



May 23, 2012

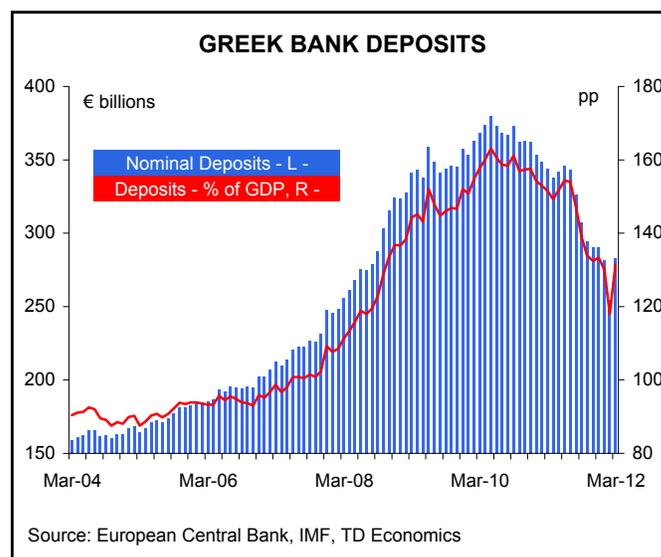
## GREEK DEBT CRISIS: ANSWERS TO FREQUENTLY ASKED QUESTIONS

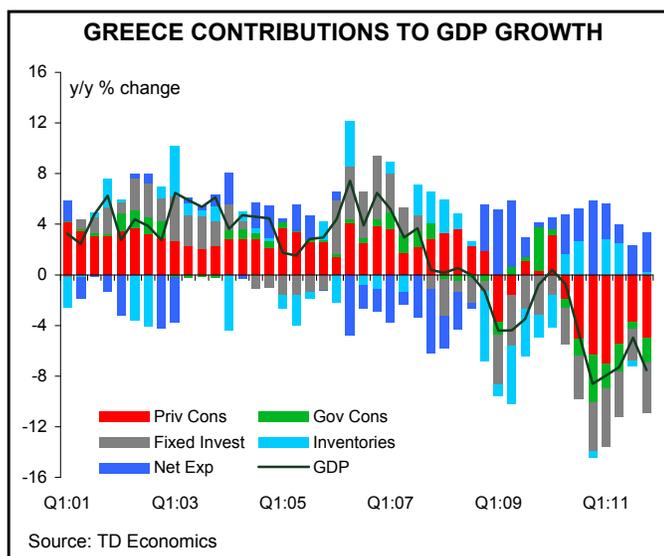
### Highlights

- An acceleration in deposit withdrawals, combined with the prospect of an anti-austerity party winning the next election, has brought to the fore concerns about a potential Greek exit from the euro zone.
- Our base case assumption is that under the most likely scenario, the Greek election will lead to a government that sticks to an EU/IMF program, even if the terms are renegotiated.
- However, we do believe that Greece needs a further restructuring of its debt and we do think the country will ultimately exit the euro – we're just not convinced that Europe is ready for this to happen at the moment.
- If an accident does occur and Greece does leave the euro in the near term, it would have global financial ramifications that could range from severe to catastrophic. Initially, this will depend on how much European governments are willing to bend the provisions in the European treaties to allow the ECB to contain the shock. But ultimately, it will be the governments who will have to act boldly to save the monetary union.

The situation in Greece has materially deteriorated in recent weeks. A fragmented election outcome on May 6<sup>th</sup> led to a frantic search for a coalition government, which ended in failure. As a result, new elections have been called for June 17<sup>th</sup>, and the country is being run by a caretaker government led by a senior judge. Reports last week that Greek banks were confronting an acceleration in deposit withdrawals, in combination with the fact that an anti-austerity party was leading the election polls, has brought to the fore concerns about a potential Greek exit from the euro zone.

In this report we analyze the economic and financial implications of some of the potential scenarios that could materialize. We address some of the most frequent questions that arise in any discussion regarding a potential Greek exit from the euro zone. Our analysis, however, suffers several shortcomings. The first limitation is that of trying to analyze the economic implications of an event in which political elements will override all economic considerations. Furthermore, given that abandonment of the currency union is not contemplated in the European treaties, developments in the coming months could defy the existing European institutional framework, which further complicates predictions on potential policy reactions. Moreover, the lack of data on individual bank exposures to other banks and sovereigns makes it very difficult to assess potential impacts across the European banking system. Therefore, trying to predict whether other euro





zone countries – if any – would follow Greece out of the currency union, or how severe the financial impact on this side of the Atlantic would be becomes a very speculative exercise.

Our base case assumption is that under the most likely scenario, the Greek election will lead to a government that sticks to an EU/IMF program, even if the terms are renegotiated. However, the possibility of Greece leaving the euro zone is now quite plausible and such an event would have a considerable impact on global financial markets. Given the high degree of uncertainty, it is worth revising the various scenarios that could arise.

### **Scenario 1: A run on bank deposits is avoided until the June 17<sup>th</sup> election**

Under this scenario, we start from the assumption that deposit withdrawals abate and the caretaker government is able to lead the country to the June 17<sup>th</sup> election without any further escalation in domestic financial stress. Given that it seems very unlikely that there will be a party able to obtain a clear majority, the election will likely yield one of three outcomes: an anti-austerity coalition government is formed, no coalition government is formed, or a pro-austerity coalition government is formed.

#### **Scenario 1.A: Anti-austerity government is formed**

If an anti-austerity government is formed, it will threaten to stop the implementation of the EU/IMF program. This could prompt Greece's European partners to stop loan disbursements, which would cause Greece to run out of cash. Then, if the breakdown in the relationship between Greece

and its foreign lenders is not restored, the country might need to start printing its own currency. This would bring down the Greek banking system. Eventually, Greece would default on its foreign debt.

However, it could also happen that, if an anti-austerity government is formed, the EU and the IMF decide to offer a relaxation in the program conditionality and introduce some measures to stimulate economic growth. The coalition could embrace the new program and cooperate. This would buy Greece more time to keep working through its structural reforms. In other words, the election of an anti-austerity government does not necessarily mean Greece would be on its way out of the monetary union.

#### **Scenario 1.B: A coalition government cannot be formed after the election**

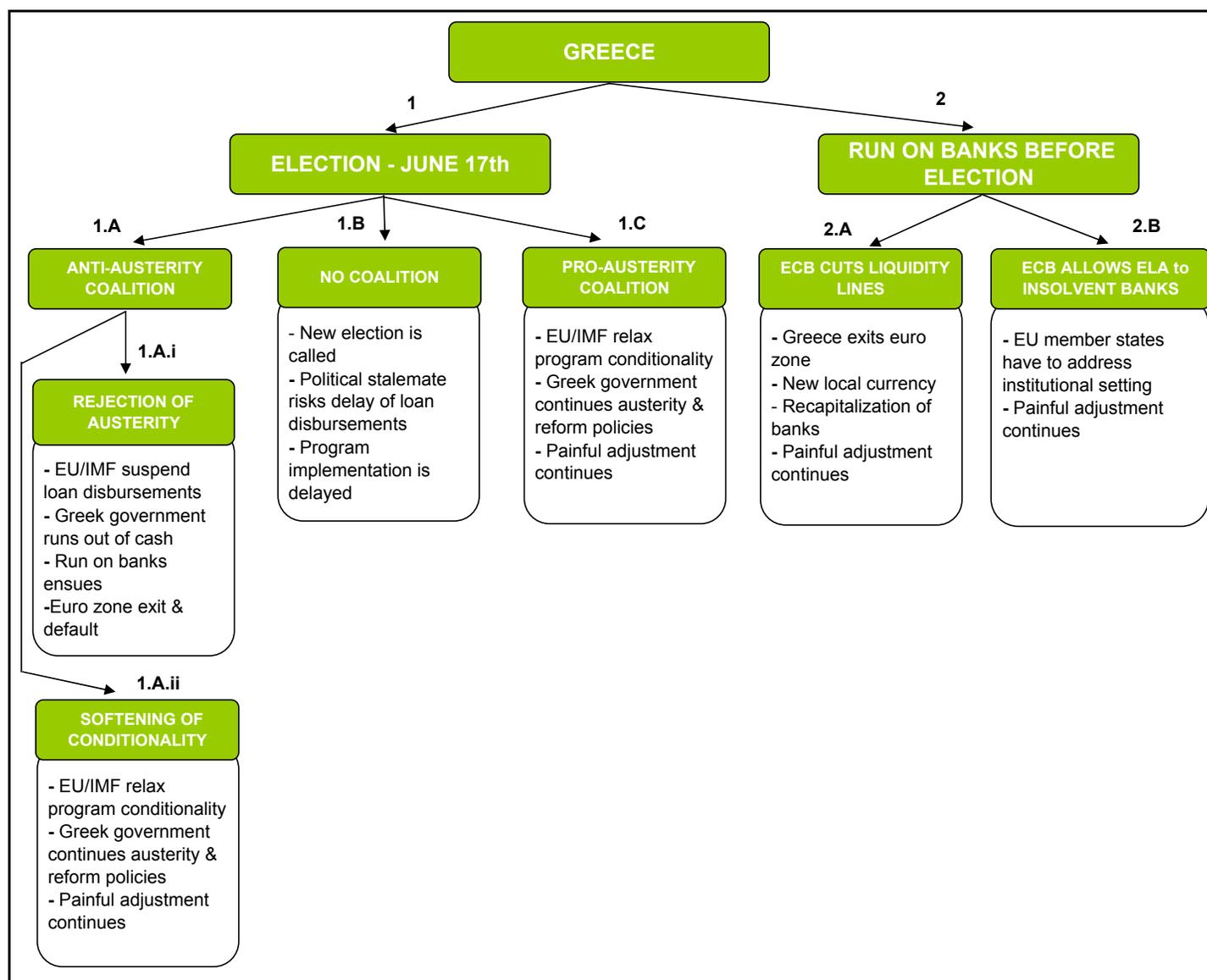
In this case, the situation would be similar to what it is today, except that the prolongation of the political stalemate would cause more delays on program implementation and could expose the country to running out of funds because loan disbursements could be stopped until a new government is formed. The increased uncertainty could also fuel greater deposit withdrawals, threatening the stability of the domestic banking system.

#### **Scenario 1.C: A pro-austerity coalition government is sworn into office**

If New Democracy and Pasok, with the support of other small parties, manage to form a coalition government after the June 17<sup>th</sup> elections, it is likely that the EU and the IMF will try to give the new government some breathing room by relaxing the program targets.

#### **Scenario 2: Run on banks before elections**

European authorities might have to decide whether to keep Greece within the euro zone even before the country could have its election on June 17<sup>th</sup>. Last week the ECB excluded four Greek banks from its regular liquidity provision operations because they had very low capital ratios. Under the terms of the second Greek bailout, the European Financial Stability Facility would provide up to €25 billion to the Hellenic Financial Stability Fund, so that the latter could recapitalize the country's banks after they complied with a set of requirements. Given that the recapitalization process had been delayed, the ECB opted to direct Greek banks to request additional emergency liquidity assistance – ELA – from the Greek central bank. Once the recap-



talization takes place, which will likely occur this week, Greek banks will once again have access to standard ECB liquidity operations.

However, if deposit withdrawals accelerate, at some point the ECB might have to decide whether it allows the Bank of Greece to provide additional ELA to technically insolvent banks.

### Scenario 2.A: ECB cuts liquidity lines

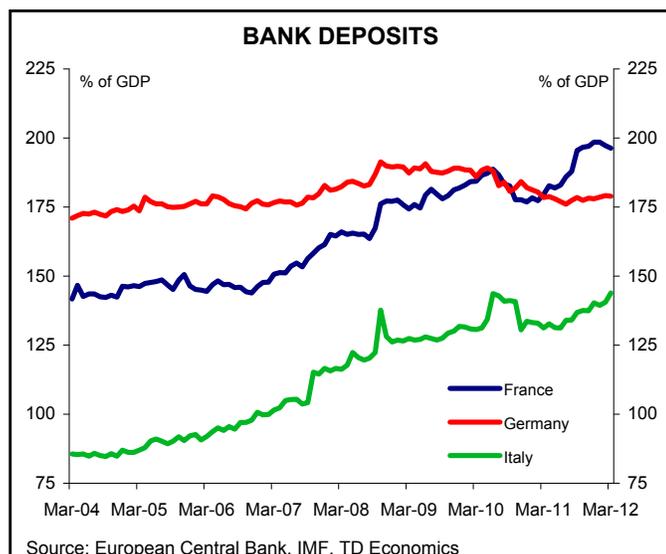
If the ECB declines further ELA expansions to the Bank of Greece, then the Greek government might need to declare a bank holiday, freeze all bank accounts, and impose restrictions on international transactions until they figure out how to assist their banks. At that point there will be two options:

1) get more help from the EU/IMF, either to recapitalize the banks or in the form of a blanket guarantee on deposits; or 2) exit the euro zone and establish a new local currency. The latter would lead to a debt default.

### Scenario 2.B: ECB allows ELA to insolvent banks

The ECB could instead authorize the Bank of Greece to continue providing ELA even if Greek banks remain undercapitalized. This situation would have to be rapidly addressed by euro zone leaders because it goes against the provisions in the European treaties.

Now that we have laid out our scenarios, let's discuss some of the questions that arise from them.



### What could cause a Greek exit from the euro zone?

From our previous discussion it is clear that, in order for Greece to leave the euro zone, the parties involved would have to make a series of decisions to arrive to that outcome. For instance, it could happen if the run on banks intensifies and the European Central Bank cuts its provision of liquidity to Greek banks. Alternatively, we could arrive at the same outcome if the EU and the IMF decide to stop loan disbursements after an anti-austerity government suspends program implementation.

That being said, it is also possible that events could occur faster than the time it takes for the European institutional framework to produce correcting actions. This could lead to a Greek exit, even if that was not the desired outcome by any of the parties involved. Particularly worrisome is the case of a bank run that would require the EU, the ECB, the IMF, and the Greek government to act at unison to stem the deposit hemorrhage. Unfortunately, the experience thus far shows that it takes the EU too much time to deliver actions in response to financial markets pressures. It is also possible that European authorities might need to make decisions under circumstances that are not contemplated in the EU legal framework. With this in mind, we move on to the next question.

### Is there a legal procedure for withdrawal from the euro zone within the European treaties?

According to ECB research, withdrawal from the euro zone without a parallel withdrawal from the EU would be legally impossible.<sup>1</sup> Moreover, there is no formal procedure

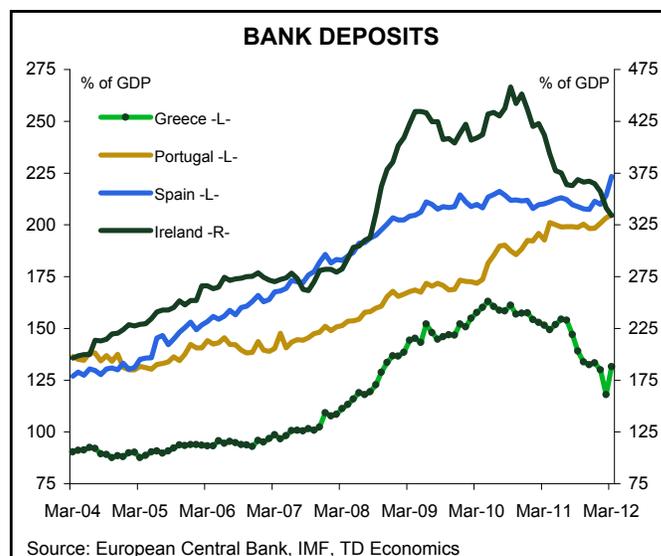
established for withdrawal from the EU. It has to be negotiated between the country and the European Council. Namely, the exit clause on Article 50 of the Lisbon Treaty states that a member state wishing to withdraw from the EU must inform the European Council of its intention. Then, the Council has to produce guidelines to negotiate a withdrawal agreement with the country in question; and, finally, the Council, with the consent of the European Parliament, will conclude the agreement on behalf of the EU. It is very clear that the European institutional framework would offer very little guidance if Greece comes to be on the verge of exiting.

### How would Greece implement its exit?

If the Greek government decides to abandon the common currency, they would declare a bank holiday. Restrictions on the use of funds, as well as on transfers between bank accounts would be imposed. Capital controls on external transactions would be established. The government would create a new currency. Simultaneously, an exchange rate to the euro would be established in order to convert all the financial claims in the domestic financial system to the new currency. New bills and coins would have to be printed and coined, and then distributed across the country.

### How would the exchange rate of the new currency to the euro be established?

There are many criteria that could be used to assign the initial exchange rate. One is to make an assessment of the current degree of overvaluation of the real effective exchange rate between Greece and its main trading partners. This assessment is based on the differential in certain key



prices between the countries, such as unit labor costs. For instance, if comparable wages in Germany – adjusted by productivity – are 30% cheaper than in Greece, then the new Greek currency should be devaluated roughly 30% vis-à-vis the euro.

Another – rather complex – method takes into consideration the current level of foreign exchange reserves of the country, the aggregate assets and liabilities on the banking system, a target level for both nominal GDP and monetary aggregates, as well as a projection of the international transactions that the country would have to make over the initial period of adjustment. By combining these stocks and flows, one can arrive at an exchange rate that the country should be able to sustain for some time, while the economy adjusts to the initial shock.

Although it is speculative, TD Economics believes a new Greek currency could lose 50% of its value vis-à-vis the euro.

#### What would be the impact on the Greek economy?

The conversion of domestic assets and liabilities to the new currency would create severe currency mismatches in those firms with foreign liabilities. This, in combination

with credit restrictions, would cause a severe contraction in imports. There would be disruptions in the supply of imported inputs, exacerbating the decline in economic activity.

A spike in non-performing loans and a sharp increase in bankruptcies would lead to a surge in legal litigations that would overwhelm the justice system for a number of years.

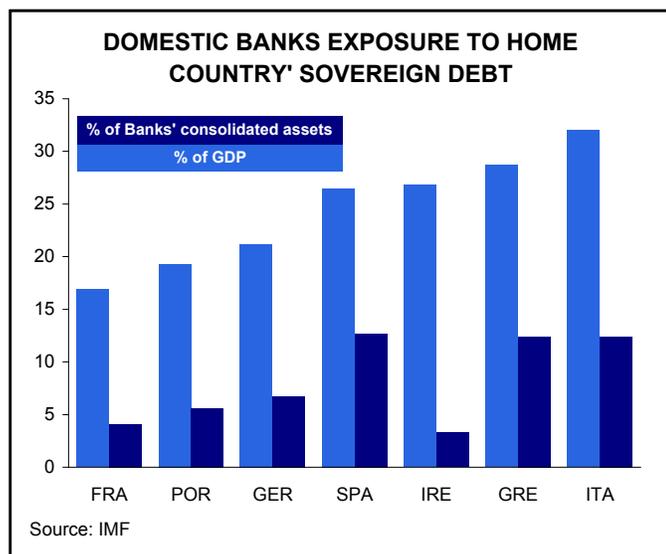
The banking system would have to be recapitalized or nationalized.

#### In the six years following its 2002 debt default, Argentina experienced an average economic growth rate of 8.5%; can Greece repeat this performance?

Argentina's recovery coincided with the boom in commodity prices. This led to a marked improvement in its terms of trade, which allowed the country to generate foreign reserves to finance domestic consumption and investments. Therefore, despite being shunned from international capital markets, Argentina was able to finance an expansion in domestic demand via persistent trade surpluses. Furthermore, Argentina's main regional trading partners also benefitted from the commodities boom, increasing their demand for Argentinean exports. Strong domestic growth also allowed the country to rapidly improve its fiscal situation.

FOREIGN BANKS CLAIMS ON GIIPS and CORE EUROPE										
(% OF LENDER BANKS' HOME COUNTRY GDP)										
	Greece	Ireland	Italy	Portugal	Spain	Total Exposure to GIIPS	France	Germany	United Kingdom	Total
Portugal	3.4	7.3	0.9		9.1	20.7	2.8	1.0	2.5	26.9
France	1.4	1.2	11.9	0.8	4.1	19.4		7.1	7.7	34.3
United Kingdom	0.5	5.8	2.5	0.9	3.6	13.2	12.1	7.8		33.1
Germany	0.9	2.7	3.7	0.8	4.1	12.3	4.9		12.8	30.0
Belgium	0.1	6.9	2.4	0.2	2.4	12.1	8.7	2.6	5.2	28.6
Spain	0.1	0.6	2.0	5.2		7.8	1.8	3.6	26.4	39.7
Switzerland	0.3	2.2	2.1	0.4	2.7	7.7	11.4	11.3	32.7	63.0
Netherlands	0.4	2.1	4.1	0.6	0.0	7.1	8.9	20.3	16.3	52.6
Austria	0.5	0.5	4.3	0.2	1.1	6.7	2.5	10.7		20.0
Denmark	0.0	4.4	0.1	0.0	0.6	5.2	1.5	1.3	13.6	21.6
Ireland	0.1		0.6	0.2	2.2	3.1	2.3	1.3	64.0	70.6
Italy	0.1	0.8		0.1	1.2	2.3	1.8	10.4	2.5	16.9
Sweden	0.1	0.3	0.2	0.0	0.7	1.3	1.7	12.3	6.9	22.2
United States	0.0	0.4	0.2	0.0	0.3	1.0	1.2	1.0	3.8	7.0
Japan	0.0	0.4		0.0	0.4	0.8	1.4	2.0	3.7	7.9
Greece		0.2	0.1	0.0	0.1	0.4	0.6	0.9	4.9	6.8
Canada						0.0			5.2	5.2

Source: BIS, TD Economics, December 2011 data



In the case of Greece, most of these elements are absent. First and foremost, a Greek exit would cause severe financial turmoil, at least at the European level. Therefore, the external environment would not be as favorable as it was for Argentina in the early 2000s. Moreover, the country has a small export base and structural rigidities in both its labor and service markets. In addition, when Argentina abandoned the currency peg to the U.S. dollar in January 2002, the country had a national currency in circulation. Hence, Argentina did not have to go over the logistical nightmare of coining and distributing a new currency, as well as adapting the payment systems to the new sign. All these elements suggest that Greece would likely experience a much slower recovery.

#### **Given that an exit from the euro zone would be so traumatic for Greece, is it better to stick to austerity?**

From an economic perspective, sticking to structural reforms and fiscal austerity for long enough might eventually lead to economic recovery. But it is also possible that the economy falls into a downward spiral in which internal devaluation causes economic depression, leading to ever growing debt ratios. In the case of Greece, given the extremely unfavorable starting point (i.e., high fiscal and current account deficits, high public debt, and a very rigid economic structure) the odds of success are very limited. For it to occur, the EU/IMF would have to soften the criteria Greece should meet under its program while the country maintains its reform agenda. However, these two things may be incompatible. Relaxing the program weakens the drive for reform.

#### **What would happen to Greek foreign debt after the country abandons the euro?**

The sharp devaluation of the new Greek currency would lead to a default by both the Greek public and private sectors on their foreign debt. This would cut the country from any external financing, forcing an abrupt correction on its current account deficit.

#### **What would be the impact of a Greek default on the European financial system?**

Although the [debt swap](#) conducted in March reduced Greek public debt with private bondholders by €90 billion; the country still owes €140 billion in bonds and some €150 billion in multilateral loans from its two bailouts. A Greek default caused by the country's exit from the euro zone would imply a very low recovery rate. Domestically, Greek banks, pension funds, and other institutional investors would be busted, and foreign debt holders would have to absorb losses of around €200 billion.

The ECB alone holds some €50 billion of Greek bonds in the Securities Market Program. That loss would be absorbed by the Eurosystem, although the amount would likely be lower, because the ECB bought those bonds at a significant discount. In addition, given that Greek banks would be insolvent after the default, the Eurosystem would also have to absorb the loss on the liquidity lines provided to them by the ECB, net of the non-Greek collateral posted by the banks. Apart from that collateral, the Eurosystem could also have recourse over some €4.5 billion in foreign exchange reserve assets attributable to the Bank of Greece to defray part of the impact.

In addition, upon Greece leaving the monetary union, the Eurosystem would have to absorb the roughly €104 billion liability that the Greek central bank has accumulated within the Eurosystem's clearing and payments' platform TARGET2.<sup>2</sup>

Furthermore, an additional repercussion from a Greek default would be felt by those non-Greek banks that have pledged Greek debt as collateral with the ECB in exchange for liquidity. They would have to post new collateral or repay the loans. So, the impact would not only materialize in the loss the banks would suffer on their holdings of Greek bonds, but could also affect their access to liquidity.

A similar effect would be caused by the increase in yields on sovereign Irish, Italian, Spanish and Portuguese bonds that would ensue after the Greek default. It is likely that

some banks outside of Greece would need support from their governments.

### How large are the risks for contagion?

Although there has been a significant reduction in cross exposures across the European banking system, the table on page 5 shows that there are still some potentially troublesome links. For instance, Portuguese banks could fan the impact of a Greek default into the Spanish banking system. However, it should be noted that the data on the table does not capture the additional reduction in exposures due to the Greek debt swap. Therefore, it is possible that those figures are actually much lower in some cases.

Another transmission channel comes from the significant bank exposure to the sovereign debt of their home countries. This feeds the negative feedback loop between banks' stocks and sovereign yields that has been so damaging throughout this crisis. That would be perhaps the main spillover effect of the Greek exit shock into Spain and Italy, that could see both banks and governments simultaneously losing access to the markets.

The worst possible scenario would be that of a Greek exit precipitated by a run on Greek banks, because the risk of the bank run spreading to other euro zone countries would be very high and difficult to contain. Traditional bank runs can be stymied by a deposit guarantee. However, a bank run fueled by fears that the currency will be sharply depreciated are more difficult to defuse.

Lastly, a Greek default would also test for the first time the capacity of the EFSF to collect payments from guarantor countries at a time of heightened market turmoil. This would be another catalyst for market anxiety.

### Final Remarks

To sum up, the outlook for Europe is highly uncertain and poses the number one risk to the global economy. Our base case assumptions are that Greece will continue to get adequate financial support to make it to the June 17<sup>th</sup> election. However, the election outcome is difficult to predict. Voter turn out in the last election was low, and there is greater emphasis that the upcoming election will be a sort of referendum on staying in the euro. We're also not confident in the accuracy of political polling when so much is at stake. So, there are three possible outcomes. First, if a pro-austerity coalition forms the next government, the outcome is likely one where Greece muddles along. If an

anti-austerity government is formed, the outcome will be negative for financial markets, but it is not clear that Greece will exit the euro. Indeed, the platform of the left party that gained significant support in the recent election is one that argues for less austerity but continued participation in the euro. The problem is that they need austerity to qualify for financial aid, which is required to stay in the euro. The rational outcome would be for the anti-austerity government to elicit some concessions from the other nations to temper the degree of austerity but still continue with fiscal rebalancing. Finally, there is the outcome where no government can be formed. This would prolong the uncertainty, breeding financial risks until a new government is formed.

Economists are not political scientists, so we cannot comment on which election outcome will occur. However, it seems likely that all efforts will be made to keep Greece in the euro, even if an anti-austerity government takes power. Our base case outlook is for a protracted financial crisis in Europe that bolsters volatility in financial markets and maintains hyper stimulative monetary policies through most of the developed world.

Having said that, we do believe that Greece needs a further restructuring of its debt and we do think the country will ultimately exit the euro – we're just not convinced that Europe is ready for this to happen at the moment. If an accident does occur and Greece does leave the euro in the near term, it would have global financial ramifications.

Although Greece is a small country, the precedent set by a nation dropping the euro would likely lead to intense financial market speculation of other countries ultimately following suit. Fear and uncertainty would be a blow to equities and to the European banking system, while leading to a rally in non-European bonds, particularly U.S. Treasuries. As the borrowing requirements by fiscally-strained countries increase, worries of further euro exits would risk becoming a self fulfilling prophecy. One would expect the euro to fall in value, but much would depend upon whether investors channel funds into Germany as a safe haven, or flee the euro zone entirely. Commodity prices would fall amid lower expectations for global growth.

The trillion dollar question would be the policy response to limit the contagion. Increased commitment by the ECB to be the lender of last resort and/or credible progress towards the issuance of Eurobonds would likely go a long way in defusing the situation. The problem from a forecasting perspective is that it is hard to judge how the political/policy

response would unfold because we are truly in uncharted territories. If a strong and effective firewall was implemented – something that would require a significant amount of twisting of the European treaties provisions – a Greek exit would have serious cascading effects across Europe,

but it might stop short of a global catastrophe. Conversely, if the euro zone starts to unravel, it would create a global financial crisis that could dwarf the aftermath of Lehman Brothers failure in 2008.

*Craig Alexander*  
*SVP and Chief Economist*  
*416-982-8064*

*Martin Schwerdtfeger*  
*Senior Economist*  
*416-982-2559*

---

## Endnotes:

- 1 Athanassiou, P. “Withdrawal and expulsion from the EU and EMU, some reflections”, ECB Legal Working Paper Series, December 2009
- 2 TARGET2 stands for Trans-European Automated Real-Time Gross Settlement Express Transfer System 2. The Central Bank of Greece has accumulated a negative balance against the Eurosystem as a result of the country’s inability to finance its external deficits on the current account of the balance of payments via capital inflows on the capital account of the balance of payments. For a country outside of a currency union, persistent current account imbalances which cannot be financed through capital inflows end up causing an exhaustion of the country’s foreign exchange reserves. That has been avoided in Greece because the Greek central has been able to draw on its balance with the Eurosystem.

This report is provided by TD Economics. It is for information purposes only and may not be appropriate for other purposes. The report does not provide material information about the business and affairs of TD Bank Group and the members of TD Economics are not spokespersons for TD Bank Group with respect to its business and affairs. The information contained in this report has been drawn from sources believed to be reliable, but is not guaranteed to be accurate or complete. The report contains economic analysis and views, including about future economic and financial markets performance. These are based on certain assumptions and other factors, and are subject to inherent risks and uncertainties. The actual outcome may be materially different. The Toronto-Dominion Bank and its affiliates and related entities that comprise TD Bank Group are not liable for any errors or omissions in the information, analysis or views contained in this report, or for any loss or damage suffered.