

3-2002

## European Integration and the “Euro Project”

Philip Arestis

Malcolm Sawyer

Follow this and additional works at: [https://digitalcommons.bard.edu/levy\\_archives](https://digitalcommons.bard.edu/levy_archives)



Part of the [Economics Commons](#)

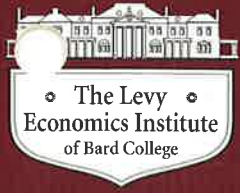
---

### Recommended Citation

Arestis, Philip and Sawyer, Malcolm, "European Integration and the “Euro Project”" (2002). *Archives of the Levy Economics Institute*. 84.

[https://digitalcommons.bard.edu/levy\\_archives/84](https://digitalcommons.bard.edu/levy_archives/84)

This Article is brought to you for free and open access by the Levy Economics Institute of Bard College at Bard Digital Commons. It has been accepted for inclusion in Archives of the Levy Economics Institute by an authorized administrator of Bard Digital Commons. For more information, please contact [digitalcommons@bard.edu](mailto:digitalcommons@bard.edu).



## EUROPEAN INTEGRATION AND THE “EURO PROJECT”

PHILIP ARESTIS AND MALCOLM SAWYER

The introduction of the euro—in January 1999 as a “virtual” currency, and then in January 2002 as a “real” currency—has been a significant step in the integration of the economies of the countries that form the European Union (EU), and, more notably, for the 12 countries that have so far adopted the euro and created the Economic and Monetary Union (EMU). The adoption of the euro has not only meant that a single currency now prevails across the euro zone with reduced transactions costs for trade between member countries. It also has meant that the euro has become embedded in a particular set of institutional and policy arrangements that tell us much about the nature of economic integration occurring in the EU. In fact, the euro is a relatively *small* step along the path to further economic integration at the global level, and the neoliberal agenda of globalization can be clearly seen from the ways in which the euro has been introduced.

**THE ADOPTION OF THE EURO CAN BE VIEWED AS A FURTHER STEP** in a process of economic integration that began with the signing of the Treaty of Rome by the six founder member countries (Arestis, Brown, and Sawyer 2001, especially chapter 2). Proposals for a single currency began in earnest with the Werner report in 1970, which advocated the movement toward economic and monetary union by 1980. The European Monetary System (EMS), launched in March 1979, sought to establish monetary and exchange rate stability based on the introduction of the Exchange Rate Mechanism (ERM), which, in turn, focused on the European Currency Unit (ECU). In 1986 the EU amended the Treaty of Rome with the Single

PHILIP ARESTIS is an Institute professor of economics at The Levy Economics Institute.

MALCOLM SAWYER is a senior scholar at the Levy Institute and professor of economics at University of Leeds.

European Act and set the end of 1992 as a target date for the removal of all remaining barriers to the free flow of goods, services, and resources.

The countdown to the single currency started with the signing of the Maastricht Treaty (or Treaty on European Union, to give its full title). We begin with an analysis of the controversy surrounding the so-called convergence criteria, which were to determine whether a national currency would join the single-currency system, to provide some insights into the nature of the euro project. The introduction of the euro was also accompanied by the adoption of the Stability and Growth Pact; we continue with a discussion of the Pact and its accompanying constraints on fiscal policy. The creation of the European Central Bank (ECB) with a counterinflationary agenda and related matters are then introduced before we summarize and provide our conclusions.

### The Maastricht Treaty and All That

The Maastricht Treaty defined the convergence criteria that each country had to meet in order for that country to become a member of the single-currency system. By implication, meeting the criteria is also required for member countries to become a part of the independent European System of Central Banks (ESCB) that comprise the ECB, and the national central banks of those countries that would belong to the EMU. The convergence criteria requires countries to

1. maintain a high degree of price stability, with an inflation rate within 1.5 percent of the three best-performing member states;
2. have "healthy" government finance, defined as a maximum government deficit-to-GDP ratio of 3 percent at market prices, and a maximum government debt-to-GDP ratio of 60 percent at market prices;
3. observe normal ERM fluctuation margins for at least two years without any devaluation among member-state currencies; and
4. support long-term interest rate levels that do not exceed two percentage points of the nominal long-term government bond rates of the three best-performing member states in terms of price stability.

Countries are also required to enact legislation for their central banks to become "independent." These criteria were to be applied to countries entering the euro at its creation, though many of the criteria were fudged (Arestis, Brown, and Sawyer 2001). In principle, these criteria would also be applied to countries seeking to join the euro in the future.

The Maastricht Treaty, which provides the institutional framework for the introduction of the single currency, was signed in late 1991, a time when political power in most EU countries was held by the right; the terms of the Treaty reflected the dominance of neoliberal ideas. Despite some electoral success by center-left parties (especially at the end of the 1990s), these neoliberal ideas still prevail. The neoliberal agenda therefore has been embedded in the institutional and policy arrangements surrounding the operation of the euro.

The general thrust of the convergence criteria was deflationary, as many countries were required to cut budget deficits, reduce public debt, and bring down inflation and interest rates to meet the criteria. The relatively poor economic performance of many of the EU economies during the 1990s may to some degree be attributable to the striving of countries to meet those criteria. From 1992 to 1999, the growth of national income averaged 1.7 percent per annum in the eurozone countries, compared with the 2.5 percent per annum averaged by the United Kingdom over the same time period. Moreover, the unemployment rate fell substantially in the United Kingdom (as well as in the United States and Canada), but tended to rise in the eurozone countries, most notably in France, Germany, and Italy. (The notable exception was Ireland, where unemployment fell dramatically.)

The convergence criteria affected what may be called nominal variables; that is, inflation rates, interest rate, and budget deficits. There is some rationale for concern about the convergence of inflation and interest rates if a single currency is to be formed, since a single currency area will have a single monetary policy (and hence a single, Central Bank interest rate). It is also unlikely that a single currency area could function with substantial differences in inflation rates within the area. However, any rationale for the inclusion of the convergence of budget deficits to less than 3 percent of GDP and for government debt to be less than 60 percent of GDP has been generally lacking. The adoption of these criteria not only brought a deflationary element to the Maastricht Treaty, but also reflected the general rejection of Keynesian economics and the use of fiscal policy to stimulate employment.

It is also evident that there is no reference to what may be termed real convergence; that is, the convergence of economic growth, unemployment levels, levels of national income per capita, business cycles, and the like. Indeed, massive differences remain in living standards and unemployment rates across the EU. The single currency is much more likely to operate effectively if there is some real convergence between participating economies, yet those concerns were dismissed (Arestis, Brown, and Sawyer 2001).

The institutional and theoretical background of the Maastricht Treaty and the EMU are embedded in the monetary policy operated by the ECB and in the Stability and Growth Pact

*The relatively poor economic performance of many of the EU economies during the 1990s may to some degree be attributable to the striving of countries to meet [the Maastricht Treaty] criteria.*



(hereafter SGP). The institutional macroeconomic policy framework, within which the euro was introduced and has begun to operate, has three key elements.

First, the ECB is the only effective federal economic institution. The ECB has the only policy instrument (the rate of interest, or "repo" rate) available to pursue the main objective of low inflation. The single monetary policy has an area-wide, euro perspective. A quantitative definition of price stability has been adopted in the form of, in effect, a 0–2 percent target for the annual increase in the Harmonised Index of Consumer Prices (HICP) for the euro area. The ECB has adopted a "two-pillar" monetary strategy to achieve this target through the policy instrument of interest rates. The "first pillar" is a commitment to analyze monetary developments for the information they contain about future price developments. This is the quantitative reference value for monetary growth, where a target of 4.5 percent (of the M3 definition of the money supply) has been imposed. The "second pillar" is a broadly based assessment of the outlook of price developments and the risks to price stability. This broad range of indicators includes the euro exchange rate; labor market indicators, such as wages and unit labor costs; fiscal policy indicators; and financial market indicators, such as asset prices.

Second, the ECB and the national central banks are linked into the European System of Central Banks (ESCB), with responsibility divided between them: the ECB has the responsibility for setting interest rates in pursuit of the inflation objective, and the national central banks have responsibility for regulatory matters.

Third, the ECB is intended to be independent of the EU Council and Parliament and of its member governments. Thus, there is a complete separation between the monetary authorities, in the form of the ESCB, and the fiscal authorities, in the shape of the national governments comprising the EMU. It follows that there can be little coordination of monetary and fiscal policies. Indeed, any attempt at coordination would be extremely difficult to implement. Apart from the separation of monetary and fiscal authorities, there also is the requirement that national governments (and, hence, the fiscal authorities) should not exert any influence on the ECB (and, hence, the monetary authorities). Strict interpretation of that edict would rule out any attempt to coordinate monetary and fiscal policies.

### **The Stability and Growth Pact**

The SGP, alongside the Maastricht Treaty, creates four rules for economic policy. The four rules are that (1) the ECB is granted independence from political influence; (2) national governments cannot bail out government deficits; (3) monetary financing of government deficits is prohibited; and (4) member states must avoid "excessive" deficits (defined as more than 3 percent of GDP).

The core elements of the SGP with respect to fiscal policy are three: (1) to pursue the medium-term objectives of maintaining budgetary positions close to balance or in surplus; (2) to require member states to submit annual stability and convergence programs; and (3) to monitor the implementation of those programs. The main feature of the core elements is the requirement that a national budget deficit not exceed 3 percent of GDP; failure to meet the requirement could lead to a series of fines (depending on the degree to which the deficit exceeds 3 percent). According to the Resolution of the European Council on the Stability and Growth Pact (Amsterdam, June 17, 1997), it is also necessary for national budgetary policies to "support stability-oriented monetary policies. Adherence to the objective of sound budgetary positions close to balance or in surplus will allow all Member States to deal with normal cyclical fluctuations while keeping the government deficit within the reference value of 3% of GDP." Furthermore, "Member States commit themselves to respect the medium-term budgetary objective of positions close to balance or in surplus set out in their stability or convergence programmes and to take the corrective budgetary action they deem necessary to meet the objectives of their stability or convergence programmes, whenever they have information indicating actual or expected significant divergence from those objectives." The Council can impose penalties on a country that appears to be running "excessive" deficits, with some escape clauses in case of severe recessions.

Each year a country has to submit a stability program to the commission for scrutiny, containing, inter alia, information about the paths of their budget deficit-to-GDP and national debt-to-GDP ratios. If the stability program reveals that a country is significantly diverging from its medium-term budgetary objective, the council will recommend that the stability program be "strengthened"; that is, that public expenditure cuts and tax increases be imposed. If the situation persists, the member state will be judged to have breached the reference values. (The pact details "escape" clauses that allow member states with excessive deficits to avoid sanctions.)

The separation of the monetary authorities from the fiscal authorities, along with the decentralization of fiscal authorities, inevitably makes any coordination of fiscal and monetary policies difficult. The ECB is instructed to focus on inflation, while the fiscal authorities have a broader range of concerns; this makes the grounds for potential conflict considerable and suggests a need for the evolution of a body charged with the coordination of EMU monetary and fiscal policies. In the absence of such a body, tensions will emerge in the real sector when monetary policy and fiscal policies pull in different directions. But so far, the SGP has, in effect, resolved these issues by establishing the dominance of the monetary authorities (ECB) over the fiscal authorities (national governments).

*The ECB is instructed to focus on inflation, while the fiscal authorities have a broader range of concerns; this makes the grounds for potential conflict considerable and suggests a need for the evolution of a body charged with the coordination of EMU monetary and fiscal policies.*

### Neoliberalism and the Euro

The policy rules governing the euro are based on a more general theoretical framework, the ingredients of which we identified elsewhere and termed new monetarism (Arestis and Sawyer 1998). The essential features of this theoretical framework (Duisenberg 1999; Arestis, Brown, and Sawyer 2001; Tsakalotos 2001) are as follows.

1. Politicians in particular, and the democratic process in general, cannot be trusted with economic policy formulation, as both politicians and voters have a tendency to make decisions that have stimulating short-term effects (that is, that reduce unemployment), but are detrimental in the longer term (notably, that raise inflation). In contrast, experts (in the form of central bankers) are not subject to political pressures to court short-term popularity, and can take a longer-term perspective when there is a conflict between the short term and the long term. The logic underpinning such reasoning mirrors that found in the debate over rules versus discretion. Policymakers' scope for using discretion should be curtailed and the possibility of negative spillovers from irresponsible fiscal policy reduced.
2. Inflation is a monetary phenomenon, so it can be controlled via monetary policy. The money supply is difficult, if not impossible to control directly, and the demand for money is thought to be highly unstable. However, the central bank can set the key interest rate (the repo rate) to influence monetary conditions, which in turn influence the future rate of inflation. Central banks have no discernible effect on the level or growth rate of output in the long run, but do determine the rate of inflation in the long run. Thus, inflation is still a monetary phenomenon, and ultimately it is central banks that determine the inflation rate.
3. The level of unemployment fluctuates around a supply-side-determined equilibrium rate, generally labelled the NAIRU, or nonaccelerating inflation rate of unemployment. The level of the NAIRU may be favorably affected by a "flexible" labor market, but is unaffected by the level of aggregate demand or by productive capacity.
4. Fiscal policy, primarily due to beliefs that it is inflationary and leads to the crowding out of private sector investment, is considered impotent in terms of its impact on real variables, and therefore should be subordinate to monetary policy in controlling inflation. It is recognized, though, that the government budget position will fluctuate during the course of the business cycle, but only in the context that fiscal policy is essentially passive.

*The sole objective of the ECB is price stability, so decisions are made by a governing body composed of bankers and financial experts, with no involvement by other interest groups or democratic bodies.*

The structure of the ECB clearly conforms to the first point. The sole objective of the ECB is price stability, so decisions are made by a governing body composed of bankers and financial experts, with no involvement by other interest groups or democratic bodies. The only EU-level policy for controlling inflation is monetary (interest-rate) policy, which presumes that monetary policy is a relevant and effective instrument for controlling inflation.

The implementation under the SGP of what is effectively a national-level, balanced-budget requirement (albeit balanced over the course of the cycle, rather than during any particular year), and the absence of fiscal policy at the eurozone level has eliminated the use of fiscal policy as an effective instrument for reducing unemployment (or, indeed, inflation). This approach to fiscal policy fits in very well with our fourth point listed above.

### Inflation, Unemployment, and Inequality

The ECB is the only EU-level economic institution, and it operates with the objective of attaining low inflation. There are three points of note here. First, this key institution is undemocratic in nature (indeed, it is barred from taking instructions from democratic organizations) and operates in a secretive and nontransparent way. ECB decision makers are central bankers, who represent no other interests (such as those of industry or trade unions).

Second, the only objective addressed through macroeconomic policy (and only via monetary policy) at the EU level is price stability, and that policy—an inflation target of less than 2 percent—has been one that has been generally missed over the past two years. Employment targets have also been set by the EU. For example, the overall EU employment rate is currently targeted to be 67 percent and 57 percent for women, rising to 70 percent and 60 percent, respectively, by the year 2010. These objectives are part of the European Employment Strategy, and are to be achieved through measures such as increased labor market flexibility and lifelong learning. There is no macroeconomic policy based on fiscal or monetary policy designed to create high levels of employment. Indeed, the general tenor of macroeconomic policy runs counter to the creation of high levels of employment.

Third, policy operates according to the notion that monetary policy is the relevant action for controlling inflation. Yet, monetary policy has become interest-rate policy, despite the evidence that the linkages between changes in interest rates and changes in inflation are at best weak, and at worst obscure (Arestis and Sawyer 2002). Any significant upswing in inflation

*... monetary policy has become interest-rate policy, despite the evidence that the linkages between changes in interest rates and changes in inflation are at best weak, and at worst obscure.*



would reveal that the ECB is unable to control inflation or even possesses policy instruments that can effectively tackle it, leaving the eurozone bereft of any counterinflation policy.

The eurozone itself has no weapons with which to fight recession, as there is no significant government expenditure at the EU level; further, it has no ability to run a fiscal deficit. At the national level, the ability of a government to run budget deficits is severely constrained by the SGP.

The response of the ECB to the economic slowdown of 2001–02 is a worrisome one, in view of its argument that it is natural for an economic slowdown to have adverse effects on the budget positions of member countries. However, for countries with a budget position still not close to balance or in surplus, it is important to adhere to medium-term consolidation plans. Short-lived slowdowns should not significantly change the scope for reaching the targets set in the countries' stability programs. Further, "as adjustment needs are likely to become more visible in periods of less vigorous economic growth, policymakers must now step up the

reforms rather than allowing efforts to abate" (ECB *Monthly Bulletin*, October 2001, p. 6). In this context, "reforms" mean further deregulation of labor markets. There is no fiscal policy in operation at the European level. The size of the European budget is relatively small—less than 1.2 percent of combined EU members' GDP in 1997—and is still dominated by the needs of the Common Agricultural Policy (about 50 percent). Yet, the MacDougall Report (1977) suggested that monetary union would not be viable without a sufficiently large community budget for fiscal policy (7.5 percent of members' GDP). It is also the case that the EU budget must be balanced. The interaction of those two elements means that there is no scope for active fiscal policy (or, indeed, for any fiscal policy), and that the EU budget is too small to operate as an effective stabilizer or to redistribute funds from richer regions to poorer ones in any significant manner.

The disparities of unemployment across the regions of the eurozone (and associated disparities in living standards and employment) present a major challenge and pose a considerable threat to the successful operation of the single currency. The disparities between the regions of the eurozone (which number 65) and the states within the U.S. may provide a reasonable basis for comparison. In the United States, unemployment rates ranged between 2.2 percent and 5.9 percent in 2000, and per capita disposable income from \$18,467 (Mississippi) to \$31,697 (Connecticut) in 1999. In the eurozone, unemployment rates ranged between 3 percent and 37 percent, and per capita GDP from 6,536 euros (Ipeiros, Greece) to 40,353 euros (Hamburg, Germany) in 1998, a factor of 1:6. But the SGP and associated policies contain no remedies for such disparities between these levels of unemployment and income.

*The disparities of unemployment across the regions of the eurozone (and associated disparities in living standards and employment) present a major challenge and pose a considerable threat to the successful operation of the single currency.*

The achievement of full employment does require an appropriately high level of aggregate demand, which in turn requires some combination of increased demand for exports, consumption, investment, and public expenditure. Whether such a level of aggregate demand would require a substantial budget deficit inevitably depends on what happens to the other sources of demand. But a high level of aggregate demand is only one condition, albeit a rather important one, to achieve full employment. In the context of the eurozone, there are two rather obvious and significant obstacles to such an achievement. First is a lack of productive capacity in many regions to provide high levels of employment. Current estimates by the OECD of the output gap—the difference between potential total output and actual output—place it around zero; that is, actual output is about equal to potential output despite the fact that unemployment is over 8 percent. In a similar vein, the OECD's estimates of the NAIRU average 8.8 percent for the eurozone (in 1999), which again is close to the current experience. Interpreting the NAIRU as an indicator of a capacity constraint suggests capacity problems. In this context, higher levels of aggregate demand would place pressure on capacity and could well have some inflationary consequences.

The second obstacle is the disparity of unemployment; a general increase in demand would push some regions to or even above full employment.

A major weakness of the present institutional arrangements is the separation between monetary policy (conducted by the ECB) and constrained fiscal policy (operated by national governments). There is clearly a requirement for economic policy to be coordinated across EU member countries, and for the emergence of appropriate institutional arrangements and policies at the European level. Economic policy at the EU level faces the additional issue of the disparities of economic performance in terms of employment and unemployment rates and the per capita level of GDP across the regions and countries of the EU.

### Concluding Remarks

The establishment of the euro and the European Monetary Union has been undertaken within a specific institutional and policy framework (see Arestis, McCauley, and Sawyer 2001 for a proposal of an alternative policy framework for EMU). The institutional framework gives prominence in policy formulation to an undemocratic and unaccountable European Central Bank. It is a policy framework that emphasizes controlling inflation over reducing unemployment, although it provides only a weak instrument (monetary policy) for that control and generates macroeconomic policies that tend to increase rather than diminish the level and disparity of unemployment.

## References

- Arestis, Philip, and Malcolm Sawyer. 2002. "Can Monetary Policy Affect the Real Economy?" Working Paper no. 355. Annandale-on-Hudson, N.Y.: The Levy Economics Institute.
- . 1998. "New Labour, New Monetarism." *Soundings* 9: 24–42. Reprinted in *European Labour Forum* 20: 5–10 (1998–99).
- Arestis, Philip, Andrew Brown, and Malcolm Sawyer. 2001. *The Euro: Evolution and Prospects*. Aldershot: Edward Elgar.
- Arestis, Philip, Kevin McCauley, and Malcolm Sawyer. 2001. "An Alternative Stability Pact for the European Union." *Cambridge Journal of Economics* 25:1:113–130.
- Duisenberg, Willem F. 1999. "Economic and Monetary Union in Europe: The Challenges Ahead." In *New Challenges for Monetary Policy*. Proceedings of A Symposium Sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 26–28, pp. 185–194.
- European Commission (MacDougall Report). 1977. *Report of the Study Group on the Role of Public Finance in European Integration*. Brussels: European Commission.
- Tsakalotos, Euclid. 2001. "European Employment Policies: A New Social Democratic Model for Europe?" In Philip Arestis and Malcolm Sawyer, eds. *Economics of the Third Way*. Aldershot: Edward Elgar, chapter 3.

## Related Levy Institute Publications

- Arestis, Philip, Iris Biefang-Frisancho Mariscal, Andrew Brown, and Malcolm Sawyer. 2001. "The Causes of Euro Instability." Working Paper no. 324, March.
- Arestis, Philip, Andrew Brown, and Malcolm Sawyer. 2002. "Critical Realism and the Political Economy of the Euro." Working Paper no. 352, September.
- Arestis, Philip, Kevin McCauley, and Malcolm Sawyer. 2001. *The Future of the Euro: Is There an Alternative to the Stability and Growth Pact?* Public Policy Brief No. 63.
- . 2000. "An Alternative Stability Pact for the European Union." Working Paper no. 296, March.
- Arestis, Philip, and Malcolm Sawyer. 2002. "The 'Third Way' and the Challenges to Economic and Monetary Union Macropolicies." Working Paper no. 345, May.
- . 2001. "Will the Euro Bring Economic Crisis to Europe?" Working Paper no. 322, March.
- Bibow, Jörg. 2001. "The Monetary Policies of the European Central Bank and the Euro's (Mal)Performance: A Stability-Oriented Assessment." Working Paper no. 338, September.
- . 2001. "Making EMU Work: Some Lessons from the 1990s." Working Paper no. 326, March.
- Izurieta, Alex. 2001. "Can Countries under a Common Currency Conduct Their Own Fiscal Policies?" Working Paper no. 337, August.

## Recent Levy Institute Publications

### POLICY NOTES

- The Brazilian Swindle and the Larger International Monetary Problem*  
James K. Galbraith  
2002/2
- Kick-Start Strategy Fails to Fire Sputtering U.S. Economic Motor*  
Wynne Godley  
2002/1
- Are We All Keynesians (Again)?*  
Dimitri B. Papadimitriou and L. Randall Wray  
2001/10
- Hard Times, Easy Money*  
Robert E. Carpenter  
2001/9

### PUBLIC POLICY BRIEFS

- Optimal CRA Reform*  
*Balancing Government Regulation and Market Forces*  
Kenneth H. Thomas  
No. 68, 2002 (Highlights, No. 68A)
- The Economic Consequences of German Unification*  
*The Impact of Misguided Macroeconomic Policies*  
Jörg Bibow  
No. 67, 2001 (Highlights, No. 67A)
- Racial Wealth Disparities*  
*Is the Gap Closing?*  
Edward N. Wolff  
No. 66, 2001 (Highlights, No. 66A)

### WORKING PAPERS

- "The Euro, Public Expenditure, and Taxation"  
Philip Arestis and Malcolm Sawyer  
No. 357, September 2002
- "Asset Poverty in the United States, 1984–1999: Evidence from the Panel Study of Income Dynamics"  
Asena Caner and Edward N. Wolff  
No. 356, September 2002
- "Can Monetary Policy Affect the Real Economy?"  
Philip Arestis and Malcolm Sawyer  
No. 355, September 2002
- "Should Banks Be Narrowed?"  
Biagio Bossone  
No. 354, September 2002
- "Managed Care, Physician Incentives, and Norms of Medical Practice: Racing to the Bottom or Pulling to the Top?"  
David J. Cooper and James B. Rebitzer  
No. 353
- "Critical Realism and the Political Economy of the Euro"  
Philip Arestis, Andrew Brown, and Malcolm Sawyer  
No. 352
- "Race, Ethnicity, and the Gender-Poverty Gap"  
Yuval Elmelech and Hsien-Hen Lu  
No. 351

Levy Institute publications, articles on current topics, and information about upcoming events are available on the Institute's website ([www.levy.org](http://www.levy.org)).

Copyright © 2002  
The Levy  
Economics Institute.

The Levy  
Economics Institute  
is publishing this  
research with the  
conviction that it is  
a constructive and  
positive contribution  
to discussions and  
debates on relevant  
policy issues. The  
Institute's Board  
does not necessarily  
endorse any proposal  
made by the author.

THE LEVY ECONOMICS INSTITUTE  
OF BARD COLLEGE

**NONPROFIT ORGANIZATION  
U.S. POSTAGE PAID  
ANNANDALE-ON-HUDSON, NY  
PERMIT NO. 12**

Blithewood  
Annandale-on-Hudson, NY 12504-5000

*Address Service Requested*

\*\*\*\*\*AUTO\*\*3-DIGIT 125

DIMITRI B. PAPADIMITRIOU  
PRESIDENT  
THE LEVY ECONOMICS INSTITUTE  
PO BOX 5000  
ANNANDALE ON HUDSON NY 12504-5000



THE LEVY ECONOMICS INSTITUTE  
OF BARD COLLEGE

Blithewood  
Annandale-on-Hudson, NY 12504-5000  
**Phone:** 845-758-7700, 202-887-8464 (in Washington, D.C.) **Fax:** 845-758-1149  
**E-mail:** [info@levy.org](mailto:info@levy.org) **Website:** [www.levy.org](http://www.levy.org)