumes of early stage funds to co-finance private R&D tend to be smaller. Specifically, a close examination into the use of EU structural funds shows that countries like Poland or Bulgaria have predominantly supported low-risk investments that aim at enhancing productivity—essentially upgrading of machinery and equipment. While upgrading was critical during the transition period, it is now essential to boost real R&D investments. This is not just a question of changing priorities. Administering innovation programs requires specific skill-sets and attitudes, but the public sector focus is often on meeting administrative criteria and tracking the flow of funds, not evaluating the potential or actual results. Moreover, within the European context, the Framework for State Aid for R&D and Innovation has limited the flexibility to formulate innovation policy. While the overall objectives of this framework are sound, the devil is in the details, as highlighted by the comments submitted to the consultation document, which bring to light potential rigidities in the framework.<sup>27</sup>

## Final Thoughts

The central question this chapter asked was how much mileage the EU can expect from the Europe 2020 when it comes to innovation. The answer is that having a fully coordinated innovation policy framework at the EU level can be a powerful catalyst, but it is not the fuel, nor is it the engine of growth that will narrow the productivity and income gaps vis-à-vis the U.S.

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<sup>27</sup> For example, TEKES, the Finnish Funding Agency for Technology and Innovation which has a global reputation for its innovation programs, commented that because high-tech sectors like biotech have long time-to-market and product development cycles, they should benefit from more favorable treatment. This proposal was not incorporated. [http://ec.europa.eu/competition/state\\_aid/reform/comments\\_innovation/39632.pdf](http://ec.europa.eu/competition/state_aid/reform/comments_innovation/39632.pdf).

In part, the fuel has to come in the form of firm expenditure commitments by individual countries that turn the Strategy's headline target for R&D-to-GDP into a reality. Given their healthier public finances and the considerable catch-up they still need to make, central and eastern European countries would do well to assume a greater leadership role in this process. EU funds could directly help, provided they are scaled-up drastically and redirected to stimulate frontier innovation.

Europe's science base is an incredibly important asset. A tradition of excellence in basic research has been a bridging point between advanced knowledge economies such as Finland and Germany, and new member states such as Poland and Hungary. International collaboration and public-private collaboration can step up scientific excellence and impact, and simultaneously help to construct an increasingly integrated European Research Area. Reinforcing the performance of the research organizations that have worked in relative isolation so they can start new partnerships will help to fully integrate Europe's research and innovation ecosystem.

But unless the private sector becomes the main funding source and performer of R&D, the outcomes are liable to disappoint. Attracting larger volumes of R&D-intensive FDI could provide a short-term boost. But in the long run, it is more critical to dispel the lingering aversion to risk-taking and entrepreneurship, so future technological opportunities can be grasped. Because the financial crisis will push in the opposite direction, it would help if countries took a much more proactive effort.



## *Chapter Six*

# Europe's Watershed Moment

*Daniel S. Hamilton*

The European Union has a closing window of a decade's time to position itself as a world-class player in an increasingly competitive and connected world. If it does not, the resulting strains and stresses could challenge Europe's very construction. In this regard, Europe's economic crisis could be a watershed moment: either the spur to a more competitive continent, or the time when Europe lost out decisively to more vigorous and rising powers.<sup>1</sup>

The economic crisis has demonstrated forcefully to Europeans that the very connections that generate economic opportunity in good times can be transmission belts for economic turmoil in bad times. The same interlinked monetary system that exerts downward pressure on inflation and interest rates can transmit financial insecurity at the click of a mouse. The same global demand that fuels European exports can also boost prices for many daily needs.

The Great Recession hit the EU hard, plunging the continent into its deepest recession in the postwar period.<sup>2</sup> Most of the EU's old member states, already plagued by low growth, have struggled to reestablish their footing. Many of the EU's new member states, which until the crisis had been doing better than many non-European emerging economies, fell further. Rapidly unraveling debt and banking crises offer stark evidence that the 2008 financial meltdown con-

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<sup>1</sup> This chapter draws on Daniel S. Hamilton, *Europe 2020: Competitive or Complacent?* (Washington, DC: Center for Transatlantic Relations/Brookings Institution Press, 2011).

<sup>2</sup> International Monetary Fund, *Regional Outlook: Europe Building Confidence* (Washington, DC: IMF, October 2010); Barry Eichengreen and Kevin H. O'Rourke K.H., "A tale of two depressions," <http://www.voxeu.org/index.php?q=node/3421>.

tinues to reverberate and will take years to play out.<sup>3</sup> Financial reforms are lagging and sovereign risks linger. Europe must steel itself for an inevitable string of bank restructurings. EU member states need to fix the conditions that gave rise to big budget deficits. New mechanisms are needed at EU level and within the eurozone to deal with future defaults. Recovery will take time and require painful adjustments, as households and creditors work through the overhang of excessive borrowing and lending, and the associated decline in asset prices and job opportunities; and as financial institutions work to strengthen their balance sheets to meet higher standards for capital and liquidity. And as all scramble to recover, divergent policies could undermine European solidarity.<sup>4</sup>

In many ways it is appropriate to focus on the EU as an economic entity, given the common trade policy, the Single Market, and delegation of many aspects of economic life to the European Commission. But the EU consists first and foremost of its member states, and each offers strengths and faces challenges unique to its particular situation. In fact, Europe's economic crisis has underscored the diverse reality of the European Union.

Some EU member states host companies that are highly-connected world-beating exporters and investors. They have proven to be successful in building highly-skilled, adaptable workforces and in ensuring that economic gains extend widely throughout their societies. Others struggle to boost the potential of their people. Some European countries are driving global innovation; others are catching up; and still others are competing fiercely with rapidly rising economies elsewhere. The economic and financial crisis has affected each EU member state in different ways.

<sup>3</sup> See Nouriel Roubini, "Irish woes should speed Europe's default plan," *Financial Times*, November 16, 2010; "Europe heads back into the storm," *Financial Times*, November 18, 2010; Philippe Legrain, "Don't blame the euro for Ireland's mess," *Financial Times*, November 18, 2010; Bruce Stokes, "What you need to know about Ireland, and what to do about it," *Transatlantic Take*, German Marshall Fund of the United States, November 18, 2010.

<sup>4</sup> See European Commission, *European Competitiveness Report 2010* (Brussels: European Commission, 2010) p. 22; IMF, *Regional Economic Outlook: Europe Fostering Sustainability* (Washington, DC: IMF, May 2010), p. 30.

According to the World Economic Forum's Global Competitiveness Index, overall the EU continues to feature prominently among the most competitive regions in the world, with 5 EU member states ranking among the 10 most competitive economies in the world and 10 among the top 20. But the rankings also reveal great disparities within the EU, particularly with new member states, all of which ranked behind China.<sup>5</sup>

The rankings reveal different sources of strength and weakness. The Benelux and the Nordic countries, for instance, compensate for their small size with excellent skills, sound institutions, and, particularly in the case of the Nordic countries, a strong capacity for innovation. Some countries in the core, like France, need to focus on increasing labor participation while others, like Germany, need to tackle obstacles to service sector expansion to support domestic demand. The OECD estimates that northern European countries are well positioned to cope with the G20 world, thanks particularly to their education levels, their focus on high-tech products, their strong innovation frameworks, and their commitment to help workers adjust as jobs come and go. Most are competing less head-on with rapidly developing countries. Moreover, the export sectors of most northern European economies are geared towards fast-growing products and most have trade surpluses in services.<sup>6</sup>

Member states in the middle ground have substantially less innovation and as a whole suffer from poorer institutions than the leaders, even though their macroeconomic performance and the basic skills of their population are similar.<sup>7</sup> Almost half of the EU's member states ranks lower in competitiveness than China; some also rank behind Russia, India and other rapidly developing countries. In general, EU

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<sup>5</sup> See *World Economic Forum*: <http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm>.

<sup>6</sup> World Economic Forum; Peter Mandelson, "Europe's openness and the politics of globalisation," February 8, 2008, [http://trade.ec.europa.eu/doclib/docs/2008/february/tradoc\\_137739.pdf](http://trade.ec.europa.eu/doclib/docs/2008/february/tradoc_137739.pdf); David Rae and Marte Sollie, "Globalization and the European Union: Which Countries Are Best Placed to Cope," December 6, 2007, [http://www.oilis.oecd.org/olis/2007doc.nsf/LinkTo/NT000058AE/\\$FILE/JT03237661.PDF](http://www.oilis.oecd.org/olis/2007doc.nsf/LinkTo/NT000058AE/$FILE/JT03237661.PDF).

<sup>7</sup> World Economic Forum; Joachin Almunia, "Europe's Competitiveness & Global Economy—The Next Steps," September 21, 2010 (Brussels: European Commission, 2010).

members from southern and eastern European are having a harder time coping with the new world rising because they score below average on most indicators, with their relatively poor human capital levels a major weakness. Not only do these countries tend to be competing head on with rapidly developing nations, they also have less inherent strength to deal with the challenges.

The EU's great diversity argues against a one-size-fits-all economic strategy. Yet the EU as a whole faces many common challenges, and the EU boasts considerable strengths when EU member states band together to boost trade, attract talent, or spark innovation. To the extent that individual member states are able to pool their strengths and advance common or compatible approaches, all stand to gain relatively more than if each stood alone.

### **European Economies: A “SWOT” Analysis**

Table 1 offers an EU “SWOT” analysis that summarizes the EU's strengths, weaknesses, opportunities and challenges. Let's look first at the EU's weaknesses and challenges, and then its strengths and opportunities.

#### ***Weaknesses and Challenges***

The European Union is challenged on a number of fronts. Large government deficits persist despite a reviving global economy. This danger is exacerbated by the legacy of the Great Recession: in most EU member states, public debt has soared way above 60% of GDP. Restoring government debt to 60% of GDP by 2030 will require painful fiscal adjustment in many countries.

The EU is in danger of fracturing along northern, southern and eastern lines. In general most northern EU member states exhibit high education levels, strong innovation capabilities, and strengths in upmarket goods and knowledge-intensive services. Southern member states overall face challenges ranging from fiscal deficits, major debt and in some cases severe challenges of competitiveness. Eastern member states were hit hard by the crisis and are still struggling to catch up with old member states while competing head-on with rising markets

**Table 1. Europe: A SWOT Analysis**

Strengths and Opportunities	Weaknesses and Threats
<p><b>Goods</b></p> <ul style="list-style-type: none"> <li>*World's largest trader in goods.</li> <li>*Market leader in medium technology and capital intensive exports.</li> <li>*Top supplier of goods to developing countries.</li> <li>*#1 in export market share in 9 of 20 different product categories.</li> <li>*Maintained global export share over past 15 years.</li> <li>*Withstood emerging competition better than U.S. or Japan.</li> <li>*Strong in environmental goods</li> <li>*High-growth demand in European specialities</li> </ul>	<ul style="list-style-type: none"> <li>*Weak in a large number of high technology export markets</li> <li>*Some member states still mostly rely on exports of low-tech goods</li> <li>*Export gains overwhelmingly in traditional products and markets, rather than in new products or new markets.</li> <li>*Still "overweight" in trade ties to developed countries, and "underweight" in ties to developing markets.</li> <li>*Lost market share in some fast-growing emerging markets</li> <li>*Trade deficits with all BRICs except India</li> <li>*China small comparative advantage over the EU as a whole in research-intensive goods and technology-driven industries</li> </ul>
<p><b>Services</b></p> <ul style="list-style-type: none"> <li>*World's largest regional trader in services.</li> <li>*#1 in 8 of 11 categories of services exports.</li> <li>*Services: all of net job growth in the EU.</li> <li>*Share in global services trade much higher than that of the BRICs.</li> <li>*EU home base is significant market for services.</li> <li>*In past decade EU15 almost quadrupled their services trade balance.</li> <li>*Services trade surplus with every world region except the Caribbean.</li> <li>*Well positioned to take advantage of the globalization of services.</li> <li>*Services account for over 70% of EU GDP but only 23% of global exports: room to grow.</li> <li>*Services FDI providing key access to emerging markets.</li> <li>*Non-EU foreign affiliates account for large share of EU services exports</li> <li>*Boosting services sector productivity to the EU15 average or to EU best-practice levels per sector could add 3-2.0% to EU productivity.</li> </ul>	<ul style="list-style-type: none"> <li>*Failed to capitalize on Single Market in services.</li> <li>*Uneven capabilities: southern and central EU member states could be at competitive disadvantage</li> <li>*Lagging services productivity is the source of the GDP and productivity growth gap between the EU15 and the U.S.</li> <li>*Must harness high tech and adequately educate/train workforce.</li> <li>*Failed to spark services innovation.</li> <li>*BRICs increasing services exports faster than the EU, U.S. or Japan.</li> <li>*India's services firms competing hard with EU companies in third markets.</li> </ul>
<p><b>Money</b></p> <p><i>Capital</i></p> <ul style="list-style-type: none"> <li>*Critical source of capital for other world regions.</li> <li>*Largest portfolio investor in North America, Wider Europe, Russia, India and Oceania; 2nd largest in Africa, Caribbean, Rising Asia, Japan and Middle East.</li> <li>*Despite woes, euro is legitimate and favorable alternative to dollar.</li> <li>*Euro has allowed EU to attract more of world's excess savings.</li> <li>*Deeper capital markets have become more globally competitive.</li> <li>*Capital flows within euro zone without exchange rate risk.</li> <li>*EU financial centers account for 10 of the 20 best performers.</li> </ul>	<ul style="list-style-type: none"> <li>*Financial crises propagate to all markets easily.</li> <li>*Financial crisis halted 3 decades of capital markets expansion.</li> <li>*Widespread concern about the volatility of capital flows.</li> <li>*UK and euro zone: largest declines in cross-border capital flows.</li> <li>*Major deficits and debts among EU member states.</li> <li>*EU has only 4 of the top 20 financial centers worldwide; 15 of top 40.</li> <li>*EU financial centers account for 8 of the 20 worst global performers.</li> <li>*EU secondary financial centers losing ground to other centers.</li> <li>*Eurozone: no common economic policy to go with common currency</li> <li>*Eurozone: euro crisis unnerving investors, could subvert integration.</li> </ul>

**Foreign Direct Investment**

**Strengths and Opportunities**

- \*Largest provider and recipient of FDI among all world regions.
- \*Home base dynamic and significant
- \*55 of the 100 largest non-financial multinational corporations.
- \*U.S. FDI in EU more than next 20 investors combined.
- \*EU FDI inflows more than twice the amount flowing to U.S.
- \*EU outward FDI increased five-fold in past 15 years.
- \*Outward FDI boosted EU GDP by more than €20 billion between 2001-2006; EU workers increased income by almost €13 billion.
- \*Stronger position in BRICs as investor than as exporter.
- \*EU FDI stocks in BRICs heavily oriented to services.
- \*FDI is main means for EU services firms to access BRIC markets.
- \*EU companies well placed to invest in high-growth sectors of rapidly rising economies.

**Weaknesses and Threats**

- \*Restrictions on FDI persist in many emerging markets.
- \*EU reliant on inward investment; must remain attractive as high-talent place to invest, work and innovate.

**Energy**

- \*EU leads U.S. and Japan in energy efficiency and sustainability.
- \*EU companies lead in high-growth global clean energy sector.
- \*13 of world's top 15 clean energy R&D companies.
- \*Substantial lead in patents in air and water pollution control, renewable energy and solid waste management.
- \*Opportunities for energy efficiency and renewables worldwide.
- \*EU can lead effort to break link between production of wealth and consumption of resources.
- \*The EU's overall dependence on energy imports will rise from 55% in 2008 to 70% in 2030.
- \*All member states except Denmark are net importers of energy.
- \*By 2030, EU will have to import up to 80% of its natural gas. Germany, France and Italy already exhibit this rate.
- \*12 member states are 100% dependent on foreign gas imports.
- \*The concentration of energy production in a handful of countries will grow.
- \*EU probably not able to reduce its energy dependence on Russia.
- \*The resource and energy needs of rapidly developing countries are unsustainable.
- \*Clean energy not big enough to make a significant difference to growth.
- \*Clean energy not likely to be consistently cheaper than dirty sources of energy anytime soon.
- \*Widespread commercialization of clean energy technologies faces substantial hurdles.
- \*EU companies challenged by the clean energy investments by U.S., Japan, China, and South Korea.
- \*EU maintains biofuels barriers on Brazil and other exporters.
- \*Failure to secure sufficient energy supplies would be devastating.

**Weaknesses and Threats**

- \*The EU is aging, shrinking, and has become a net importer of labor.
- \*Europe is the world's oldest region.
- \*EU labor markets still fragmented.
- \*These trends exacerbate mismatches in labor supply and demand.
- \*Today's migration inflow of 1 million/year not enough to offset the trends.
- \*To compensate for declining labor participation rates, EU needs to double immigration levels.
- \*EU has become a magnet for the unskilled.
- \*Highly skilled foreign workers only 1.7% of all workers in the EU.
- Australia: 9.9%; Canada: 7.3%; U.S.: 3.5%.
- \*85% of unskilled labor goes to the EU and 5% to the U.S.
- \*55% of skilled labor goes to the U.S and only 5% to the EU.
- \*EU must be more effective in making itself a more attractive destination for qualified and highly motivated potential immigrants and their families; but anti-migrant forces rising.
- \*EU loses skilled hundreds of thousands of skilled emigrants each year to Oceania, North America and Wider Europe.

**Strengths and Opportunities**

- \*Rich human resources compared to other regions.
- \*EU commitment to free flow of labor within its borders has been a boon to sending and receiving countries alike.
- \*Most countries have sought to target highly skilled migrants.
- \*EU Blue Card offers promise to attract high-skilled talent.
- \*EU accounted for 16% of worldwide refugees at the end of 2009.

**People**

**Ideas**

- \*Overall a competitive and highly connected innovation economy.
- \*EU innovation leaders: Denmark, Finland, Germany, Sweden and UK
- \*Next tier: Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, Netherlands and Slovenia.
- \*EU performs better than U.S. in 6 of 17 innovation indicators and growth performance better in 13 of 17 indicators.
- \*Strong innovation performance lead over the BRICs.
- \*9 of top 20 countries in terms of Network Readiness.
- \*EU companies: 31% of the top R&D companies. U.S.: 34%. Japan 22%.
- \*More than 25% of scientific publications, highest share of any region.
- \*Non-EU companies based in EU key to EU R&D investment.
- \*R&D investment to 3% of GDP could create 3.7 million jobs and increase annual EU GDP by up to €795 billion by 2025.
- \*EU innovation performance very uneven.
- \*Moderate Innovators: Czech Republic, Greece, Hungary, Italy, Lithuania, Malta, Poland, Portugal, Slovakia, Spain.
- \*Catching-up Countries: Bulgaria, Latvia, Romania.
- \*Consistently fails to meet goal of 3% share of GDP for R&D; failed to catch up to the U.S.; fallen further behind South Korea, Singapore and Japan; could be eclipsed by China.
- \*Clear innovation performance gap in favor of the U.S. and Japan.
- \*U.S. companies invested nearly 5 times more than EU companies in semiconductors, 4 times more in software and 8 times more in biotechnology.
- \*Only 5 EU regions among top 20 knowledge regions. U.S.: 13.
- \*Inadequate attention paid to demand-driven innovation; social and services innovation.
- \*Stronger focus needed bringing ideas to market.
- \*Significant barriers to circulation of highly-skilled individuals.
- \*EU patent system still fragmented.

elsewhere. There are some exceptions, but such varied challenges are straining European solidarity and the Union's effectiveness.

Unemployment, inactivity and poverty still blight too many European lives. Almost half of the EU's member states ranks lower in competitiveness than China; some also rank behind Russia, India and other rapidly developing countries.<sup>8</sup> Some EU member states still mostly rely on exports of low-tech goods that tend to encounter less dynamic world demand, hampering gains in market share, and also more intense competition from low-cost countries. The EU is still "overweight" in its trade ties to developed countries, where demand is relatively static or growing slowly, and "underweight" in its trade ties with rapidly growing developing markets.

Except for a small subset of countries, the EU's innovation performance and its productivity lags other advanced economies. The services sector remains a sleeping giant. Secondary European financial market places are losing ground to other advanced and emerging financial centers.

Aging and shrinking populations challenge European competitiveness at a time when competition has gotten tougher. They make social safety nets harder to finance just when the need for them becomes greater. Immigrant workers are crucial as the EU confronts a rapidly aging work force and an acute labor shortage of skilled and semi-skilled workers. Yet the EU has become a magnet for the unskilled, struggling to assimilate and integrate migrants into society while falling short in the global competition for talent.

The EU will continue to rely on traditional sources of energy and depend on foreign sources for over half of its energy supply, with some EU member states critically dependent on a handful of foreign sources. And the combined and ultimately unsustainable resource and energy needs of rapidly developing countries and advanced economies are adding significant pressure to Europe's energy picture.

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<sup>8</sup> Almunia, op. cit.; Peter Mandelson, *The European Union in the Global Age* (London: Policy Network, 2007), p. 12; *Beyond Austerity*, op. cit., pp. xi-xii; Martin Neil Bailly and Jacob Funk Kirkegaard, *Transforming the European Economy* (Washington, DC: Institute for International Economics, 2004).

In addition, rapidly developing countries are recording high growth rates while Western economies, including many in Europe, struggle to recover from the financial crisis. Over the next five years the EU and other advanced economies are unlikely to grow more than 3% a year while the developing world is likely to grow more than 5% a year. Mature industrial economies are losing about a percentage point a year in share of world GDP to emerging markets.<sup>9</sup> In a world of overall growth, simply having a smaller share of an expanding pie is not necessarily all that bad, and the developing economies are emerging quickly from a low base. But such a world is not a given. Growth rates are uneven for particular EU countries and companies, and there are still significant risks to future growth.

Despite its accomplishments, the EU remains a patchwork of jurisdictions and regulations. The Single Market has come a good way, but still has a good way to go. Integration within the EU is far less than that within the U.S.; trade between U.S. states is two to three times higher than trade between EU member states. Decision-making is often fragmented and ineffective. The lack of a European patent means that patenting an idea in the EU is 10 times more expensive than in the United States.<sup>10</sup> EU member states operate under a common trade policy, but their trade orientation and performance vary considerably. In areas such as agriculture the EU remains highly protectionist. Eurozone members share a common currency without a common economic policy, and the euro crisis has hobbled European recovery.

Of course, the EU's diversity can be one of its great strengths. An EU that could move only in lock-step would be an EU unlikely to progress at all. Yet in many ways, the European Union is still less than the sum of its parts. There is considerable discrepancy between the EU's challenges and the ability and propensity of its member states to address them together.<sup>11</sup>

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<sup>9</sup> Byron Wien, "US capital productivity decline must be reversed," *Financial Times*, February 17, 2010, p. 24.

<sup>10</sup> Nikki Tait, "Single EU patent moves closer to reality," *Financial Times*, December 8, 2010.

<sup>11</sup> Tony Barber, "A tent to attend to," *Financial Times*, June 17, 2010.

### *Strengths and Opportunities*

Fortunately, the EU's challenges are balanced by some notable strengths. The EU accounts for 5 of the top 10 and 10 of the top 20 most competitive nations in the world, and for 8 of the top 10 and 22 of the 30 most "economically globalized" nations in the world.<sup>12</sup> With only 7% of the world's population, EU GDP of about €12 trillion accounts for nearly 30% of the world's economic output. The U.S. accounts for 27%, Japan for 9% and China for less than 6%.

Northern European EU member states in particular are well positioned to cope with the G20 world, thanks particularly to their education levels, their focus on high-tech and upmarket products, their strong innovation capacities, and their commitment to help workers adjust as jobs come and go. Moreover, the export sectors of most northern European economies are geared towards fast-growing products and most have trade surpluses in services.<sup>13</sup>

Over the past twenty years the EU has grown from 12 to 27 members and has made considerable progress toward a single internal market. Together, the creation of the Single Market and the enlargement of the EU created 2.75 million additional jobs and contributed an additional 1.85% growth between 1992 and 2009.<sup>14</sup> The euro shields a significant portion of intra-EU commerce from currency fluctuations. The EU is culturally rich; boasts an extraordinarily well-educated population, sophisticated product and financial markets and significant technological prowess; and is experimenting with the boldest type of supranational governance on the planet. It has at least as many wealthy consumers as the United States. Life satisfaction and happiness are higher in Europe than any other part of the world. European workers still enjoy a larger share of their countries' wealth than do U.S. workers, and most European countries have safety nets for work-

<sup>12</sup> See KOF Globalization Index, available at [http://www.globalization-index.org/static/pdf/rankings\\_2010.pdf](http://www.globalization-index.org/static/pdf/rankings_2010.pdf).

<sup>13</sup> Daniel S. Hamilton and Joseph P. Quinlan, *Globalization and Europe*, op. cit.; Daniel S. Hamilton and Joseph P. Quinlan, *Sleeping Giant*, op. cit.

<sup>14</sup> European Commission, "Towards a Single Market Act: For a highly competitive social market economy. 50 proposals for improving our work, business and exchanges with one another," November 11, 2010, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0608:REV1:EN:PDF#page=2>.

ers that would be the envy of anxious U.S. employees. While Europe traditionally has experienced higher rates of unemployment than the United States, for many this has been more than offset by the stagnant incomes and growing income inequality that have plagued the U.S. in recent decades, and in the wake of the financial crisis the situation has reversed, with U.S. unemployment higher than in most of Europe. Life expectancy has increased and Europe could be a leader in healthy aging. Educational opportunity is expanding. Diversity has the potential to be a great source of creative strength. Successfully managed migration could help meet Europe's economic and social needs.

Europe's internal transformation has had profound external consequences. The EU is the world's largest exporting entity, largest source and destination of foreign direct investment, largest donor of foreign aid, and a critical source of capital for many other world regions. The EU is home to some of the world's most competitive companies, who are not just holding their own against global competition but have emerged or maintained their status as global leaders within their respective industries. The EU has maintained its share of world exports despite the rise of other trading powers, and is a more significant trading partner for the BRICs than either the U.S. or Japan. Rapidly emerging economies are registering high demand in the types of products in which many European exporters specialize.

In a world of continental-sized players, the EU has become an important vehicle for relatively small European countries to amplify their presence on the world stage, and to manage globalization without resorting to protectionism. EU member states together have greater ability than any of them alone would have to develop standards for globalized commerce, food and product safety, and financial transactions. Common minimum regulations in the EU have moderated potentially destructive competition among member states while allowing for national differences.<sup>15</sup> EU enlargement has enabled European companies to make use of a bigger Single Market to extend their production networks and thus to compete more effectively. Billions of euros in EU structural funds boost prospects for poorer

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<sup>15</sup> *Making Globalization Work for Europe*, op. cit., p. 177; Sophie Meunier, "Managing Globalization: the EU in International Trade Negotiations," *Journal of Common Market Studies*, December 2007, Vol. 45, No. 4, pp. 905-926.

regions and transition economies and make Europe as a whole more fit for global economic competition. In all these areas the EU is, and seen in Europe to be, a vehicle for European states to negotiate the terms of their deepening integration with each other and their widening interactions with the rest of the world.<sup>16</sup>

The EU is also a leader in clean energy and energy efficiency. It is better positioned than others to break the link between the generation of wealth and the consumption of resources. The BRICs and many other rising markets are all growing rapidly in a world economy premised on extensive use of oil and gas and intensive use of resources. That is untenable for a global economy of 7 billion people. Breaking this link could open the way for an entirely different patterns of consumption and competitiveness. Europe could lead the way.

None of these strengths are easily tapped, however. Instead of embracing its periphery, the EU is fearful of it. Rather than advancing low-carbon competitiveness, too many companies and politicians use it as an excuse for further protection. Rather than embracing flexicurity and related initiatives, too many hold onto false securities of the past. And rather than taking advantage of the real possibilities offered by services, European politics still portray them as low-wage and low-skill, pose false choices between services and manufacturing, and are fearful of opening up home markets to their own EU partners, much less competitors from abroad.

### **The 2020 Strategy: Good, But...**

Given these challenges, EU leaders in 2010 set forth a strategy to turn the EU into a “smart, sustainable and inclusive economy delivering high levels of high levels of employment, productivity and social cohesion” by the year 2020. They placed three related priorities of smart, sustainable and inclusive growth at the heart of their “Europe 2020” strategy, and under each priority enumerated various “flagship” initiatives and headline goals.<sup>17</sup> Relatedly, the Commission seeks to

<sup>16</sup> Philip Gordon, “Europe’s Cautious Globalization,” Working Paper, Martindale Center College of Business and Economics, Lehigh University, April 2004.

<sup>17</sup> European Commission, *Europe 2020. A strategy for smart, sustainable and inclusive growth*. COM (2010) 2020 final, Brussels, March 3, 2010.

implement the Single Market Act, a blueprint it has offered to revitalize the Single Market by the end of 2012, the 20<sup>th</sup> anniversary of its birth. Its proposals, inspired by a 2010 report by Italian Prime Minister and former Competition Commissioner Mario Monti, include simplified accounting rules; improving small business access to public procurement contracts; boosting electronic commerce; building down barriers to intra-EU transportation; facilitating cross-border venture capital; more open and competitive pan-European procurement processes; promoting social entrepreneurship; online commerce; full implementation of the Services Directive; and streamlining recognition of professional qualifications across the Union.<sup>18</sup>

The overall thrust of these efforts is promising and deserves broad support. But the fatal weakness of the previous effort, the so-called Lisbon Strategy, was its inability to provide incentives or to ensure implementation by EU member states. In the end not one of the Lisbon Strategy goals was achieved over a ten-year period. The Europe 2020 Strategy seeks to remedy this weakness with a number of monitoring measures, but in and of themselves they are unlikely to ensure that member states take the tough decisions needed.<sup>19,20</sup> Commission President Jose Manuel Barroso himself identified what many deem to be central to the strategy's success or failure: political will among member states. "We have to be quite honest," he has said, "there are 27 member states and if they don't want to play ball nothing will happen."<sup>21</sup>

The Strategy needs to be accompanied by incentives to member states to improve performance, for instance by using the EU budget as an incentive mechanism and using conditionality as a disciplining principle. Those who meet headline targets could receive additional EU funds. EU transfer rules need to be revised to better reward reformers

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<sup>18</sup> Mario Monti's report, *A New Strategy for the Single Market*, May 9, 2010, is available at [http://ec.europa.eu/internal\\_market/strategy/docs/monti\\_report\\_final\\_10\\_05\\_2010\\_en.pdf](http://ec.europa.eu/internal_market/strategy/docs/monti_report_final_10_05_2010_en.pdf).

<sup>19</sup> Céline Allard and Luc Everaert, et al., "Lifting Euro Area Growth: Priorities for Structural Reforms and Governance," IMF Staff Position Note, November 22, 2010 (Washington, DC: International Monetary Fund, 2010).

<sup>20</sup> Ann Mettler, Lisbon Council, in <http://innovation.blogactiv.eu/2010/02/28/eu-2020-proposal-the-watershed-we-had-hoped-for/>.

<sup>21</sup> Andrew Willis, "Lukewarm Reaction to Europe 2020 Plan," *Business Week*, March 5, 2010.

and punish laggards; and compliance must be enforced more decisively than in the past. National reform agendas could be assessed by an independent expert group, as a way to reward good behavior and punish bad policies. EU transfers could be withheld if countries do not comply with the reform agenda. Peer review should be avoided, as pressures to weaken discipline would arise, as experienced in the past with the Stability and Growth Pact (SGP). The need to build better incentives to reform into the European governance framework is hardly new.<sup>22</sup> But the crisis has made changes more pressing.

### **Key Recommendations**

The European Union and its member states have a window of opportunity to reposition themselves for the challenges of a vastly different world. Given current trendlines in such key areas as trade in goods and services, financial markets, energy dependencies, demographic changes and innovation performance, they have about decade's time to address their weaknesses and capitalize on their strengths. If they do so, Europeans are likely to prosper in the new world rising. If they do not, the resulting strains and stresses could challenge Europe's very construction.

Will the financial crisis be remembered as the moment when the EU finally cracked? Or as the spur to a more competitive Union? During the first few years of the new decade most EU member state governments will be preoccupied with recovering from the financial crisis and restoring confidence in EU and euro zone economic policy coordination. Yet even if successful, such efforts will prove inadequate to the larger challenges facing the European Union. Even as they tackle the lingering crisis, policymakers must simultaneously lay the foundation for continued European competitiveness in an increasingly interconnected world.

How can this be achieved?

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<sup>22</sup> Already in 2003 the Sapir Report set forth an agenda for growth that still resonates with relevant recommendations. Sapir and others updated their recommendations in 2009. See André Sapir, ed., *Europe's economic priorities 2010-2015: Memos to the new Commission*, available at [http://www.bruegel.org/uploads/tx\\_btbbreugel/comm\\_memos\\_082009.pdf](http://www.bruegel.org/uploads/tx_btbbreugel/comm_memos_082009.pdf).

There is no one-size-fits-all model. To a large extent, each member state must devise its own strategy. Different pathways can lead to success. Different circumstances call for different relative priorities. Countries in southern Europe need to focus more on regaining competitiveness, while others should promote higher labor force participation or more open service sector markets. Some common priorities do emerge, however, that underscore the importance of working better at European level. To the extent that individual member states are able to advance together along the lines below, each is likely to be strengthened as well.

Here are 8 basic priorities.

**1. First things first—get the recovery right.** EU leaders urgently need to fix the financial system and tackle burgeoning deficits and debt without undermining Europe's fragile return to growth. Addressing weaknesses in the financial system is essential to a strong and sustained recovery. Unfortunately, EU leaders have adopted hesitant and piecemeal approaches to the debt problems of the eurozone's weakest members, which have not helped those countries return to growth, have not reassured nervous investors, and have not protected other eurozone countries from further contagion.<sup>23</sup>

EU leaders urgently need to fix the financial system and tackle burgeoning deficits and debt without undermining Europe's fragile return to growth. Case-by-case crisis management isn't working. More fundamental reforms are needed, including a eurozone fiscal union to underpin monetary union; the substantial European Stability Mechanism as a permanent crisis resolution mechanism; fiscal and financial reforms that actually support—and enforce—the growth and stability pact targets that have been ignored for many years; and related efforts to improve economic performance. Permanent bail-outs are not the solution to Europe's economic challenges. As Jean Pisani-Ferry notes, weaker EU member states need to regain their footing and resume economic growth, “not to be put inside an economic oxygen tent.”<sup>24</sup> This will require EU leaders to convince weary voters to accept some short-term

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<sup>23</sup> Michael Schuman, “Europe's Debt Crisis: An Uglier 2011?” *Time*, December 17, 2010.

<sup>24</sup> Jean Pisani-Ferry, “A growing crisis puts the euro in danger,” *Financial Times*, December 6, 2010.

economic pain in order to build down deficits and debt and reposition their economies to compete successfully in the changing global economy.

**2. Raise productivity to drive overall growth.** The EU must boost its productivity if it is to deal with its demographic challenges and sustain its social welfare model.<sup>25</sup> Better utilization and productivity of labor would lift EU GDP substantially. McKinsey estimates that boosting services sector productivity to the EU15 average or to European best-practice levels per sector could add 3-20% to the region's productivity.<sup>26</sup> And simulations by the IMF and the European Commission suggest that if all EU member states were to adopt best practices by the EU's 3 best performers in labor markets and the services sector, overall EU GDP growth would rise by as much as 1/2 percentage point of additional annual growth annually over the next 5 years.<sup>27</sup> Stagnant or flagging productivity, on the other hand, will mean a period of low or no growth, which is likely to generate greater domestic and intra-EU conflicts while leaving the EU behind in a world of high-growth competitors.

Specific challenges vary across EU member states. Germany, France, and some smaller countries need to improve their utilization of labor, while many southern and eastern member states need to focus on more basic requirements, such as their institutional setting, infrastructure levels, market efficiency, technological readiness, and skill levels.<sup>28</sup> Yet even though each member state faces its own unique challenges, all are likely to benefit from strengthened coordination. The Europe 2020 strategy offers some useful ways forward, yet in many areas does not go far enough. Reforms could include a shift from labor to VAT taxes; reducing entry barriers in key services sectors; offering better tertiary and vocational education opportunities; promoting more effective links between business-related research and universities, allowing universities to patent output even when research has been financed through public programs (as permitted by the

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<sup>25</sup> <http://ec.europa.eu/trade/creating-opportunities/trade-topics/european-competitiveness/global-europe/>; See Chapters 4, 7, and 8 of Sapir et al., *An Agenda for Growth*, op. cit.

<sup>26</sup> See *Beyond Austerity*, op. cit; Allard and Everaert, et al., op. cit.

<sup>27</sup> Allard and Everaert, et al., op. cit.; Mourre, op. cit.

<sup>28</sup> Almunia, op. cit.

Bayh-Dole Act in the United States); and attracting high-skilled foreign talent. In the past, reforms have succeeded when the agenda was driven by European institutions and a common sense of purpose, but largely failed when agendas relied on peer pressure among member states alone.

**3. Complete the Single Market.** The Single Market is both the bedrock of European integration and the EU's most potent instrument to address the challenges and opportunities of the G20 world. The European Commission estimates that completing, deepening and making full use of the Single Market would potentially produce growth of about 4% of GDP over the next ten years. A more complete and vibrant Single Market would provide countries and companies with a stronger geo-economic base in a world of continental-sized players. It would give EU countries greater opportunities to exploit their full comparative advantage, and would give EU companies new possibilities to restructure their activities on a pan-European scale. It would much improve the EU's attractiveness as place to invest, work and study.<sup>29</sup>

Completing the Single Market would create jobs and boost trade, investment, productivity and growth. The EU itself is still the key market for all EU member states. Two-thirds of all EU goods and services, FDI and private portfolio investment is transferred among EU member states. Yet major opportunities go missing. Cross-border procurement, for example, accounted for only around 1.5% of all public contracts awarded in the EU in 2009. Cross-border services account for only 5% of the EU's GDP, compared with 17% for manufactured goods traded within the Single Market. Only 7% of EU consumers used the Internet to make cross-border purchases in 2008. In energy, national champions control 80-100% of domestic electricity production. A single EU energy market could lower prices for consumers and make energy supplies more secure. The ratio of intra-EU15 exports to GDP is 70% less than the ratio of intra-U.S. exports to GDP.<sup>30</sup>

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<sup>29</sup> Monti, *op. cit.*, p. 9. See also André Sapir, "Globalisation and the Reform of European Social Models," Background document for the presentation at ECOFIN Informal Meeting in Manchester, September 9, 2005 (Brussels: Bruegel, 2005), <http://ddata.over-blog.com/xxxyy/0/28/07/62/sapir/sapirpaper080905.pdf>.

<sup>30</sup> [http://www.oecd.org/document/30/0,3343,en\\_2649\\_34569\\_38979998\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/30/0,3343,en_2649_34569_38979998_1_1_1_1,00.html); Monti, *op. cit.*, p. 9.

A Digital Single Market is a related opportunity left untapped. The cost of non-digital Europe is significant: according to a recent study<sup>31</sup> the EU could gain 4% of GDP by stimulating the fast development of a Digital Single Market by 2020. This corresponds to a gain of almost €500 billion and means that the Digital Single Market alone could have an impact similar to the 1992 Single Market program itself.<sup>32</sup>

**4. Awaken Europe's sleeping giant: services.** The EU could make things easier for itself by playing to its strength in services — its biggest untapped source of jobs and economic growth. Services account for all net job growth in the EU. Intra-EU services trade is 35% higher today than it would be without the Single Market. Nonetheless, services account for just 20% of Europe's trade, even though they account for 70% of Europe's output.<sup>33</sup> Although the EU-wide Services Directive has helped forge a more coherent approach to services within the EU, it is not fully implemented, and excludes such critical areas of potential innovation and productivity growth as financial services, health, employment and social services.<sup>34</sup> One recent study found that if the Services Directive were fully implemented, it could deliver more than 600,000 new jobs and economic gains ranging between €60-140 billion, representing a growth potential of at least 0.6-1.5% of GDP.<sup>35</sup> And if services competition in the eurozone was raised to U.S. levels, the European Central Bank estimates that service sector output could be increased by 12%. Innovation, efficiency, investment and jobs could all be sparked through stronger competition, particularly in business-to-business services; easier entry requirements into professional services sectors and easier cross-border transfer of degrees and training certificates; lifting entry barriers in such network industries as energy and transportation; providing crucial

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<sup>31</sup> Copenhagen Economics, *The Economic Impact of a European Digital Single Market*, Final Report, March 2010.

<sup>32</sup> *Beyond Austerity*, op. cit.; Allard and Everaert, et al., op. cit.

<sup>33</sup> *Assessing the costs and benefits of a closer EU-Canada economic partnership: A Joint Study by the European Commission and the Government of Canada*, 2008, available at <http://www.international.gc.ca/trade-agreements-accords-commerciaux/assets/pdfs/EU-CanadaJointStudy-en.pdf>

<sup>34</sup> Soete, op. cit.

<sup>35</sup> "Expected economic benefits of the European Services Directive," Netherlands Bureau for Economic Policy Analysis (CPB), November 2007; Monti, op. cit.

enablers such as standards, education, and infrastructure in business services, tourism, and telecommunications; and facilitating European scale across member state borders. Member states such as Germany and those from northern Europe are particularly losing out on these opportunities.

The European Competitiveness Report 2010 highlights the particular importance of the “creative industries” to the EU’s future prosperity. Such industries are essentially services industries. They range from information services, such as publishing or software, to such professional services as engineering, architecture, advertising and design. They account for 3.3% of total EU GDP and 3% of employment, and are among the fastest growing sectors in the EU. Overall employment in the creative industries increased by an average of 3.5% a year in 2000-2007, compared to 1.0% a year for the EU economy as a whole.<sup>36</sup>

A true Single Market in services would also position the EU well internationally. The EU is a world-class leader in services trade, including in exports of creative industries products and services. EU services companies are also major investors in services; in fact FDI has become the main means for EU companies to get access to high-growth emerging markets. More effective efforts to facilitate services investments, not just trade, would pay dividends to EU services companies, which still lag U.S. firms when it comes to such key markets as Japan, India, China and Rising Asia.<sup>37</sup>

**5. Break the link between the production of wealth and the consumption of resources.** The EU should lead in the transition to a low-carbon economy and promote itself as a showcase of energy efficiency and innovation. This will be neither quick nor easy. Fossil fuels are convenient, versatile, and in many cases cheaper than many

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<sup>36</sup> More than 97% of respondents to a 2010 survey in EU member states thought the creative industries were “important” or “very important” in supporting innovative activities, encouraging economic growth and creating new jobs. *European Competitiveness Report 2010*, op. cit., pp. 13-14. See also the European Commission’s “Green paper—Unlocking the potential of cultural and creative industries,” available at [http://ec.europa.eu/culture/our-policy-development/doc2577\\_en.htm](http://ec.europa.eu/culture/our-policy-development/doc2577_en.htm).

<sup>37</sup> *European Competitiveness Report 2009*, op. cit.; Europe Innova paper no. 4, Commission Staff Working Document, “Towards a European strategy in support of innovation in services: Challenges and key issues for future actions,” 2007.

renewables. But as David Buchan has noted, the EU has the capacity and the propensity to lead the great escape from fossil fuels.<sup>38</sup> Reducing EU energy consumption by 20% by 2020 would reduce the cost of energy imports by €100-150 billion annually, and could create a million new jobs. Under current policies, however, the EU will only reduce consumption by 10%, so the EU will miss out on at least €50 billion a year in cost savings and half a million new jobs unless stronger energy-saving approaches are put into place, including incentives to address up-front costs and efforts to heighten end-user awareness. The EU's green stimulus spending has been only half that of the U.S. and one-quarter of that provided by China. Prioritizing public funding of clean energy would send a strong signal to business and act as a catalyst for private investment.<sup>39</sup>

**6. Innovate.** Innovation drives economic growth and offers new solutions to existing challenges. It has become even more important as Europe's native population ages and shrinks, since population growth cannot fuel economic growth in Europe. The EU can—and must—offer greater opportunities to young start-ups and entrepreneurs; facilitate the mobility of workers within and across companies; invest more in R&D and higher education; boost possibilities for continuous development of skills; welcome highly-skilled migrants; introduce a unified EU patent and related litigation system; continue to build innovation clusters in sub-regions of the EU; improve access by small- and medium-sized enterprises to financial resources, simplified administrative procedures and better protection of intellectual property rights; facilitate the exchange of people, skills, technologies and ideas between large and small businesses to boost overall innovation capability; and build a more vibrant EU base of small and medium-sized companies, which are essential for growth and jobs.<sup>40</sup>

The EU must also turn from its traditional focus on benchmarks of innovation input such as R&D measures to a concerted focus on innovation output, and focus on user needs, demand opportunities, organi-

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<sup>38</sup> David Buchan, *Rough Guide to the Energy Crisis* (New York: Penguin, 2010).

<sup>39</sup> Stephen Tindale, "The EU should be much bolder on energy efficiency," October 12, 2010.

<sup>40</sup> Andre Sapir, et. al, *An Agenda for a Growing Europe (The Sapir Report)* (London: Oxford University Press, 2004)

zational, process and social innovation. It needs to focus more explicitly on getting ideas to market. It must recognize the collaborative and cross-border nature of innovation in today's world and actively forge and strengthen its innovation networks around the globe. The December 2010 initiative by 10 EU member states to move ahead with a unified European patent is a step in the right direction.

An effective innovation strategy must encompass both manufacturing and services. The EU needs to build on such areas of competitive advantage in high-tech manufacturing as intelligent manufacturing systems, aerospace, digital electronics and biopharmaceuticals. As emerging markets move into higher-value-added activity, ensuring that the EU maintains its advantage in those sectors will be key to keeping the EU a location of choice for innovation activity and investment. And a coherent services innovation strategy promises to extend the scope of innovation activity more widely across the Union.

The EU also needs to remain at the forefront of protecting and promoting intellectual capital. Robust protection of intellectual property drives European innovation and attracts capital to innovative and creative enterprises. It protects inventions and content and is a critical element in the fight against counterfeiting and piracy.

**7. Power to the people.** The EU and its member states must tap the potential of their people if they are to manage demographic challenges, sustain their social model, develop the skills needed in a knowledge-based economy, and prosper in the G20 world. In particular, the EU needs to develop a pan-European talent strategy that attracts skilled foreign labor; ensures the free movement of people among member states; facilitates better links between business and education; improves access to and harmonizes key features of the labor market; promotes higher education and training in key enabling technologies; and boosts overall skills training and re-skilling across the Union. Europe's aging population also represents a market opportunity for certain sectors, in particular healthcare, pharmaceuticals, medical and nutrition products, tourism and leisure, which should be encouraged to innovate to meet changing demand patterns.<sup>41</sup>

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<sup>41</sup> *European Competitiveness Report 2010*, op cit., p. 12.

The EU also has the opportunity to demonstrate that economic strength can go hand in hand with high standards of welfare, despite intense competitive pressures. EU leaders can show that it is possible to reap globalization's benefits while making its costs bearable to those who are directly affected by rapid economic change. "Flexicurity" arrangements piloted by Denmark and other member states is one example of how Europe is doing just that.<sup>42</sup>

**8. Become a critical hub in the G20 world.** The EU is well placed to be a key hub of a multi-polar world in which new centers of economic and political power have emerged. The EU should use its network capital to make itself a focal point for the exchange of ideas, people, capital, goods, services and energy innovation in the interconnected G20 world. The more connected the EU is, the more competitive it is likely to be. The EU needs to advance on four fronts.

*First, don't forget your base.* That's the first rule of politics, and it should be the first rule of EU international economic policy. The Single Market is the platform for a more competitive EU in a G20 world. Better use should be made of it, as suggested earlier. "Europeanization" can be as economically profound for many EU companies and countries as "globalization," and this study has shown that Europeanization of goods, services, capital, energy, people and ideas and the competitive networks that accompany them extend beyond EU borders to encompass the EU's neighbors in Wider Europe. Before the recession the EU benefitted enormously from the dynamism of its closest neighbors. Europe's backyard can generate tremendous opportunities again—if the EU is prepared to deepen existing ties and widen its networks. If one considers the potential of Wider Europe, the EU essentially has a China right in its own backyard. Yet the popular image is of the Polish plumber and the Turkish construction worker.

*Second, create an open Transatlantic Marketplace.* This study underscores that potential for the EU to build an even more vibrant base through its almost organic ties to North America. No two continents are as economically fused as Europe and North America, and

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<sup>42</sup> T. Andersen and M. Svarer, "Flexicurity—the Danish labour market model," MIT working paper; K. Madsen, "The Danish model of "Flexicurity"—a paradise with some snakes," European Foundation for the Improvement of Living and Working Conditions, 2002.

those bonds have tightened, not loosened, since the end of the Cold War. Together North America and the EU still comprise more than half of global GDP, are the world's and each other's most significant partners in terms of trade, investment, innovation and the norms and standards that guide global commerce. Rather than take the transatlantic partnership for granted or treat it as a "legacy" relationship rooted in the past, policymakers are called to use its considerable potential to tap new sources of innovation and growth.

The transatlantic economy is the freest in the world — but it is not free. Significant results could be achieved for smarter and more sustainable growth as well as more and well-paying jobs, from related initiatives to conclude a transatlantic zero tariff agreement; build down non-tariff measures on each shore of the North Atlantic; align legislation on "upstream" issues such as nanobiotechnology, e-health or e-mobility; and work together to establish and ensure international adherence to high level global standards in such areas as intellectual property protection, food and consumer safety and public procurement. The payoffs could be substantial: the impact of a mutual opening of the EU's Single Market and North America's vast continental market would be the equivalent of giving every European and American an entire year's extra salary over their working lifetimes.<sup>43</sup> Even as the U.S. and the EU push multilateral liberalization through the Doha Development Round, they should advance transatlantic market-opening initiatives in services, financial markets, telecommunications, energy, innovation policies and other areas not yet covered by multilateral agreements.

***Third, leverage high-growth markets.*** Completing the Single Market and bolstering the EU's extended base in Wider Europe and

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<sup>43</sup> The benefits would be widespread. An open transatlantic market for air transport services, for instance, could boost transatlantic travel by up to 24%, increase consumer welfare by over \$6 billion annually and boost economic output in related industries by at least \$9 billion a year. Full transatlantic integration of securities markets could lead to a 9% reduction of the cost of capital for listed companies, 60% reduction in transaction costs, and an almost 50% increase in trading volume. Aligning U.S. and EU automotive regulations could reduce the cost of every car and truck by up to 7%, with important knock-on effects for the extensive networks of suppliers and distributors across each continent. See Daniel S. Hamilton and Joseph P. Quinlan, *Deep Integration: How Transatlantic Markets are Leading Globalization* (Washington, D.C.: Center for Transatlantic Relations, 2005). See also Koen Berden, et al., *Non-Tariff Measures in EU-US Trade and Investment—An Economic Analysis* (Rotterdam: Ecorys, 2009)

North America would position the EU much better to face the challenges and leverage the opportunities offered by the fast-growing markets of the emerging world. EU companies must overcome the relative inertia evident in their export orientation to compete with emerging market companies in high-growth economies.

Despite the use of such terms as BRICs, this study has shown that the nature of the EU's ties to other world regions varies significantly, and each must be approached on its own terms. The EU needs to open the Chinese market to EU goods, services and investments; improve standards for trade in goods and services; address counterfeiting and other intellectual property challenges, currency distortions and discriminatory Chinese policies. With Rising Asia it has the opportunity to build on its free trade agreement with South Korea to conclude additional pacts with others, and to press ahead with its renewables trade. The consumer markets of China and Rising Asia together will rise from 12% of world consumption prior to the economic crisis to about 32% in 2020, becoming the main driver of world growth and a key opportunity for the EU—if European companies reposition themselves and are able to export value-added goods and services to these growing consumer markets and establish affiliates to provide goods and services locally.<sup>44</sup>

The EU could be a major partner for Russia if Moscow would be prepared to tackle seriously its profound domestic challenges and further develop its energy infrastructure while shifting to a more balanced economy. The EU needs to strengthen its surprisingly weak links to India while bracing for tough competition in third markets from Indian services providers. And it can do more to engage Brazil through services, investment and collaboration on new energy sources.

There are some common threads in EU ties to emerging markets. Major challenges arise from weak regulatory frameworks, uneven enforcement of laws, continuing non-tariff barriers to trade and relatively low environmental and labor standards, which often discriminate against foreign companies. Prominent examples are intellectual property rights protection and its enforcement in China, labor legislation in India and Russia, and environmental regulations in both Russia

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<sup>44</sup> Gordon Brown, *Beyond the Crash: Overcoming the First Crisis of Globalisation* (London/New York: Simon & Schuster, 2010).

and China. In addition, the strong role of the state in many emerging markets, which can be expressed in terms of preferential subsidies, tax preferences, or privileged access to bank loans or raw materials, especially for state-owned enterprises, can hamper efforts by EU companies to be competitive both home and abroad. State interference in China poses particular challenges for EU companies, in view of the export-driven character of the Chinese economy and the potential scale and scope of the Chinese domestic economy.

**Fourth, don't neglect key economies.** As the EU engages vigorously on these fronts, it needs to address areas in which it has allowed its economic ties to erode. Africa is perhaps the most prominent example. But Latin America has also been neglected. And Turkey is shifting its trade away from Europe.<sup>45</sup> EU companies have sacrificed considerable opportunities in these three markets, losing market share to rising competitors, particularly from Asia.

The rise of rapidly developing nations presents many opportunities for the EU, but also very real challenges. The EU still has time to reposition itself to prosper in this new world rising, if the political will is there. But time is not standing still. And in the end, history will remember not only how well leaders managed this or that crisis, but how well they positioned their countries for the future.

## Four Scenarios

Europe's future economic performance depends on its ability and its propensity to leverage global growth, human talent and innovation while exploiting European strengths and consolidating public finances. These external and internal drivers define four possible scenarios for Europe's future: *Competitive Europe*, *Losing Steam*, *Europe Unbooked*, and *Europe Adrift*.<sup>46</sup>

<sup>45</sup> Adjustments at home and in the EU need to be accompanied by a sustained commitment to a rules-based system of open global commerce, underpinned by concrete efforts to reduce trade and investment barriers with the rest of the world. An immediate priority in this regard is agreement in the Doha round of multilateral trade negotiations.

<sup>46</sup> Figure 1 was adapted with thanks from a chart on scenarios for the UK economy in Vanessa Rossi and Jim Rollo, "Aiming for New Vigour: The UK in the Global Economy," Chatham House Briefing Paper, June 2010.



### *Competitive Europe*

If the EU is to maintain and even advance its competitive position, it must not only build on its strengths and address its weaknesses, it must bolster its capacity to leverage the dynamism of other key regions and to absorb innovation and talent from beyond its borders. In the scenario dubbed *Competitive Europe*, the EU and its member states are successful in doing these things in a high-growth global environment.

Under this scenario, the EU and its member states address their fiscal and financial problems and inject new vibrancy into their home base by improving the economic governance of the eurozone, including the historic step of eurozone fiscal union, and boosting the capacity of the EU Single Market and the free flow of goods, services, money, energy, people and ideas within it. They leverage higher growth to seek greater economic convergence among EU member states at levels of high competitiveness across the board. They supplement these initiatives with efforts to infuse additional dynamism into their broader geo-economic base in Wider Europe, and to invigorate the EU's deep economic connections to North America, in particular by knocking down non-tariff barriers to transatlantic commerce, fueling greater innovation linkages, and opening up the transatlantic services economy.

These initiatives proceed in tandem with more effective efforts, both through trade and foreign direct investment, to capture greater market share in new markets, particularly in China and Rising Asia, and renewed attention to Africa. EU firms capitalize on their advantages in services and in high-tech, upmarket and environmental goods across all markets; as well as the opportunities rapidly rising economies offer to EU medium-tech capital goods industries and those engaged in infrastructure development. Activist policies address aging and shrinking populations, boost integration levels and advance skills and training across the board. They promote innovation and knowledge-based investments, particularly in energy sustainability.

### *Losing Steam*

Under this scenario the EU and its member states agree on ways to improve their competitiveness, but the promise dissipates due to persistently low European and global growth as the recovery from the finan-

cial crisis stutters. EU exports and FDI remain overweight in developed country markets, as opportunities falter in emerging markets. Pressure builds on economic and monetary integration as some EU member states capitalize on opportunities while others fall further behind. Social tensions rise as governments are forced to make further cuts in social welfare systems and education. The EU fails to attract or nurture high-skilled labor as populations age and shrink, adding to pressures on workers, migrants, companies and governments. Investment capital weakens as investors turn to other markets for better opportunities. Flagging investment, in turn, makes it harder for the EU to reduce acute energy dependencies and promote energy sustainability.

### *Europe Unbooked*

Under this scenario the global growth environment is good but the EU and its member states prove unable to generate the efforts needed to maintain and advance their competitiveness. The EU fails to leverage global growth, the recovery is weakened, and confidence erodes in the euro and in sterling. Faster-growing and more innovative competitors capture market share in a variety of goods and services, and investment shrivels as high-growth opportunities beckon elsewhere. Divergences widen even further between high-performing member states and thus unable to maintain their competitive position. Social tensions rise as governments forced to cut back on social welfare systems and education, and limited investment funds blunt the EU's ability to promote sustainable growth models as a source of European competitiveness.

### *Europe Adrift*

Under this scenario there is low global and European growth and the EU and its member states fail to advance efforts to advance their competitiveness. Debt levels remain stubbornly high and further debt crises erupt in some EU member states, triggering a crisis of confidence in the euro and sterling. Continual crisis management erodes the credibility of European integration and the European model, diminishing European influence in the world, prompting intense debate about the nature and relevance of the EU itself. Innovation and productivity flag. The EU loses critical market share both in goods

and services to faster-growing, more innovative competitors. Social divisions are exacerbated and the welfare state provisions of EU member states simply become unsustainable as a smaller workforce proves unable to support aging populations. The lack of energy innovation and internal EU disputes limit the possibilities for coherent EU energy policies, thus deepening energy dependencies among a greater number of EU member states. Workers suffer, wages decline, and anti-migrant forces gain ground. Consumers are confronted with less choice at higher prices.

\* \* \*

Europeans need the European Union now as much as they did a half-century ago, but for different reasons. For fifty years, the European project was about internal reconciliation and reconstruction following the collapse of an earlier era of globalization into war and depression. It was a grand experiment in harnessing closer economic integration to build prosperity and peace. Over the past twenty years it has extended those benefits to more of the European continent than ever thought possible. Today, in a new context and with new challenges, Europeans once again have the opportunity to harness integration—to use their network capital to position themselves for the new world rising and to generate a better life, not only for themselves but for billions around the world. Whether they will use the coming decade's window to do so is likely to determine the relevance of the European project in an increasingly competitive and connected world.



## About the Authors

**Martin Neil Baily** was a Senior Fellow at The Brookings Institution (1979–89) and returned to Brookings as the Bernard L. Schwartz Chair (2007–present). He is a former Senior Fellow (2001–07) at the Peterson Institute for International Economics. He was chairman of the Council of Economic Advisers during the Clinton administration (1999–2001) and one of three members of the council from 1994 to 1996. He is a Senior Advisor to the McKinsey Global Institute. He was a research associate at the National Bureau of Economic Research, and he co-founded the microeconomics issues of the Brookings Papers on Economic Activity. His research focuses on productivity, employment, monetary and fiscal policy, and capital markets.

**David Calleo** is a University Professor at The Johns Hopkins University and Dean Acheson Professor and Director of European Studies at the Paul H. Nitze School of Advanced International Studies (SAIS). He is the author of several books on European and American history and political economy.

**John Gabriel Goddard** is a Senior Economist at the World Bank, based in Washington, D.C. He is part of the Finance and Private Sector Development Unit of the Europe and Central Asia Region, where he currently coordinates the private sector development programs in Bulgaria and Macedonia. He was a Cournot Centre postdoctoral fellow in 2003–04. His main research interests are in the economics of trade and industry and in science and innovation policy.

**Daniel S. Hamilton** is the Austrian Marshall Plan Foundation Professor and Director of the Center for Transatlantic Relations at the Johns Hopkins University School of Advanced International Studies. He also serves as Executive Director of the American Consortium for EU Studies. He is the coordinator of the Enabling Technologies coalition of scholars, businesses and stakeholders on the interaction between technologies and developments in health, low-carbon economy and education in Europe. He has held a variety of senior positions in the U.S. Department of State, and in 2008 served as the first

Robert Bosch Foundation Senior Diplomatic Fellow in the German Foreign Office. Recent publications include *Transatlantic 2020: A Tale of Four Futures* (2011); *Europe 2020: Competitive or Complacent* (2011); *Shoulder to Shoulder: Forging a Strategic U.S.-EU Partnership* (2010); *The Transatlantic Economy* (annual editions, 2004-2011).

**Hans-Helmut Kotz** is a visiting professor at Harvard University's Center for European Studies. He is a senior fellow at Goethe University's Center for Financial Studies, chair of its Research Advisory Council, and an honorary professor at the University of Freiburg. He has served on the Executive Board of the Deutsche Bundesbank, the European Parliament's Expert Group on Financial Markets, and various committees of the Bank for International Settlements and of the O.E.C.D. His research focuses on financial stability and the politics of international rule making.

**Natalie McGarry** is currently a research assistant at the Brookings Institution in Economic Studies in Washington, D.C. Prior to that, she was in Egypt as part of the Inktank media monitoring and writing staff. Her main research interests include monetary and fiscal policy, agent-based modeling, and development economics.

**Xavier Ragot** is associate professor at the Paris School of Economics and a researcher at the C.N.R.S., the French National Center for Scientific Research. He worked as senior economist at the Bank of France from 2008 to 2011. He also served as chief economist of the French Agency for Industrial Innovation. His main field of interest is monetary economics and fiscal policy, with his research focusing on monetary and macro-financial issues.

**Robert M. Solow** is Institute Professor Emeritus of economics at the Massachusetts Institute of Technology. In 1987, he received the Nobel Memorial Prize in Economics for his contributions to economic growth theory, and, in 1999, the U.S. National Medal of Science. He is a former president of the American Academy of Sciences and of the Econometrics Society. He is the Robert K. Merton Scholar at the Russell Sage Foundation. He is co-founder of the Cournot Foundation and Centre.



# EUROPE'S ECONOMIC CRISIS

## TRANSATLANTIC PERSPECTIVES

ROBERT M. SOLOW AND DANIEL S. HAMILTON, EDITORS

When the euro was introduced, it was heralded as the symbol of a unified Europe. Not enough consideration was given at the time, however, to how member economies could adjust to differences in economic performance or how to manage debt crises. Today, amidst a broader North Atlantic financial and economic crisis, the eurozone is in turmoil, beset by stresses and strains that could challenge Europe's very construction.

How should eurozone countries tackle their current crisis? How did it come about, and how may it be resolved? What does it mean for Europe's historic experiment in political and economic integration? Will the eurozone crisis be remembered as the moment when the EU finally cracked? Or as the spur to a more integrated and competitive Union?

The Center for Transatlantic Relations and the Cournot Centre asked the authors in this timely volume to address these questions. Their varying perspectives are invaluable to anyone seeking to understand the roots of Europe's economic crisis and how it may affect Europe's future.

Contributors include

Martin Neil Baily

David Calleo

John Gabriel Goddard

Daniel S. Hamilton

Hans-Helmut Kotz

Natalie McGarry

Xavier Ragot

Robert M. Solow



JOHNS HOPKINS  
UNIVERSITY

Center for Transatlantic Relations  
EU Center of Excellence Washington, D.C.  
The Paul H. Nitze School of  
Advanced International Studies  
The Johns Hopkins University  
1717 Massachusetts Avenue, NW  
Suite 525  
Washington, DC 20036  
Tel: (202) 663-5880  
Fax: (202) 663-5879  
Email: [transatlantic@jhu.edu](mailto:transatlantic@jhu.edu)  
Website: <http://transatlantic@sais-jhu.edu>

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