



What Can We Expect From Greece?

ANALYSIS

Introduction

Recognizing that the European sovereign debt crisis has stretched beyond the peripheral countries to several of the core economies previously considered safe, an analysis of Greece, the country that triggered the crisis, provides insight into the key issues affecting the Euro Zone.

Greece's problems are rooted in intrinsic weaknesses in the economy and the state administration, flaws that were obscured in 2001 when the country was allowed to join the currency union and adopt the euro. Going forward, Greece faces daunting challenges in stabilizing the financial sector, winding down its debt, implementing institutional reforms and promoting economic growth, all in the face of political instability and social unrest.

The sovereign debt crisis also shows how the currency union, due to a lack of adequate governance and a central fiscal authority, has created huge imbalances within the region. Although the European Central Bank (ECB) has taken measures to put a "firewall" around the European financial system by providing excess liquidity, European banks remain exposed to the sovereign debt of Greece and other troubled Euro Zone countries. As a condition of granting financial aid, the "troika" consisting of the ECB, the European Union and the International Monetary Fund have mandated deficit-reduction measures that make economic growth nearly impossible and thus, make it even harder for the struggling countries to service their debt.

This report explores the plausible scenarios and potential consequences for Greece and the Euro Zone. Morgan Stanley economists subjectively estimate a 35% probability of a Euro Zone break-up during the next 12 to 18 months. No matter the outcome for Greece, the currency union needs to make changes to preserve the euro and restore the economic health of its member countries.

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Executive Summary

At a time when the European debt crisis has stretched beyond the peripheral nations to the previously considered safe, core economies, an analysis of Greece, the country that triggered the crisis, provides insight into the quandary that afflicts the Euro Zone.

Part I of this report focuses on why Greece, despite its relatively small economic footprint, has kept European policymakers on edge for the past few years and has repeatedly caused tremors in global financial markets. Financial integration has created a global interconnectedness through which financial contagion can spread rapidly. Though small in size, Greece's economy is important from a European perspective since it exposes the underlying weakness in the Euro Zone and provides a prototype for action for other countries, including Portugal, Ireland and Spain. Although US trade with Greece is minuscule, its trade and financial linkages with the European Union (EU) are significant. At a time when the US is trying to spur economic growth, a prolonged downturn in Europe could create significant headwinds.

The second part discusses the situation in Greece from the current perspective, connecting the dots with historical mistakes and identifying major risks and challenges faced by the Greek economy going forward. At the root of the Greek financial crisis lie intrinsic weaknesses in the economy and the state administration, flaws that were not apparent in 2001 when the country was allowed to adopt the euro as its currency. The sovereign-debt crisis has exposed defects in Greece's institutional capacity and economic policies that led to excessive borrowing, and

highlighted the internal weaknesses of the euro that created huge imbalances within the region due to lack of adequate governance and a central fiscal authority. Going forward, Greece faces major challenges in stabilizing its financial sector, servicing its debt, implementing institutional reforms and promoting economic growth. Moreover, domestic political instability and social unrest could impede progress in meeting those goals and risk exacerbating "donor fatigue" among the European Union member nations that have provided financial assistance.

Although the European Central Bank (ECB) has taken measures to put a "firewall" around the European financial system by providing excess liquidity, European banks remain exposed to Greek sovereign debt, Greek banks and the forces of deleveraging. Reeling from the flight of their deposit base, elevated funding costs and narrowing of funding sources, Greek banks have suffered further losses from the recent debt restructuring. The debt restructuring between Greece and private creditors may not provide much more than temporary relief from the nation's debt woes. In the long run, debt sustainability is questionable, as the trajectory of public debt remains uncertain. However, a timely implementation of reforms poses a challenge due to dysfunctional revenue administration, social unrest over unpopular cutbacks and market pessimism. The emphasis on austerity also raises the question of how to spur economic growth. The latter part of this section explores the academic literature on

this debate, outlining the most compelling challenge faced by Greece, that is, stimulating growth without the tools of monetary independence. Adding to the complexity, Greece's entry into the Euro Zone was the result of political negotiations, rather than a reflection

of the nation's economic and institutional strengths. Political and social factors will continue to be critical to the success of reform measures and could play a major role in defining the potential outcome.

The final part of this report explores plausible scenarios and potential consequences for Greece and the Euro Zone given the financial, economic and social challenges outlined in the previous sections. In the short term, Greece and Europe may simply stagger along, making progress only as a result of market, economic and political pressures. This staggering should be viewed as a transitional phase.

For Greece, the two long-term scenarios represent the final possible outcomes, that is, a Greek exit from the Euro Zone or a successful restructuring of debt, implementation of institutional reforms and the receipt of aid that would allow it to remain within the Euro Zone. From a global perspective, the currency union, which lacks fiscal integration and a strong governance structure, needs structural changes. The most extreme change would entail a full breakup where each individual country reverts to its pre-euro currency. In another scenario, not all 17

"Though small in size, Greece's economy is important from a European perspective since it exposes the underlying cracks in the Euro Zone and provides a prototype for action for other problematic countries such as Portugal, Ireland and Spain."

countries currently in the Euro Zone may be there in a year or two. Less extreme scenarios envision the Euro Zone remaining intact and either continuing on the current path of internal devaluation of periphery countries or achieving tighter fiscal centralization. The final scenario discussed is that of a coordinated rebalancing of competitiveness

in which stronger economies follow expansionary policies and incur inflation to narrow the competitiveness gap.

No matter the outcome for Greece, policymakers need to make changes to preserve the euro and restore economic health.

Why Greece Matters

Ever since concerns about Greece's precarious fiscal position first began to roil global financial markets in late 2009, European rescue efforts have occupied a prominent place in financial policy discussions worldwide. Despite the February 2012 €130 billion bailout package—Greece's second such package in less than two years—the outcome in Greece remains uncertain and future developments could have significant implications throughout Europe and beyond.

Prior to its membership in the Euro Zone, Greece's impact on global financial and economic affairs was relatively limited. The country's annual GDP of some €215 billion is roughly equivalent to that of Maryland, and accounts for only 3% of Euro Zone economic activity. Aside from shipping, most Greek industries have no major international footprint. From the US perspective, Greece has minimal direct impact: US exports to Greece amounted to less than \$1.1 billion in 2011¹ (compared to nearly \$269 billion to the European Union as a whole)², and Greek assets account for a negligible proportion of total US portfolio holdings.

Although not immediately obvious at the time, Greece's 2001 entry to the Euro Zone magnified the country's global significance far beyond that warranted by its economic weight. As the first Euro Zone member to have its fiscal imbalance come under intense market scrutiny, Greece has become the test case for Europe's ability and willingness to stand behind its member states in times of crisis. Should events spiral out of control, conditions in Greece have the potential to spark contagion throughout the Euro Zone and beyond (see Figure 1). If sparks fly, the next in line to be affected would likely be one or more of the other European periphery countries suffering from heavy debt burdens and flagging economic competitiveness—a group that includes Spain, Portugal, Ireland and Italy.

This potential for contagion explains the ongoing focus on the need for a "fire-wall" to protect Euro Zone economies from the threat posed by economic and financial distress in Greece and other

Figure 1: The European Union and the Euro Zone Countries



Source: European Central Bank as of June 13, 2012

periphery economies. The March 30, 2012, announcement that Europe would expand its emergency lending capacity from €500 billion to €700 billion temporarily calmed markets. Since then, however, credit spreads in the periphery have widened, indicating a continued lack of confidence in Europe's ability to manage the crisis and address the underlying economic problems.

There are at least three channels through which Greece's troubles could spread throughout the Euro Zone. First, there is the European banking system, which has exposure to Greek sovereign and corporate debt. Significant losses on the debt could force stressed banks to rebuild capital either by selling liquid financial assets, which would depress market prices and generate additional forced selling, or by restricting credit, which would further depress economic growth. Second, problems could spread through economic channels, particularly

trade relationships between Euro Zone economies. Third, contagion could be transmitted through financial markets, with fears of a worst-case scenario creating a "risk-off" market psychology that prompts investors to flee all forms of European sovereign debt and potentially other risk assets as well.

Should any one or more of these scenarios come to pass, the difficulties in Europe would likely have a substantial impact on the US and global economies and financial systems. Problems in the financial sector would likely strike first, manifesting themselves in both the banking sector and the capital markets. While US banks have only minimal exposure to Greece itself, their exposure to the rest of the European periphery is far more significant, with the largest banks showing gross exposure as high as 15% to 20% of Tier 1 common equity, a measure of regulatory capital.³ US regulators are aware of the issue and

believe the banks could withstand major problems in Europe; recent Federal Reserve stress tests found that 15 of 19 banks tested could manage a downturn worse than that of 2007-2009, but disagreements persist over the adequacy of the Fed's stress-test scenario.

In the capital markets, US prime money-market funds could be an area of market focus. These funds hold \$1.5 trillion in US savings and have invested heavily in short-term European bank debt,⁴ with European holdings recently accounting for roughly one-third of their total assets.⁵ In a worst-case scenario, losses on European commercial paper could force one or more funds to "break the buck," that is, drop the net asset value below \$1 as occurred in the case of the Reserve Primary Fund in the fall of 2008 following the bankruptcy of Lehman Brothers. That could spark a run on the funds and make it difficult for US corporations to obtain short-term funding. However, this worst-case possibility should not be misconstrued as the base-case scenario.

Another area of significant concern is US pension funds. Even those funds not heavily invested in Europe could be affected, as contagion could result in price declines for many risk assets. Additionally, financial system stresses would likely result in increased credit costs and tighter lending conditions for US businesses and households, thereby exacerbating the economic impact of a European downturn. Moreover, a decline in risk-assets prices could impact a broad spectrum of investors, especially those with less diversified portfolios.

From a trade perspective, the EU is the single most important trading partner of the US. The bilateral trade relationship is the world's largest, accounting for trade flows of \$3.6 billion per day; in addition, transatlantic investment supports an estimated 7.1 million jobs.⁶ A prolonged European recession would severely weaken the United States' largest export market and provide a headwind to its employment outlook at a time when the country is struggling to increase economic growth and create jobs.

While strains have already been felt in all of the aforementioned areas, the full

impact will ultimately be determined by Europe's efforts to calm financial markets and rebalance its economies. Regardless of the outcome, the sovereign-debt crisis in Europe could shape political discussion in developed economies on how to balance growth and austerity in the years to come.

Defining the Problem

How did this small Mediterranean country become so unstable, and how did its problems generate tremors that would reverberate throughout the global financial system? The answer lies partly in a legacy of domestic economic weakness, and partly in flaws in the design of the Euro Zone that exacerbated that weakness and magnified its effects.

DOMESTIC ECONOMIC WEAKNESS

Greece has a turbulent economic history. Not including the recent debt restructuring, the country has defaulted on its sovereign debt five previous times in the past two centuries, with the first such episode occurring during the country's war of independence in the 1820s and the last during the global depression of the 1930s. As economists Carmen Reinhart and Kenneth Rogoff have noted, the country has been in default roughly half the time since winning its independence from the Ottoman Empire in 1829.⁷

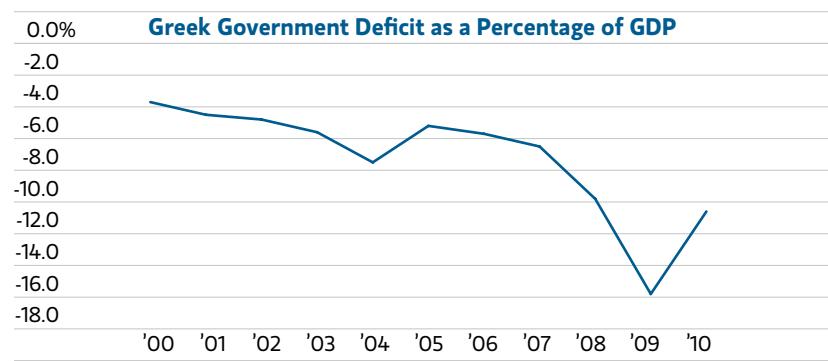
Like much of Europe, Greece experienced robust growth in the decades following the devastation of World War II. As the postwar boom came to a close in the late 1970s and early 1980s, Greece entered a period marked by lower growth and higher volatility as compared with its European peers.

This weak growth has been the result of low productivity and inefficient economic policy.⁸ In particular, the large role of the state continues to be a fundamental problem. Beginning in the 1970s, the Greek government nationalized a substantial part of the economy, including industries such as banking and transportation.⁹ At the time, policymakers imposed mandatory investment criteria for banks, which hampered the efficient allocation of resources in the economy.¹⁰ Many industries not nationalized were instead placed under tight regulation.¹¹ The pace of government expansion was the fastest in the EU, with the public sector's share of GDP growing to 30% in 1980 and 45% in 1990.¹² With today's public sector accounting for approximately half of GDP, the Greek economy continues to grapple with the legacy of this period.

As the public sector grew rapidly, so too did fiscal deficits (see Figure 2). Two of the primary causes were high wages for government employees and a generous pension system. Government employee compensation accounts for

Figure 2: Greece's Deficit Remains Large Relative to GDP

Austerity measures helped to reduce the size of the Greek government's deficit, but the budget has a long way to go before it is in balance.



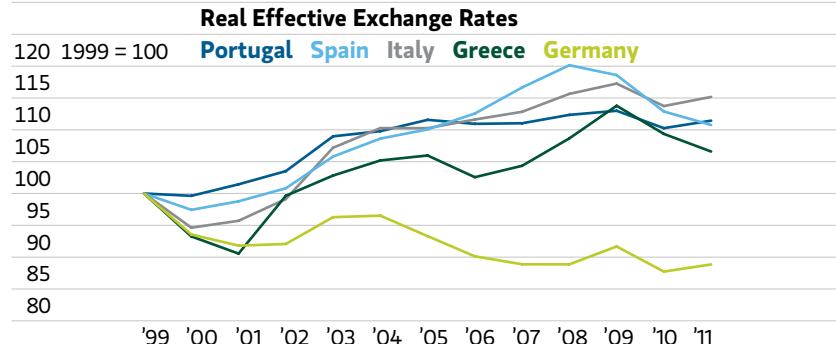
Source: Eurostat as of April 3, 2012

nearly one-third of Greece's total compensation, despite the fact that public servants make up less than a quarter of the country's workforce; the disparity between these two numbers is one of the highest among OECD countries.¹³ Greek public pension entitlements are also among the most generous. As of 2010, Greeks' annual pensions averaged 96% of their previous earnings in gross terms, compared with an average of 59% for the other OECD countries.¹⁴

The Greek economy has also been plagued by institutional weakness and inefficient administration. Tax evasion, corruption and complicated regulation are all major problems. Rampant tax evasion places a substantial burden on Greece's already-strained public finances. In 2010, the gap between taxes owed and taxes paid accounted for a third of total tax revenue, an amount roughly equivalent to Greece's entire budget deficit.¹⁵ The Greek shadow economy, estimated at 24.3% of GDP in 2011, is one of the largest in the OECD.¹⁶ The problem of tax evasion is closely tied to that of corruption, as it is common practice for Greeks to bribe tax collectors to look the other way. According to Transparency International, an organization that monitors and fights corruption globally, Greece has the worst corruption score of the Euro Zone countries.¹⁷ Finally, complicated regulation has contributed to a deteriorating business environment in Greece. For example, lengthy and costly procedures related to permits,

Figure 3: Real Effective Exchange Rates Show Effects of Inflation

Even though there is a common currency, domestic inflation differs in various countries. That means Germany, where inflation has been low over the past decade, makes the effective exchange rate much lower than for Greece.



Source: Eurostat as of May 29, 2012

licenses and export-import requirements have hampered Greece's foreign direct investment (FDI).¹⁸ During the period from 2001 to 2010, inbound FDI amounted to 0.8% of GDP, compared to a Euro Zone average of 2.4% of GDP.¹⁹

FLAWS IN THE DESIGN OF THE EURO ZONE

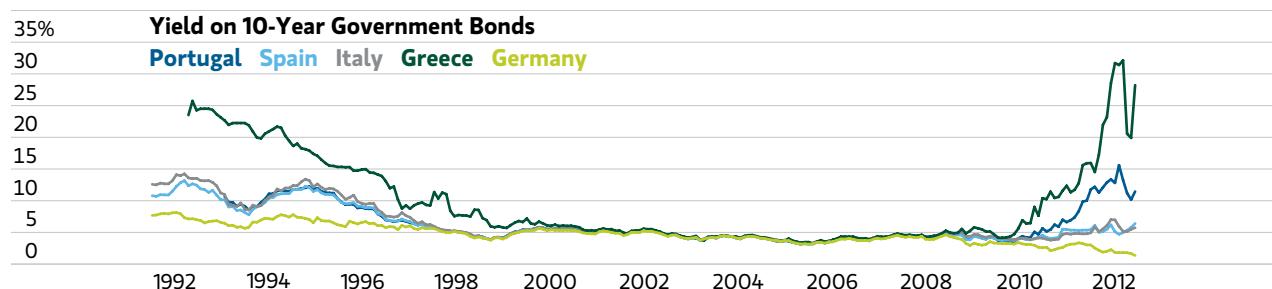
While Greece's domestic economic problems helped lay the groundwork for the crisis, there were other factors at play. The notion that many other countries on Europe's periphery are experiencing similar debt crises at the same time suggests some broader forces are at work. Chief among these is the forces that the Euro Zone was never an optimal currency area.

Optimal currency theory, developed by Nobel laureate Robert Mundell, presents

a set of conditions that maximize the benefit of a regional area adopting a common currency. One of the requirements is an adjustment mechanism that enables a weak economy to regain its competitiveness, an example of which is price flexibility.²⁰ There is no such mechanism in the Euro Zone, and the economies of the core and the periphery are very different—a problem recognized by many economists at the inception of the common currency, but given lesser priority due to political considerations. As a result, the creation of the euro locked in an undervalued exchange rate for the core countries and an overvalued exchange rate for the nations on Europe's periphery, resulting in a loss of competitiveness for those countries (see Figure 3).

Figure 4: European Government Bond Yields Converge, Then Break Apart

With the adoption of the euro, yields on 10-year European government bonds converged. When the financial crisis exposed countries' various problems, the market repriced the bonds.



Source: FactSet, Bloomberg as of May 29, 2012

Greece serves as a prime example of a country that experienced declining competitiveness after joining the Euro Zone. Because the creditworthiness of all European sovereign debt was perceived as being roughly equal after the launch of the euro, Greece and other peripheral countries were able to raise funds at lower interest rates than might otherwise have been the case, resulting in heavy foreign borrowing and high current account deficits (see Figure 4, page 5, and Figure 5).

Adding to the toll, this borrowing was used primarily for consumption rather than investment²¹ (see Figure 6 and Figure 7). Because these funds were insufficiently used to upgrade the economy's productivity in a way that would enable Greece to repay its borrowings, the country accumulated ever more foreign debt.²²

Heavy borrowing to finance consumption resulted in an unfavorable mix of relatively low productivity and higher inflation, which in turn led to exchange-rate overvaluation and a deterioration of international competitiveness, which was never strong to begin with. The loss of competitiveness can be seen in Greece's rising unit labor costs, which are up 30% over the past decade, and in its declining export market share (see Figure 8, page 7 and Figure 9, page 7).

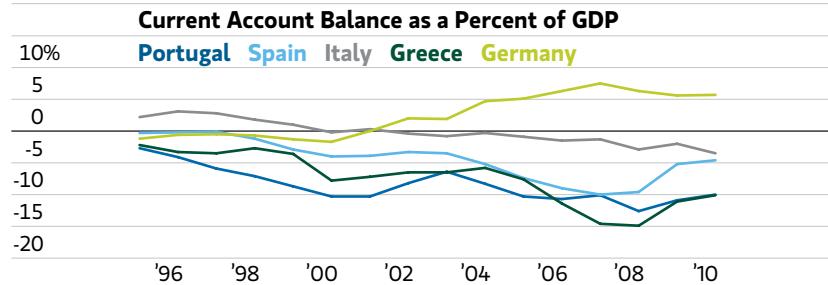
INADEQUATE GOVERNANCE

Another element of optimal currency theory is a fiscal transfer system capable of directing funds from stronger countries to weaker countries in order to minimize the damage of adverse shocks.²³ Since there is a possibility that member countries will rely too heavily on such transfers rather than trying to overcome their weaknesses, this mechanism requires member countries to maintain sustainable fiscal positions.²⁴

Since the launch of the euro in 1999, however, the EU has had neither a central fiscal authority nor credible enforcement of budget discipline. The Stability and Growth Pact, which was adopted in 1997 and sets limits on the annual budget deficit and national debt of each EU member country, has proven to be unenforceable and has been violated even by core countries such as Germany and France.

Figure 5: With the Euro, Debt Increased as Did Current Account Deficits

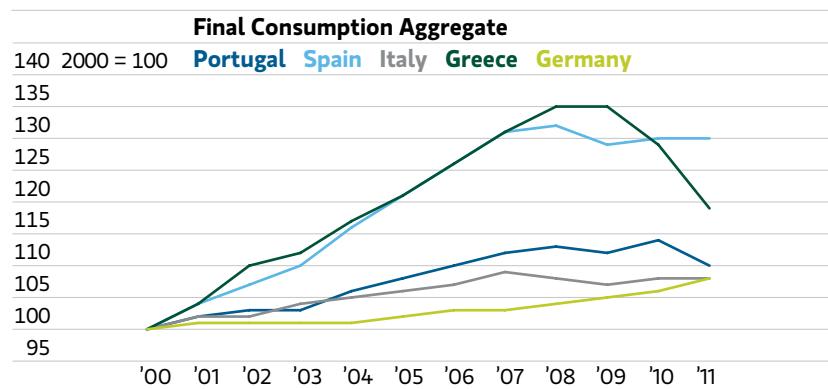
When interest rates dropped following the adoption of the euro, Greece and other peripheral countries borrowed heavily from abroad. That led to high current account deficits.



Source: Eurostat as of March 31, 2012

Figure 6: Europe's Decade-Long Spending Spree

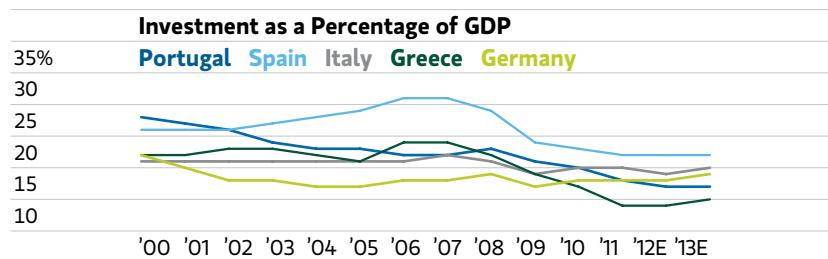
Greece and other peripheral countries took advantage of low rates to borrow heavily, but largely used the sums for consumption that did little to boost long-term growth.



Source: Eurostat as of March 31, 2012

Figure 7: Investment Spending Never Boomed in Greece Relative to GDP

Greece and some other sovereign borrowers failed to invest enough in their economies. Thus, productivity never grew enough to allow these countries to lower their debt levels.



Source: Eurostat as of March 31, 2012

Many economists had recognized the flaws in the Euro Zone's design, including the lack of a unified fiscal authority, well before the launch of the euro.²⁵ That their concerns did not delay the march toward a common currency is a testament to the fact that the euro was as much a political project as an economic one. European policymakers saw the creation of a common currency as a major step on the path toward European integration, a goal that took on increasing importance following the reunification of Germany in 1990. For Germany's neighbors, the euro became a means to address a newly reunified power, binding it to the rest of Europe in order to prevent the types of divisions that had torn the continent apart in the first half of the 20th century. For Germany, the euro presented an opportunity to calm European fears and to gain acceptance of German unification.²⁶

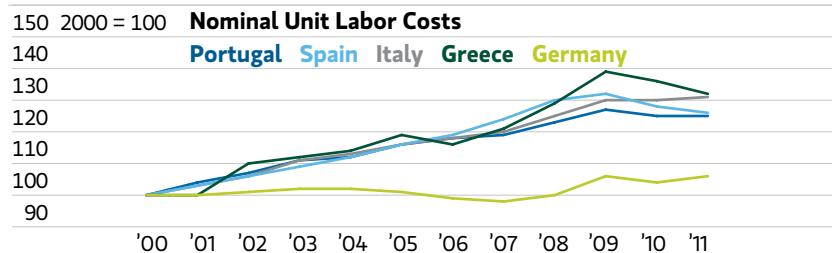
While political considerations demanded that plans for the common currency proceed apace, not all of the ideal economic preconditions for a common currency had been fulfilled. In particular, citizens of EU countries were not ready to cede sovereignty to a centralized fiscal authority.²⁷ Rather than seeing this as an obstacle to progress, European leaders viewed it as a consideration to be addressed at a later date, once widespread acceptance of the euro had paved the way for future integration.²⁸

Decisions about which countries could become members of the Euro Zone also tended to be grounded more in politics than in economics. Although a set of standards existed, including a 3% limit on the annual government deficit and a 60% limit on government debt-to-GDP, it was politically impossible to exclude Italy, the third largest economy in Europe, or Belgium, home of the EU administration, even though they had government debt exceeding 100% of GDP in the late 1990s.²⁹

Greece was not allowed to join the Euro Zone in 1999 because of a failure to meet the economic criteria,³⁰ but it reported a substantially improved inflation rate and government deficit during the subsequent two years, thereby allowing it to become a member

Figure 8: High Labor Costs Hampered Greece's Competitiveness

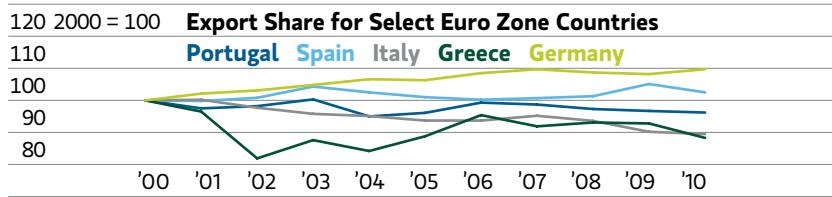
Greece's nominal unit labor costs climbed by 40% during the past decade, which made it difficult to compete in global export markets.



Source: Eurostat as of March 31, 2012

Figure 9: Greek Exports to the Euro Zone Lost Ground

Because of its lack of international competitiveness, Greek exports to other Euro Zone countries declined during the last decade.



Source: Eurostat as of March 31, 2012

of the Euro Zone in 2001.³¹ Statistical revisions made after it joined the euro revealed that Greece in fact had never actually complied with the 3% limit on government deficits.³²

Despite problems inherent in the Euro Zone, the financing costs for Euro Zone countries dropped, and periphery countries enjoyed an economic boom following the launch of the euro. This boom allowed the Euro Zone to avoid addressing its fundamental problems until the financial crises of 2008 to 2009 brought them back into the spotlight.

Recently, the EU has been trying to strengthen the enforcement of the Stability and Growth Pact. Member countries' annual budgets are now required to be reviewed by the EU governing body in Brussels, and a fine of up to 0.2% of GDP may be imposed if a member country continuously violates the limit on government deficits.³³ As a result, Belgium

was forced to cut its spending to avoid the sanctions,³⁴ and Hungary was actually sanctioned.³⁵

Ongoing Challenges

FINANCIAL SECTOR HURDLES

One of the key challenges for Greece will be to stabilize its financial sector and restore the health of its banks, so they can effectively allocate capital to productive economic uses. The crisis has placed tremendous strain on both the asset and the liability side of banks' balance sheets.

On the asset side, Greek banks have been heavily exposed to the government's fiscal weakness through their substantial holdings of Greek sovereign debt. As perceived sovereign credit risk has increased, the value of the banks' sovereign-debt holdings has declined, generating losses that have eroded bank



capital. These losses increase the fragility of the banking system by reducing the equity cushion that protects banks against potential losses. They also limit the system's effectiveness by forcing banks to cut back on lending in order to rebuild capital.

These problems coalesced in April 2012, when the country's four largest banks—which together account for roughly 80% of all Greek bank assets—announced record fourth-quarter losses in excess of €24 billion due to the impact of the recent sovereign debt restructuring.³⁶ The four banks have already been forced to turn to the state for a combined €18 billion in loan commitments, and may require additional emergency capital in the future.

It is important to remember that exposure to Greek financial assets is not contained within Greek borders. After a voluntary restructuring of Greece's debt in 2012, public institutions within Europe are now the primary owners of Greek debt.

On the liability side, the crisis has caused Greek banks' funding costs to spike and has threatened to shut off certain funding sources entirely. The area of greatest concern is the retail deposit base because under the EU, national governments guarantee deposits. Continued doubts about the crisis-stricken government's ability to make good on these guarantees has already led many depositors to pull their money from Greek banks. According to the ECB, deposits in Greek banks plunged 17% in 2011. In a worst-case scenario, an acceleration of this trend could spark a run on the entire Greek banking system, with severely negative implications for the broader economy and for the government's ability to adhere to the bailout package. However, the EU agreed in 2011 to guarantee private savings of

up to €50,000 for at least one year in an effort to stem the flight of deposits from the banks.

In a May 24, 2012 report titled "Headed for Euro Divorce?" Morgan Stanley economists argue that a federal deposit guarantee scheme in which governments agree to jointly guarantee bank deposits is among the policy responses that could limit the crisis and make

the Euro Zone more stable in the long run.

Although deposit outflows pose the greatest threat to the banking system, other funding sources have also been impacted. Repurchase ("repo") markets—in which banks post collateral in exchange for short-term financing—offer one example. Because government bonds are used as collateral to secure repo financing, de-

clines in the value of the bonds constrain banks' ability to raise short-term funds through this market. At the same time, Greece's deteriorating creditworthiness may reduce the value of government guarantees to Greek banks, be they explicit or perceived; to the extent that these guarantees back bank liabilities, the cost of raising such government-backed debt increases. Finally, sovereign downgrades by the rating agencies have increased the cost of raising funds in the long-term debt or equity markets, both because of concern about banks' holdings of sovereign debt and because sovereign ratings generally represent a ceiling for the ratings of domestic banks.

Given these challenges, the composition of Greek bank funding has changed significantly, with both customer deposits and external liabilities declining as a share of total assets. As a result, many banks are increasingly dependent on the ECB for funds.³⁷ Some banks—including Greece's four largest—have already been

forced to turn to government bailouts.

Looking ahead, official sector assistance to Greece will continue to play a major role in the health of the country's banking system. Such assistance tends to calm financial markets and, by extension, promote banking sector stability; a recent study finds that the prospect of a Greek bailout had a stabilizing impact on Euro Zone bank stock prices.³⁸ But with governments across the continent stretched thin and the ECB already providing unprecedented support, it is fair to question the sustainability of this solution; stresses have already begun to re-exert themselves. In the medium- to long-term horizon, prospects for the Greek financial system will depend primarily on the country's ability to undertake the painful economic reforms and return to economic growth.

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MACROECONOMIC CHALLENGES

Despite the success of Greek and European officials in convincing holders of Greek sovereign debt to accept voluntary restructuring, Greece still faces an uphill battle in its attempts to bring its debt burden down to a sustainable level. The current program administered by the troika—a group that includes the ECB, the European Commission and the International Monetary Fund—relies on a set of structural reforms and asset privatizations to reduce the debt-to-GDP ratio. Each of these components is likely to present major challenges for the Greek economy. If all goes well, the program aims to reduce Greek debt to 120.5% of GDP by 2020 from 160% in 2011—a still significant debt burden by any measure.

European officials also recognize that a number of factors could cause Greece to slip behind this plan. According to the troika's debt-sustainability report, the Greek program is "accident prone," with small deviations from baseline assumptions generating large negative impacts on the overall debt burden. In a downside scenario—defined as lagging economic growth accompanied by a privatization plan that would require an additional five years and generate

only €20 billion in revenues—Greek debt could remain as high as 160% of GDP in 2020.³⁹

DEBT SUSTAINABILITY

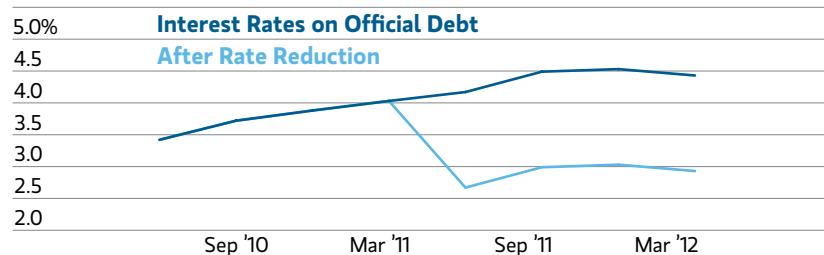
The first set of challenges relates to the debt component of the debt-to-GDP ratio. Broadly speaking, a national government has three options for reducing indebtedness. First, it can rebalance its budget to produce fiscal surpluses that allow it to reduce the debt burden over time. Second, if its debt is denominated in its own currency and it controls its own monetary policy, it can print enough money to produce significant inflation, thereby reducing the real value of the debt it owes. Finally, a country may be able to negotiate some type of debt forgiveness with its creditors or, barring that, it may choose to default. Because Greece has ceded control of its monetary policy to the ECB by virtue of its membership in the Euro Zone, inflating away the debt is not an option. The troika program has therefore focused on a combination of fiscal austerity and debt forgiveness.

Given the unsustainability of the debt burden and the likelihood that no amount of structural reform would allow Greece to repay its debts in full, debt forgiveness became a necessary condition for the troika program. In recognition of this fact, Greece and its creditors reached agreement on a voluntary restructuring in February 2012. Under the Private Sector Involvement (PSI) deal—negotiated among European officials, the Greek political leadership and the Institute of International Finance (IIF) on behalf of the creditors—private-sector bondholders agreed to take a voluntary write-down of 53.5% of face value on their €206 billion in bonds. Factoring in the accompanying interest-rate reductions, existing Greek debt was swapped for new bonds with lower coupons; the total loss to bondholders exceeded 70% on a net-present-value basis.⁴⁰

Despite initial concerns about bondholders' willingness to accept the deal negotiated by the IMF, participation was widespread: 85.8% of Greek law bondholders agreed to the deal, with the number increasing to nearly 97%

Figure 10: EU Gives Greece Sharply Reduced Interest Costs

With access to low interest-rate loans from the EU, Greece may be less willing to seek private-sector funding.



Source: European Central Bank as of March 30, 2012

(€199 billion) following the use of collective action clauses.⁴¹

All told, the PSI deal reduced Greece's debt burden by an estimated €100 billion with an eye towards giving the Greek government the breathing room needed to continue with structural reforms that eliminate the budget deficit and ultimately reduce the nation's debt.

Key challenges remain following acceptance of the PSI deal. First, Greece still faces a projected funding gap of €20 billion in 2012 through 2014. With official creditors now holding more than 75% of Greek debt following the PSI deal, continued official sector involvement will be critical to Greece's success. Second, any one of several factors could delay Greece's return to the markets beyond the 2015 date anticipated by the IMF. Small changes from baseline assumptions could make market participants reluctant to buy Greek debt. The large share of Greek debt held by the official sector could discourage private sector participation by stoking fears that privately held bonds would be subordinated to those held by the ECB and national governments. Greece's continued access to low interest rate funds from Europe could reduce Greek officials' willingness to turn to the private sector for funding (see Figure 10).

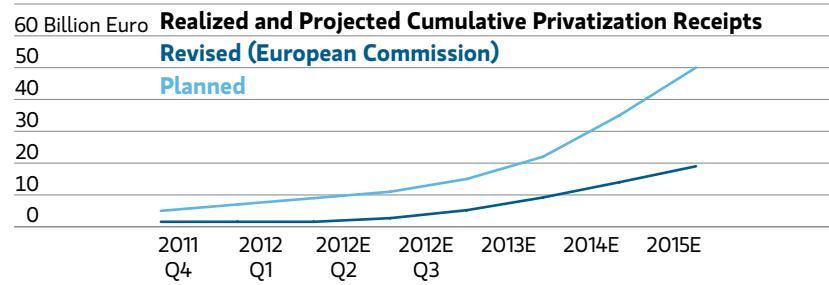
With the PSI deal in place, Greek officials can now focus on fiscal reforms. The problem they face is that the government still spends more money than it brings in, so that the total debt burden, already unsustainable at its present level,

increases with each year. In 2011, Greece's primary deficit—its total deficit excluding interest payments on debt—amounted to 2.5% of GDP. This represents an improvement of 8.25 percentage points since 2009, largely due to increases in income, property and value-added taxes, as well as cuts in wages, pensions and public employment. However, it is still well short of the 1.5% primary *surplus* needed to be considered sustainable.⁴² To comply with the troika program, Greece will need to achieve a primary deficit of 1% in 2012 and a primary surplus of 4.5% by 2014. While these targets are not impossible, achieving them will require politically difficult institutional reforms.

Greece can address its deficits in three ways: increasing tax revenue, raising funds through the privatization of state assets and reducing spending. Each of these measures presents significant hurdles.

Greece has one of the lowest ratios of revenue collection to government size in the EU, due to weak public financial management and inefficient revenue administration. Part of the problem is the aforementioned tax evasion and corruption. To put this in perspective, Greece's VAT gap—the shortfall in the collection of value-added taxes relative to actual tax liabilities—is 30%, compared to an average of 12% for the EU-25; its shadow economy is estimated at 24.3% of GDP, compared to an average of 13.4% for the EU-25.⁴³ Additionally, Greece has the EU's highest ratio of self-employed workers as a percentage of the labor force due to

Figure 11: Greece's Privatization Receipts Fall Below Projections



Source: Hellenic Republic Development Authority, European Central Bank as of March 2012

heavy regulation of the labor market and legislative measures that allow the self-employed to make relatively low social security payments. Research has shown that the self-employed are the most likely to underreport taxes; one study found that tax evasion among self-employed workers accounted for 44% to 68% of Greece's budget shortfall in 2010.⁴⁴

The government has already taken a number of steps to address the revenue administration problem. Parliament has passed a solidarity surcharge of 1% to 5% on income, a cut in the tax-free income threshold and increases in VAT rates, luxury taxes and property taxes. Tax reform, initially planned for September 2011 and then postponed to March 2012, is still to be enacted. Even so, more must be done to improve revenue administration. At the same time, higher revenues will depend at least as much on economic growth.

The Greek asset privatization program also faces significant challenges. Privatization is essential not only as a revenue raiser, but because of the need to modernize Greek industry.⁴⁵ The baseline assumption of the troika program is that government asset sales will generate €50 billion by 2015 (see Figure 11). However, market conditions and legal difficulties have combined to limit progress to date. The planned privatization proceeds for 2012 appear ambitious in the current environment, and the Greek government may revise

Privatization is essential not only as a revenue raiser, but because of the need to modernize Greek industry. Market conditions and legal difficulties have limited progress on that front.

its target for privatization proceeds downward to €19 billion.⁴⁶

The final component of deficit reduction is spending cuts. Greece has undertaken a major pension reform that is expected to lower the projected increase in pension spending. Wages in public sector enterprises have been reduced, with an average reduction of 17% in 2011, and bonuses have been scrapped. To meet the 2012 IMF targets, major spending cuts are expected through reduction in government wages, social security benefits, pharmaceutical and health spending and defense spending. However, judging by the social unrest following the first round of austerity measures, successive spending cuts may become progressively more difficult to implement.

GROWTH IN AN AGE OF AUSTERITY

The country's future growth trajectory will likely play a critical role in determining its ultimate success or failure. Even if Greece manages to raise revenues and cut spending, declining economic output would make the debt burden impossible to sustain without significant external assistance. Unfortunately, the Greek economy has been shrinking for more than five years, and the near-term outlook is not any brighter. The Economist Intelligence Unit estimates that the Greek economy will contract an additional 7% in 2012, the result of 21% unemployment, declining government

services and a stressed banking system.⁴⁷

Part of the problem is that the old sources of growth in Greece are no longer reliable. Private credit expansion once drove growth in consumption, but household credit has collapsed since the onset of the crisis. FDI from across the EU once supported investment, but FDI inflows have declined in the face of overregulated markets, an unattractive business environment and weak institutions. Even exports, one of the few remaining sources of growth, face significant headwinds due to weakened demand from the rest of Europe and sector-specific challenges. For example, in such a key industry as tourism, social unrest threatens to deter travel. Finally, the heavier tax burden placed on the private sector does not help matters.

Greece clearly needs to find new ways to foster economic growth, but it faces a problem common to countries with large fiscal deficits and struggling economies: the tension between growth and austerity. On the one hand, fiscal rebalancing demands that the government scale back spending in order to balance the budget; on the other hand, cuts in government spending can have a contractionary effect on the economy, placing much-needed growth even further out of reach. The growth versus austerity debate currently taking place in Greece could have a decisive impact on the country's future, and it is also likely to have significant implications throughout Europe and beyond.

Thus far, the European approach to resolving the Greek debt crisis has emphasized strict austerity measures. The troika has conditioned its support upon the successful reduction of government expenditures and accompanying increases in tax revenues. However, many experts believe this approach could be ineffective or even counterproductive. Numerous academic studies have shown that austerity leads to the contraction in demand for final goods and services.⁴⁸ Additionally, austerity measures can result in a negative feedback loop: the more aggressive the government spending cuts and tax hikes, the more the economy is likely to shrink, which



in turn could reduce tax revenues and lead to calls for further spending cuts and tax hikes.

On the other hand, some proponents of austerity base their policy recommendations on a belief in “expansionary austerity.” This theory suggests that a small increase in taxes today may reduce the need for larger tax hikes in the future, and may even signal future tax cuts. By raising households’ expected future disposable income and increasing the confidence of investors, fiscal consolidation can thus stimulate private consumption and investment even in the short term. George Osborne, the UK’s finance minister, has used this argument to support his spending cuts.

Even if the hypothesis is valid, it may not work in Greece. To begin with, this theory assumes that individuals have a certain degree of confidence in the future. However, evidence abounds that such confidence is sorely lacking in Greece today. Second, the theory assumes that confidence triggers private consumption and investment, but it is not clear that Greeks have the means to consume or invest any more than they already are. Part of the problem is the country’s low level of savings even before the crisis: in 2009, for example, Greece consumed 93% of its GDP compared to an EU-27 average of 81%.⁴⁹ Another factor is the troika bailout package, which constrains consumption both directly, through wage reduction, and indirectly, via the reduction in wealth resulting from economic contraction.

A recent study of the effects of deeper fiscal consolidation in Greece

found that reducing government expenditures by 1% of GDP causes a 0.6% decline in GDP. The decline in GDP is greater, 0.8%, if the public spending cuts are broadly expected to be applied for only one year. The contraction increases further, to 1.1% of GDP, if the transitory public spending cuts are not credible.⁵⁰

Finally, empirical evidence from the past several years of austerity does

not seem to support the expansionary austerity theory. According to Eurostat, the UK’s growth rate fell to 0.8% in 2011 from 2.1% in 2010, a period during which Prime Minister David Cameron’s government pursued significant austerity measures. Spain has applied austerity to cut its deficit, promote growth and address the unemployment of more than 5 million workers, only to get stuck in a negative feedback loop: The more the government cut spending and raised taxes, the more likely it became that the economy would shrink, thereby reducing tax revenues and leading to calls for further spending cuts and tax increases.⁵¹

The evidence suggests that Greek austerity measures will likely cause the economy to contract further. Given that Greece has a shrinking public sector, has only a few globally competitive industries, cannot manage its own exchange rate and has key trade partners who are also implementing austerity measures, the question of how to stimulate growth will remain a major challenge.

POLITICAL AND SOCIAL CHALLENGES

While Greece’s problems are largely financial and economic in nature, political and social factors will be critical in determining whether the Greek government can achieve the targets set forth in the troika program. Specifically, conflicts among national governments and international

“While Greece’s problems are largely financial and economic in nature, political and social factors will be critical in determining whether the Greek government can achieve the targets set forth in the troika program.”

institutions threaten to weaken Europe’s resolve to continue supporting Greece, while social unrest could undermine the Greek government’s political will to implement tough reform measures.

At the troika level, the presence of many players makes it difficult to take prompt action and to implement policy. In the past, IMF-assisted debt restructurings have typically included only two players,

the IMF and the debtor country. But the current Greek restructuring features a third party, Europe, represented by the ECB and the EU, acting as an additional layer of authority between Greece and the IMF. This has led to disagreement regarding each party’s role and level of responsibility in the restructuring, with the IMF reluctant to provide additional support until the EU countries increase their participation. Additional tensions exist between the Euro Zone core and periphery countries, with the core—notably Germany—demanding austerity measures; and between Greece and the entire troika, with European officials increasingly suspicious of Greek political will and Greece’s indignance over perceived European encroachment on its sovereignty. Greece’s “slippage” on implementation of the troika’s tax and spending targets, together with the German response, makes apparent the challenges and frustrations at hand.

Looking forward, the support of a unified Europe could be crucial to Greek success over the next several years. With major funding gaps and no access to the capital markets, Greece is highly reliant on Europe. For the time being, Europe also needs Greece, since a worst-case scenario in Greece could spark contagion that threatens the existence of the Euro Zone. There may come a time when the two parties do not need each

other equally; should European officials establish a credible firewall around Greece and markets begin to return to normal, donor fatigue could set in as European officials increasingly question the need for their citizens

to pay for the Greek rescue.

At the domestic level, the Greek leadership must have the approval of its public if the troika program is to succeed. Indeed, some signs are promising: despite more than five years of recession, high unemployment and the prospect of painful structural reforms, a large majority of Greeks want their country to remain in the Euro Zone. However,

the potential for political unrest remains relatively high. At least five major austerity packages have been announced in the past two years, and the announcements have frequently led to bouts of large-scale rioting. The crisis has damaged the trust between the government and the public sectors, between social classes and between generations. Given that progress has lagged on many of the troika's targets and more economic pain is in store, the situation may get worse before it improves.

Potential Outcomes for Greece

Given the financial, economic, political and social challenges outlined in the previous section, how might events play out in Greece and throughout Europe? Although the fluidity and uncertainty of the situation make forecasting difficult, it is possible to outline the likely impact of the most plausible scenarios.

In the short term, Greece and Europe may simply stagger along, with progress only happening as a result of market, economic and political pressures. This has certainly been the region's recent history, but staggering along should be viewed as a transitional phase.

SCENARIO 1: GREECE EXITS THE EURO ZONE

Since the onset of the crisis, European and Greek political leaders have consistently stated that a Greek exit from the Euro Zone is not an option. This stance is necessary for market confidence, and Greece may well avoid such a fate.

There are several factors that could still push Greece out of the common currency. Greece could prove unable to implement the structural reforms required under the troika program, particularly if austerity measures generate further political and social unrest. Improving competition through deflation, as opposed to devaluation, is especially challenging since workers have to be willing to accept pay cuts, unemployment and a lower standard of living. If deflation proves too challenging from a political and social perspective, some believe that Greece could very well decide to leave the Euro Zone in order to take the perceived-easier route of pursuing competitiveness

through currency devaluation. Another factor that may cause Greece to exit the euro is that European officials' commitment to Greece could wane, particularly if Greek implementation significantly stalls for social and political reasons.

If Greece were to depart the Euro Zone, the drachma would likely replace the euro as the country's official currency. The drachma, then floating freely against the euro, would depreciate significantly as it achieved a level of equilibrium.

The reintroduction and rapid depreciation of the drachma would pose a number of challenges. Greece would likely experience a surge in inflation as the prices of crucial imports like food and oil increased in drachma terms.⁵² There would also be uncertainty surrounding the status of contracts and debts denominated in euros. Specifically, there would be questions about whether the contracts and debts could be automatically converted to drachma or whether the receivers would insist on taking payment only in euros.⁵³ Given the significant drachma depreciation, borrowers would prefer to recast the debts in drachmas while the lenders would prefer to keep them in euros.⁵⁴ Default risk could run high for debt remaining in euros if Greece were to exit the Euro Zone.

Leaving the Euro Zone would have the greatest impact on holders of Greek government debt, who would face one of two outcomes, neither of them pleasant. If Greek sovereign debt were redenominated, foreign creditors would receive

interest and principal payments in a relatively weak currency, leading to large losses. Domestic creditors would likewise suffer from the currency exchange. If the debt were not redenominated, the government would be faced with a mismatch between its euro-denominated

debts and the drachma-denominated revenues with which it would have to pay back those debts. Although the debts would be fixed in euro terms, depreciation would cause the debt burden to explode in drachma terms.⁵² Ultimately the government could almost certainly be forced into another debt restructuring, again leading to large losses for both foreign and domestic creditors.

Corporations would face the same dilemma as the government: redenominate or risk insolvency. However, large corporations that issued bonds under English law in non-Greek jurisdictions would probably be unable to redenominate. This would place immense pressure on Greek^{52,53} corporations, forcing many of them to entertain bankruptcy. The results, including mass layoffs and a large reduction in capital inflows, would lead to a further contraction in the economy.

Financial institutions would likely redenominate their deposits, causing outflows to accelerate as depositors sought the safety of stronger currencies. A sufficiently large outflow would have the potential to spark a full-blown banking crisis. The government's potential responses to such an outcome would be limited, short of instituting capital controls that would further impede economic activity. Some analysts believe the country might have to severely limit movement across borders to prevent depositors from withdrawing their money and taking it abroad.

While a cheaper drachma would make Greek labor cheaper, the government would still have to liberalize labor laws, because in the past, although the drachma was "cheap," foreign direct investment failed to materialize due to high minimum wages and restrictive/expensive employment policies.

"If Greece were to depart the Euro Zone, the drachma would likely replace the euro as the country's official currency. The drachma, then floating freely against the euro, would depreciate significantly as it achieved a level of equilibrium."

Greece may ultimately remain in the Euro Zone, as the costs of leaving would be high.⁵⁵ It would be difficult to generate confidence in the drachma in the midst of a crisis. It would be extremely challenging to convince potential investors to commit to projects denominated in a new currency. Furthermore, other Euro Zone countries might not favor a Greek exit because it would set a precedent for others. In addition, there is no provision in Euro Zone governance for a country to leave.

SCENARIO 2: GREECE SUCCESSFULLY IMPLEMENTS REFORMS

Greece faces three key challenges: lack of competitiveness and fiscal sustainability and financial sector instability.⁵⁴ As a result, major structural reforms will be needed for Greece to meet its deficit and debt targets and produce a long-term recovery. A successful outcome would include significant progress in four areas: wage flexibility, structural fiscal reforms, privatization and financial sector reforms.

First, Greek wage reform would increase its competitiveness with the rest of the Euro Zone and globally. Such reform would entail cutting wages and reducing worker protections. Public-sector wage reductions would need to be accompanied by personnel reductions and controls on hiring.⁵⁵ To successfully implement these reforms, Greek politicians would need to overcome expected resistance or outright opposition from interested parties.⁵⁶

Second, structural reforms would allow Greece to promote private-sector development. The changes envisioned under the troika program include tax system and revenue administration reforms, restructuring of the public financial management system and tighter control over government spending.⁵⁷ The key concern here would be timing, as it could potentially take Greece much longer than has been assumed to identify and implement the reforms necessary to improve the primary balance from -1% of GDP in 2012 to the target of 4.5% of GDP in 2014.⁵⁸

Next, the privatization program would transfer public assets in key sectors of the economy to more productive uses in the private sector, thereby encouraging FDI and supporting the recovery. Key sectors, which have been identified, include ports, airports, motorways, energy and real estate. If successful, the privatization program would generate €19 billion in proceeds by the end of 2015, and €50 billion over the life of the program.

Finally, financial sector reform would have to include bank recapitalization to ensure that the Greek banking system is not destabilized as a result of the debt restructuring. Greece would successfully implement a series of financial sector reforms designed to increase the resilience of the financial system and restore confidence in its banks.⁵⁹ Specifically, these reforms include making an assessment of bank capital needs, reforming financial sector governance and enacting legislation that will support bank capitalization and resolution.

Potential Outcomes for the Euro Zone

SCENARIO 1: EURO ZONE BREAKS UP

The debt crisis that started in Greece is now threatening the survival of the Euro Zone not only because of Greek structural challenges, but also because the Greek crisis highlighted the currency union's vulnerabilities. The Euro Zone's design, which lacks fiscal unification and a strong governance structure, appears to be ill-equipped to handle a serious financial crisis.

Indeed, since the ECB established the European Financial Stability Facility and the first financial assistance package for Greece was accepted in May 2010, 10-year government bond spreads between the periphery and core countries have widened.

A Euro Zone breakup could mean complete fragmentation or partial exit by one or more countries. In theory, the breakup could be sudden or it could result from a process of negotiation; it could be set into motion by one country, or by a group of countries deciding to leave.

Currency

Within the Euro Zone, the individual country balances are quite disparate. For example, Germany has 5% of GDP-equivalent current account surplus, while Italy and Spain have GDP-equivalent deficits of nearly 4%.⁶⁰ Current account deficits usually put significant selling pressure on a nation's currency, creating a balancing mechanism; the falling currency helps balance the current account because imports become more expensive in local currency; conversely, exports become cheaper in foreign currencies, creating demand for exports. With the advent of the euro, these balancing mechanisms were removed.

“A breakup of the Euro Zone would restore the currency-balancing mechanism, resulting in the depreciation of the deficit countries’ currencies.”

A breakup of the Euro Zone would restore the currency-balancing mechanism, resulting in the depreciation of the deficit countries' currencies. Some estimate that the potential currency depreciations of the periphery countries would be quite significant, ranging from 30% to 50%.⁶¹

Banks

After the creation of the European Monetary Union, the European banks went through an unprecedented consolidation phase, with the Continent's banking system now dominated by multinational banks. Moreover, with the advent of the euro, banks used low-yielding deposits from stronger countries to finance higher yielding loans in weaker countries. In hindsight, they were engaged in a form of carry trade, borrowing money where it was cheapest, as in Germany, and lending it where the borrowing rates were



highest, in countries such as Greece. Of course, rates were higher in Greece than in Germany because Greece's macroeconomic fundamentals were less favorable than Germany's.

Should the Euro Zone break apart, many of the European banks could face severe stress, as their liabilities (deposits in the stronger countries with currency appreciation) could swell while their assets (loans in weaker countries with currency depreciation) become much less valuable.

In addition, the banking systems of stressed countries could face runs on their deposits, leading to even more intense financial crises. A further consideration is that much of the major mergers-and-acquisitions activity of the past two decades would be called into question, as the primary reason for the consolidation would no longer be valid. Finally, a Euro Zone breakup would likely generate inflation in the weaker peripheral countries as their depreciating currencies would have less buying power with which to obtain non-substitutable goods that cannot be sourced locally and thus have to be purchased abroad.

SCENARIO 2: INTERNAL DEVALUATION OF PERIPHERY COUNTRIES

As mentioned previously, once the peripheral countries joined the Euro Zone, the natural balancing mechanism, where large trade deficits were progressively suppressed by currency depreciation, was removed. The removal allowed these countries to spend substantially more than they were earning, by issuing debt. Now that the credit markets are no longer willing to finance the peripheral countries' consumption, these countries will have to reduce their trade deficits by increasing exports and/or cutting consumption.

In the absence of rebalancing trade with currency devaluation, the peripheral countries will have to mimic the effect of currency devaluation by a process known as "internal devaluation." Internal devaluation means a weaker country regains its trade competitiveness by reducing its relative costs, such as wages, relative to its trading partners. The Euro Zone peripheral countries' main export partners are other EU countries, such as Germany and France. This means that going forward, wage rates in peripheral countries such as

Greece, Italy, Portugal and Spain have to rise at a slower pace than those in Germany or France. Since wages influence prices, another way to look at this is that the inflation rate in Germany and France probably has to be higher than the rate in peripheral countries so that lower wage rates will make an exporting country's products relatively cheaper.⁶²

The problem though is that Germany, instead of spending money and buying peripheral countries' products, is pursuing contractionary policies as well, making it hard for the struggling peripheral countries to improve their competitiveness and grow exports.⁶³ Regardless of whether the stronger countries start pursuing more expansionary policies, the peripheral countries are likely to undergo protracted recessions, as the private sector will take a while to absorb the government cost cuts.⁶⁴

SCENARIO 3: COORDINATED REBALANCING

A similar scenario would call for a coordinated rebalancing, wherein the peripheral countries pursue contractionary policies and lower their labor costs and thus make their exports cheaper, while stronger countries such as Germany simultaneously pursue expansionary

polices and buy peripheral countries' exports, while the ECB keeps interest rates low.⁶⁵ As a result, stronger countries such as Germany would suffer domestic wage inflation and become comparatively less competitive, while the peripheral countries would become comparatively more competitive. In such a plan, Germany would have lower exports and higher imports, while the reverse would be true for Greece and the others. This way, the peripheral countries could rebalance their current accounts and grow out of their debt. The main hurdle to this type of coordinated policy response is it would require Germany to give back those hard-won gains that followed its own unification.

SCENARIO 4: FISCAL CENTRALIZATION

A final scenario would be for the Euro Zone to centralize, with the debt obligations of all the members aggregated. This can be achieved through issuance of Eurobonds and each country having joint liability for its full repayment. On such a consolidated basis, Euro Zone debt would be much more sustainable, and there would be no current account deficit problem.

However, for such a scenario to occur, the countries such as Germany that would become the de facto net payers would want significant influence over the net borrowers. In fact, under the German constitution, the only way for Germany to assume another country's debt and effectively for the Eurobonds to be issued would be for the German parliament to have the right to approve that country's budget.⁶⁵

To a degree, increased centralization has already begun: peripheral debtors such as Greece, Ireland, and Portugal have had to agree to conditions imposed on them by the troika and/or the stronger countries in exchange for the various funding measures and bailout packages.

We should note, however, that some of the major steps above are temporary. For instance, the ECB's purchases of peripheral countries' debt have to be temporary measures and done in secondary markets because otherwise the central bank would be breaking its "no



debt monetization" rule.⁶⁶ In normal times, such purchases would be considered inflationary and therefore counter to ECB's price stability mandate.

Conclusion

As Greece endeavors to move towards fiscal and economic sustainability, the process could be as influential as the eventual outcome. No matter how the outcome plays out for Greece, the currency union needs to make structural changes to preserve the euro

and restore the economic health of its member countries.

Europe faces a dual challenge of resolving the current crisis, while simultaneously creating institutions and regulations to safeguard against future crises. Forthcoming events may not only transform the political, institutional and economic landscape of the EU as we know it but may also shape future policy debates in other nations confronting high debt and slow growth. ■



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Widely regarded as the best single gauge of the US equities market, this capitalization-weighted index includes a representative sample of 500 leading companies in leading industries of the US economy.

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