Subcommittee Chairman Kirk, ranking member Heitkamp, members of the Subcommittee on National Security and International Trade and Finance, it is a pleasure to testify before you today on the global impact of a hypothetical Greek default.\footnote{I am grateful to my colleagues at the Peterson Institute for ongoing and highly rewarding discussions of this and related issues, in particular Edwin Truman, Avinash Persaud, Joe Gagnon, Douglas Rediker, Angel Ubide, William Cline, Nicolas Véron and Adam Posen. Any errors are solely mine.} In my written testimony, I will address two issues: the probability of a Greek default and its implications on the euro area and the global economy, and the exposure to the US taxpayer from loans given to Greece by the International Monetary Fund (IMF).

\section{The Probability and Implications of a Greek Government Default on Greece, the Euro Area and the Global Economy}

In light of ongoing negotiations in the euro area, it is at the time of writing an open question if the Greek government can avoid a default against its official sector creditors, as well as whether the IMF gets paid on time on June 30 and arrears to the organization thus averted.

Substantial amounts of political brinkmanship are being utilized to achieve a negotiated outcome, which aims to see a self-identified radical leftist anti-austerity government agree to a reform package with the Troika in exchange for the continuation of financial support.\footnote{Sometimes officially now referred to as the “Brussels Institutions,” consisting of the IMF, the European Commission and the European Central Bank (ECB), with the Eurogroup functioning as the European entity politically agreeing to the technical proposals of the Troika.} Whatever today’s negotiation situation is, it remains a near certainty that an agreement will eventually be found in the coming weeks. The principal question is whether an agreement will require a brief period of restrictions on the Greek banking sector to be sealed or not. This ultimate ability to find an agreement with the current or a new Greek government is of the utmost importance, as it suggests that Greek government debt is and will most likely in the future remain
sustainable, despite the country’s extremely high gross government debt levels of 177 percent of GDP in 2014\(^3\) and uncertain future growth prospects.

This conclusion follows from the particular current structure of Greek government debt, which is overwhelmingly held by the other euro area members, the IMF as a super-senior creditor, and with remaining privately held debt at very long maturities and low nominal interest rates (see figures 1 and 2). Consequently, the cost of servicing and therefore the financial sustainability of Greek government debt is largely unrelated to the size of gross debt or financial market fluctuations. The country currently faces very small debt payment obligations until at least 2023 and already has a substantially longer debt maturity profile and lower implied rate of interest on its debt than for instance the United States federal government (figure 3).

Greek debt sustainability and ability to avoid a future default is dependent on two things: the Greek government’s ability to restore economic growth in the country, or in other words the continuation of growth-friendly structural economic reforms; and the country’s ability to reach an ongoing political agreement with its official sector creditors in the euro area and the IMF. Unlike the IMF, the euro area has the political freedom to restructure its Greek government debt holdings—as it has in June 2011, March 2012 and November 2012\(^4\)— in a manner closely calibrated to the preceding degree of Greek government delivery of agreed structural reforms and fiscal targets. Provided the Greek government implements an agreed program in a politically satisfactory manner, the euro area will, in accordance with earlier promises to consider “further measures and assistance, including inter alia lower cofinancing in structural funds and/or further interest rate reduction of the Greek Loan Facility, if necessary, for achieving a further credible and sustainable reduction of Greek debt-to-GDP ratio,”\(^5\) offer the country further debt restructuring. Such additional restructuring of the euro area holdings of Greek government debt will, however, only be contemplated once the Greek government has proven its commitment to faithfully implementing a program agreed with the Troika. Ex ante debt relief to Greece will not be granted.

Recalling that Greece is a small country, accounting for only 1.8 percent of total euro area GDP, and hence does not pose a material risk to overall euro area financial stability (see also table 1), Athens’s ability to avoid a future default is a question of the government’s domestic reform capability and internal euro area politics, not objective debt sustainability criteria or financial markets.

In short, Greece is and will remain solvent if the euro area wants it to be.

Discussions about the implications of a Greek government default are thus likely to remain hypothetical. If the Greek government were nonetheless to default, the precise circumstances and which creditors it defaulted against would determine the consequences. Failure to pay the IMF on time, for instance,

\(^3\) Eurostat data at http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=teina225&amp;plugin=1
\(^4\) See the European Stability Mechanism (p. 29) for the details of these earlier restructurings of euro area holdings of Greek debt. Available at http://www.esm.europa.eu/pdf/204204_ESM_RA_2014_web.pdf.
would not immediately and independently have any real consequences for Greece, as per IMF (2012:21) it would merely initially result in:

“Staff sends a cable urging the member to make the payment promptly; this communication is followed up through the office of the concerned Executive Director. The member is not permitted any use of the Fund’s resources nor is any request for the use of Fund resources placed before the Executive Board until the arrears are cleared.”

Only following a lengthy internal procedure lasting up to 24 months could Greece face expulsion from the IMF.

However, were Greece to go into arrears against the IMF on June 30, 2015, as a result of a failure to reach an agreement with the Troika, the European Central Bank (ECB) would in all probability almost immediately stop, or at least substantially scale back the ongoing provision of emergency liquidity assistance (ELA) to the Greek banking system. This would make it impossible for Greek banks to operate and would necessitate the imposition of a bank holiday, or at least severe deposit access controls at the institution level, which again would throw the Greek economy into another dramatic economic decline.

The political effects of deposit access controls—which importantly under new Banking Union regulations could potentially be imposed by the central euro area banking supervisors at the ECB against the will of the Greek government—on the Greek economy and financial system would likely be dramatic and lead to sufficient domestic political pressure for the government to reach an agreement with the Troika. This would restore ECB support for the Greek banking system and broader Troika financial support. As such, any actual default by the Greek government against any official sector creditor is likely to be of relatively short duration.

Given its current projected small primary fiscal surplus, notions that it would be in Greece’s economic interest to declare a sudden unilateral and total default against its public and private creditors are based on a dangerously simplistic understanding of the close financial, political, economic, and budgetary ties between Greece and its euro area and EU partners.

Such a unilateral default against its creditors would result in the immediate loss of ECB support for the banking system and thus cause the instant closure of Greek banking system and a highly probable loss of ongoing EU budget support of around 3 percent of GDP. Any current projected government primary surpluses in Greece would quickly disappear as a result of slumping growth, and disappearing net budget transfers and declining government revenues would likely be converted into sizable Greek government primary deficits. Any defaulting Greek government would not be able to pay even the claims of its domestic Greek stakeholders, undermining its political support. Moreover, the lessons from economic history concerning the aftermath of previous sovereign defaults are of limited predictive value for the likely effects in a country like Greece, which is a relatively closed economy with limited export

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7 Latest available data for May 2015 indicates ELA had reached approximately $87 billion (up $4 billion from April). See [http://www.reuters.com/article/2015/06/24/eurozone-greece-ecb-idUSA8N0Z300J20150624](http://www.reuters.com/article/2015/06/24/eurozone-greece-ecb-idUSA8N0Z300J20150624).
potential, has a far older population, and a much larger government share of GDP than earlier recorded sovereign default cases.

A Greek sovereign default would have severe domestic economic consequences for Greece, yet a Greek default does not imply an automatic, or even probable, departure of Greece from the euro area (the so-called Grexit). Default against some or all its official sector creditors could be implemented by any incumbent Greek government simply by failing to pay its dues on time, in the same manner the current (and previous) Greek government has gradually run into sizable arrears against many of its domestic government suppliers.9 Leaving the euro, however, would represent a reversal of nearly 40 years of Greek economic and political participation in European integration. It would in all probability require an explicit public mandate to the government to undertake such a momentous volte-face. Given how a large majority of at least two-thirds of the Greek public and over 80 percent of Greek members of parliament (including both parties in the current governing coalition) has consistently supported staying in the euro,10 such a public mandate looks politically impossible in Greece for the foreseeable future.

Occasionally researchers seek insights into what a Grexit might involve from previous recent dissolutions of currency unions in the Soviet Union, Yugoslavia, and Czechoslovakia. Such historical comparative work, though, is of limited relevance, as Grexit would not involve the dissolution of the euro, but rather attempts by a Greek government to (re)introduce its own national currency, while the euro would continue to function more or less as before.

Concerns that the departure of one member of the euro would invariably result in the collapse of the common currency are excessively alarmist for at least two reasons. First, it is highly unlikely that populations in other euro area members would attempt to emulate what would for Greece certainly be a highly disruptive and economically destructive departure from the euro. And secondly, in light of the institutional deepening witnessed in the euro area since 2010, it does seem probable—if politically very challenging—that following a Grexit the remaining euro area members would implement additional integrative measures among themselves, including additional political and fiscal integration, in order to counter renewed centrifugal political and economic forces inside the common currency area.

The fact that any Greek government would seek to (re)introduce its own currency, while the euro would still be in normal circulation, has important implications for the likelihood of success of such a new currency. Recalling how a large majority of the Greek population wishes their country to remain in the euro, and that any new Greek currency would be backed solely by the credibility of Greek governing institutions, it seems highly unlikely that a new Greek currency would be imbued with the key currency function as a “store of value.”11 When presented with a choice between a new national currency and the still circulating euro, Greek residents would overwhelmingly likely demand euros when not legally

9 See the latest Greek government budget implementation data at http://www.mnec.gr/?q=en/content/state-budget-execution-january-may-2015.
11 The store of value function of a currency is one of three key attributes. The other two are the functions of medium of exchange and unit of account. To successfully function as a store of value, a currency has to be capable of being predictably saved, stored, and retrieved for (roughly) the same value. In other words, any currency inflation affecting it must be kept within a certain range.
prevented from doing so.\(^{12}\) — This suggests any new Greek currency would quickly decline in value relative to the euro and the country would suffer a rapid nominal currency depreciation.

Being a relatively small economy, which imports many essentials (energy, food, medicine etc.) and exports only a relatively limited number of often volatile items (tourism and shipping services), Greece has a more limited scope for import substitution and dramatic changes in exports than larger and more diversified economies. The passthrough from a declining nominal exchange rate to domestic inflation in Greece following the introduction of a new currency would thus likely be strong. This again means that achieving a lasting reduction in the Greek real exchange rate from introducing a new currency would be difficult and only potentially achievable in conjunction with a material—and highly regressive—increase in the domestic inflation level. All told, attempts by the Greek government to implement a Grexit by introducing a new currency would likely fail to improve the economic outlook for the Greek population and fail to displace the euro as the dominant currency in circulation in the Greek economy.

Consequently, the actual effect for a defaulting Greece of losing access to banking sector support from the ECB, financial aid from the Troika, and budgetary transfers from the EU budget, is not a smooth transition to a new national currency. Rather, it is a scenario of disastrously high domestic inflation. Unable to successfully switch to a new national currency, the country ends up a bit like Montenegro, which unilaterally euro-ized its economy in 2002. Attempts at Grexit will de facto mean that Greece has only left the institutions of the euro area and the European Union, not the currency itself.

Highlighting the dramatic difficulties of actually (re)introducing a national currency by a government with low institutional credibility, when the previous anchor currency remains in circulation, is also witnessed in the ongoing usage of the US dollar. No modern economy that has ever fully adopted the US dollar (e.g., full currency substitution as seen in Ecuador, Panama, and El Salvador)—has ever undone the decision and reintroduced their own national currency. There is little reason to believe that Greece, now using the euro, would manage to do so either.

A Greek default would prove devastating to the Greek economy even without a Grexit, and the costs passed on to the euro area would be sizable but not economically or financially catastrophic. Private sector exposures to Greece through trade (figure 4) and the banking sector (figure 5) are limited and manageable today. Public sector exposures in the euro area from financial assistance (excluding IMF loans) and liquidity assistance provided to Greece amount to about 3.3 percent of euro area GDP, ranging from 1.4 percent in Ireland to 5 percent in Malta (table 1 provides total “worst-case” exposures assuming a recovery rate of zero). These exposures are large and would in already fiscally challenged countries such as Italy, Portugal, and Spain prove a material additional burden on government finances. They will not, however, in all probability cause any other euro area sovereign to risk losing market access.

The most pressing economic policy problem arising from a Greek default for the euro area would be for the ECB, as it would dramatically complicate plans for ongoing asset purchases, currently scheduled to

\(^{12}\) The Greek government might for instance pay wages or accept payments from residents only in a new currency, or require that bank deposits covered by any deposit guarantee scheme in Greece be held in the new currency.

5
end in September 2016. It would first and foremost be up to the ECB to ensure that any potential financial market cross-border contagion effects—likely only at a magnitude far below what was seen in 2012 in the euro area—would not pose a threat to euro area growth. The ECB is likely, if required, to act decisively and be successful in this task.

In a Greek default scenario, the ECB would most likely feel compelled to expand current levels of asset purchases (€60 billion/month), as well as potentially postpone any exit. Given the relatively limited level of financial assets purchased to date by the ECB in comparison with other major central banks like the Federal Reserve, such additional monetary stimulus would not pose any noteworthy financial risk or economic problems.

Recalling the limited present day private sector exposures to Greece, direct risks to global growth beyond the euro area from a default are relatively limited and linked to threats to the euro area regional growth outlook. However, given likely ECB policy activism, the generally robust euro area economic performance to date (short-term Q2 indicators point to around 1.6 percent growth annualized with June composite Purchasing Managers' Index at 49-month high\textsuperscript{13}), the lower levels of external and budget deficits now found in the euro area, and new euro area institutions put in place since 2010, the regional fallout from a Greek default is likely to be contained and not derail the current euro area cyclical recovery.

In sum, a default by the Greek government will quickly prove an economic disaster for Greece, though for that reason domestic political pressures to seal a deal with the Troika will keep any failure to pay international creditors brief. Any default by Greece will not automatically lead to a Grexit, and it will likely prove impossible for a Greek government to successfully reintroduce a national currency under any scenario. Improved euro area economic performance, a more resilient though still incomplete institutional structure in the euro area, and additional ECB monetary stimulus are all likely to contain any cross-border spillovers from a Greek default. As a result, a Greek default does not pose systemic risks to either the euro area or the global economy.

\textbf{II \quad The Exposure of the US Taxpayer to Loans Provided to Greece by the IMF}

As noted in the previous section, any actual default by the Greek government is likely to be relatively short-lived. The domestic economic implications would be very negative through the rapid introduction of a bank holiday or bank deposit controls, while the domestic political reactions would in all probability produce the required domestic political pressure on the Greek government to seal a deal with the Troika. As a result, any financial risks for the IMF appear quite limited, as Greece would eventually secure the required funding from the euro area or its own funds to repay the IMF.

It appears a relatively high risk, but not the base case, that Greece may not pay the IMF the approximately $1.7 billion due on June 30, precipitating the serious domestic economic and political

\textsuperscript{13} See \url{http://www.markiteconomics.com/Survey/PressRelease.mvc/986c020abdb0457f9574c56ff8a80e79}. 
implications discussed above. However, from the perspective of the IMF, new Greek arrears of this magnitude would not pose any financially material risk and would only approximately double the IMF’s current levels of arrears of $1.8 billion.\textsuperscript{14} This would take total member state arrears to the IMF back to levels of the early 1990s,\textsuperscript{15} but not in any way affect the operations of the IMF or pose any threat to its shareholders, including the United States.

Total current IMF exposures to Greece from the 2010 Stand-By Arrangement and 2012 Extended Fund Facility amount to approximately $39 billion,\textsuperscript{16} currently scheduled to be fully repaid only by 2026 (figure 2). The IMF is Greece’s super-senior creditor, and any potential future additional euro area restructuring of its Greek debt holdings are likely to include a conversion of costlier IMF loans into longer maturity and cheaper European Stability Mechanism (ESM) loans, implying that the IMF’s exposure to Greece is likely to be eliminated before 2026. Both issues suggest that the actual financial risk to the IMF and its shareholders from lending to Greece is relatively limited, as the IMF will ultimately be paid back fully, even as euro area taxpayers will surely not in net-present-value terms.

Consequently, estimates of potential liabilities to the US taxpayer from IMF lending to Greece should be treated as a very low-probability worst-case scenario.

The United States’ IMF quota stands at 16.74 percent, implying that the United States’ share of total current Greek IMF exposure of about $39 billion is approximately $6.5 billion.

In relation to the US government and economy, this is a very small number, amounting to 0.2 percent of 2014 federal government outlays and 0.04 percent of US 2014 GDP.

Figures and Tables

**Figure 1**  Greek Government Debt Ownership By Sector, Spring 2015

- Private Sector - 15%
- Public Sector - 85%

*Source: ESM*
Figure 2  Greek Debt by Type and Maturity, €bn

Source: RBC Capital Markets
Figure 3  Implicit General Government Interest Rate 2014

Source: European Commission AMECO Database
Figure 4  Exports To Greece, 2014, % of GDP

Source: Eurostat; US Census

United States: 0.004
Estonia: 0.04
Sweden: 0.1
United Kingdom: 0.1
Finland: 0.1
Latvia: 0.1
Lithuania: 0.1
Portugal: 0.1
France: 0.1
Italy: 0.1
Poland: 0.1
Belgium: 0.2
Sweden: 0.2
Germany: 0.2
Russia: 0.2
Spain: 0.2
Malta: 0.2
Slovenia: 0.3
Italy: 0.3
Slovakia: 0.3
Croatia: 0.3
Hungary: 0.4
Netherlands: 0.4
Romania: 0.5
Cyp: 1.3
Bulgaria: 3.5
Figure 5 Consolidated Foreign Claims On Greek Banks - Ultimate Risk Basis, 2014, % of GDP of eporting Country Banks

Source: BIS; IMF
### Table 1 Euro Area Financial Exposures to Greece April/May 2015

<table>
<thead>
<tr>
<th>Member States</th>
<th>Eurosyste mr/ECB</th>
<th>Total</th>
<th>% of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bilateral Loans €bn</td>
<td>EFSF/ESM €bn</td>
<td>SMP €bn</td>
</tr>
<tr>
<td>Austria</td>
<td>1.6</td>
<td>4.3</td>
<td>0.9</td>
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<td>0.0</td>
<td>0.1</td>
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<td>Estonia</td>
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<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Finland</td>
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<td>2.7</td>
<td>0.6</td>
</tr>
<tr>
<td>France</td>
<td>11.4</td>
<td>30.9</td>
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</tr>
<tr>
<td>Germany</td>
<td>15.2</td>
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<td>7.2</td>
</tr>
<tr>
<td>Ireland</td>
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<td>Italy</td>
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<td>Malta</td>
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<tr>
<td>Netherlands</td>
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<td>0.2</td>
</tr>
<tr>
<td>Spain</td>
<td>6.7</td>
<td>18.1</td>
<td>3.6</td>
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<tr>
<td><strong>EA Total</strong></td>
<td>52.9</td>
<td>140.7</td>
<td>27.7</td>
</tr>
</tbody>
</table>

* Luxembourg, Latvia and Lithuania excluded from table due to small size (Lux) and late euro entry. Slovakia did not by political choice provide bilateral loans to Greece. Eurosyste m exposures distributed according to ECB ownership key, excluding Greece.

*Source: Author; ESCB; Eurostat*