Rationality in the Public’s Evaluation of Economic Policy: Evidence from the European Sovereign Debt Crisis

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Abstract

The increased use of direct democracy to set economic policy raises an important question: To what extent are aggregate preferences over complex economic policies consistent with individual rationality? Even if we do not believe that individuals have the cognitive sophistication or information to rationally evaluate policies themselves, can robust public debate over policy lead individuals to hold preferences that are consistent with rationality? This question has far-reaching implications for the coherence of economic policy. I theorize how a rational individual would evaluate the following policy: Commission monitoring of member state compliance with the Stability and Growth Pact (SGP), which governs the European Economic and Monetary Union (EMU). Then, I present empirical evidence from the European Sovereign Debt Crisis that, in a high-information environment, where public debate is robust, individuals express preferences over Commission monitoring that, in the aggregate, are surprisingly consistent with individual rationality.
An important trend in global governance is the increasing use of direct democracy to set economic policy. Recent examples include the 2007 referendum in Costa Rica on joining the Dominican Republic-Central American Free Trade Agreement (CAFTA-DR) (Hicks, Milner and Tingley 2014; Urbatsch 2013), the 2010 referendum in Iceland on loan guarantees (Curtis, Jupille and Leblang 2014), the 2012 referendum in Croatia on membership in the European Union (EU), and the 2016 referendum in the United Kingdom on EU membership. Beyond formal referendums, general elections often become quasi-referendums on major economic policies. For example, the 2016 election in the United States was, at least in the industrial Midwest, a referendum on decades of American trade policy. The 2017 election in the United Kingdom was, in large part, a referendum on Brexit.

The use of direct democracy to set economic policy raises an important question: To what extent are aggregate policy preferences consistent with individual rationality? Even if we do not believe that individuals have the cognitive sophistication or information to rationally evaluate policies themselves (and there are many reasons not to), can robust public debate over policy lead individuals to hold preferences that are consistent with individual rationality? This question has far-reaching implications for the coherence of economic policy — and whether referendums on complex economic issues are a good idea.

In this paper, I theorize how a sophisticated, rational individual would evaluate the following policy: Commission monitoring of member state compliance with the Stability and Growth Pact (SGP) — an agreement between European Union (EU) member states that governs the European Economic and Monetary Union (EMU). While politically important, this is a highly complex, technical policy issue that most EU citizens would struggle to analyze without taking cues from the broader public debate. Then, I present empirical evidence from the European Sovereign Debt Crisis that, in a high-information environment, where public debate over policy is robust, individuals express preferences over Commission monitoring that are surprisingly consistent with individual rationality.\(^1\)

\(^1\) Note that this evidence does not suggest than individuals cognitively evaluate complex economic policies rationally, only that aggregate preference patterns are consistent with individual rationality.
How would a sophisticated, rational individual go about evaluating an economic policy? Evaluating a policy is particularly complex when it is multi-dimensional — in the sense that it can affect multiple political outcomes that an individual can have preferences over (Carrubba and Singh 2004) — and when its likely effects depend on the context in which it is implemented. When a policy has these characteristics, it can create context-specific policy tradeoffs that an individual would have to carefully evaluate. A highly sophisticated, rational individual would (a) identify the outcomes that a policy is likely to affect, (b) understand how their current economic context might condition the effects of the policy, (c) identify any tradeoffs that the policy might create, and (d) express support for the policy if it advances their self-defined interests. I use these criteria as a baseline.

This approach to assessing the rationality of policy preferences stands in contrast to the usual approach in existing literature. Scholars generally ascribe interests to individuals based on their observable characteristics and then to use those characteristics to predict self-reported support for policies that advance them. For example, an individual with credit card debt might be more likely to support sovereign debt repayment to keep their interest rate low (Curtis, Jupille and Leblang 2014). Scholars then evaluate the extent to which policy preferences are driven by material self-interest. A rational individual, according to this approach, is one who correctly identifies their material self-interests (according to standard economic theory) and expresses support for policies that advance those interests. This paper goes in a different direction by focusing on the ability of individuals to correctly

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2 The empirical evidence is mixed. Some studies find empirical evidence that policy preferences are driven by material self-interest (Gabel 2000; Mayda and Rodrik 2005; Hays, Ehrlich and Peinhardt 2005; Mayda 2006; O’Rourke and Taylor 2006; Jupille and Leblang 2007; Mayda 2008; Pandya 2010; Fordham and Kleinberg 2012; Curtis, Jupille and Leblang 2014; Bearce and Tuxhorn 2017), whereas others find evidence that preferences are driven by sociotropic factors (Hiscox 2006; Hainmueller and Hiscox 2006, 2007; Mansfield and Mutz 2009; Hainmueller and Hiscox 2010). One of the original motivations behind this research agenda was to test the micro-foundations for the Heckscher-Ohlin and Ricardo-Viner models (Scheve and Slaughter 2001), but there is little empirical evidence that economic policy preferences are driven by ownership of relatively abundant factors of production (Heckscher-Ohlin) or employment in export-oriented versus import-competing sectors (Ricardo-Viner).

3 According to the literature, individuals are more likely to correctly identify their material self-interests when they are well-informed (Gomez and Wilson 2006; Armingeon and Ceka 2014; Bearce and Tuxhorn 2017), such as when they are operating in a high-information environment, like an international financial crisis (Curtis, Jupille and Leblang 2014).
identify the likely effects of a policy conditional on their economic context, and to identify whether those effects advance their self-defined interests, regardless of whether those interests are aligned with their material interests.

I use this conceptual framework to evaluate the degree to which aggregate policy preferences over Commission monitoring of member state compliance with the SGP are consistent with individual rationality. The SGP consists of two criteria, which place legal limits on EU member states’ deficit spending and sovereign debt. These criteria help mitigate a perverse incentive that member states have to over-spend and over-borrow in order to stimulate their economies. Member states know that, in the event of a sovereign debt crisis, the EU would have no choice but to bail them out — a textbook example of moral hazard. The political consequences of Commission monitoring, including the risk of a sovereign default, depend on a member state’s noncompliance with the SGP criteria. An individual’s self-reported support for the EMU (an observable indicator of their interest in the long-term stability of the EMU) will shape whether they view these outcomes as costs or benefits, and therefore the probability that they will express support for monitoring.

Understanding public opinion vis-à-vis Commission monitoring is substantively important, in its own right, because of the implications for member state compliance with the SGP. When the public does not support monitoring, governments have a greater incentive to violate the SGP criteria. As the cost of compliance increases for member states, the Commission will become less likely to take legal action against noncompliant member states. Knowing that it will be more difficult to successfully bring member states into compliance, the Commission will become less willing to pay the financial and political costs of monitoring and enforcement activities (König and Mäder 2014; Fjelstul and Carrubba 2018; Baerg and Hallerberg 2016). This strategic behavior can cause a compliance deficit.

Using multi-level models, I provide empirical evidence that the aggregate policy preferences of survey respondents are consistent with individual rationality. Specifically, I show that an individual’s support for Commission monitoring depends on the interaction between their self-reported support for the EMU and their member state’s compliance with the SGP.
criteria. In developing predictions, I black-box the origin of individuals’ self-defined interests. However, public discourse about policy responses to the Eurozone crisis could affect whether an individual supports the EMU (i.e., how they define their interests). To address this potential endogeneity problem, I use propensity score matching to correct for the non-random assignment of support for the EMU.

The Substantive Application

To theorize individuals’ support for Commission monitoring as a potential solution to the moral hazard problem underlying the Eurozone crisis, we need to consider three key issues: (1) the role moral hazard has played in the crisis, (2) how Commission monitoring mitigates moral hazard, and (3) the tradeoffs that Commission monitoring presents.

First, what role has moral hazard played in the sovereign debt crisis? The stability of the EMU depends on a non-credible promise: That member states will adhere to sound fiscal policies when the economy is good and credit plentiful. If a member state violates this promise, and its sovereign debt becomes so unwieldy that investors doubt that it will be able to pay the interest on its debt, they could launch a speculative attack — a sudden, uncoordinated sell-off of government bonds in anticipation of a precipitous drop in their value. By flooding the bond market, investors increase supply, which decreases the price. Investors then demand higher interest rates to compensate for the risk of owning a bond that could become next to worthless in the event of a default. Spiking interest rates make it that much harder for the government to restructure its sovereign debt.

This is exactly what happened to Greece on the heels of the Great Recession. Investors launched a speculative attack on Greek bonds when a newly-elected government announced that Greece’s fiscal position had been vastly overstated. (Its deficit and debt were much higher than reported.) Greece was in a bind. Usually, debt-burdened countries decrease the real value of their debt burden by devaluing their currencies. As a member of the EMU, Greece did not have that option. It could not unilaterally use monetary policy to pull itself
out of the hole. Greece’s inability to borrow as interest rates on its bonds spiked pushed the government towards sovereign default and sparked the European sovereign debt crisis, which threatens to destabilize the entire EMU.

A Greek default would not be an isolated event. Economists and politicians alike have warned that letting Greece default and exit the EMU (the only way to reclaim monetary policy autonomy in order to reduce its real debt burden) could create financial contagion. A Greek sovereign default would hurt investors who hold Greek sovereign bonds — investors that include other EU member states. Non-performing Greek assets would imperil investors’ already-weak financial positions. Beyond financial contagion, a so-called Grexit would create a dangerous precedent. It would prove that EMU membership is reversible.

The dramatic steps that the Troika (a consortium comprising the International Monetary Fund, the European Central Bank, and the European Commission) has taken to bailout Greece indicate the wide-spread belief that at-risk member states cannot be allowed to default and exit the EMU — that each EMU member is too big to fail.

The expectation of a bailout in the event of sovereign default perversely incentivizes over-spending and over-borrowing in the short term to stimulate the domestic economy. This is a textbook example of moral hazard. Knowing that a bailout is likely — because a sovereign default could create enough financial contagion to bring the European economy to its knees — incentivizes EMU members to over-spend. In short, EMU members do not internalize the costs of their own risky behavior.

Second, how can Commission monitoring mitigate moral hazard? The architects of the EMU created the Stability and Growth Pact (SGP) — an agreement among all EU member states designed to underpin the stability of the EMU by placing caps on member states’ deficits (3 percent of GDP) and sovereign debts (60 percent of GDP) — to mitigate moral hazard. The EU treaties task the European Commission with monitoring compliance. Monitoring is the primary tool the EU has to mitigate moral hazard. The SGP allows the Commission to fine noncompliant member states to incentivize compliance.
The SGP has been spectacularly ineffective, however, because the Commission has declined to initiate noncompliance proceedings to enforce the SGP criteria. Since *ex post* monitoring has failed to dis-incentivize noncompliance, observers have called for reforms that would empower the Commission to pre-approve member state budgets to prevent non-compliance before it happens (*ex ante* monitoring).

Third, what tradeoffs does Commission monitoring of member state compliance (*ex post* or *ex ante*) with the SGP criteria present to individuals evaluating monitoring as a policy to address to moral hazard? Effective monitoring (and enforcement) by the Commission constrains a country’s deficit spending, thereby limiting marginal increases to its sovereign debt, which helps to manage the risk of sovereign default. In short, effective monitoring means Commission-imposed austerity. Austerity is costly, however. By contracting public spending, austerity hurts short-term economic growth. This stability/austerity tradeoff is at the heart of the public discourse about austerity measures across Europe.

**Theory**

How would a rational individual evaluate the policy of Commission monitoring of the SGP criteria? This section builds on the IPE literatures on economic crises and public opinion to theorize when a rational individual would be more likely to support two forms of Commission monitoring: (1) pre-approval of member states’ budgets and (2) financial sanctions for noncompliance with SGP deficit criterion. I will refer to these as *ex ante* and *ex post* monitoring, respectively. Note that financial sanctions for noncompliance are an important part of the current SGP rules. Pre-approval of member states’ budgets, in contrast, is a policy

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4 Financial sanctions for noncompliance constitutes the so-called *dissuasive arm* of the SGP. The other arm is the *preventive arm*. The Commission can help facilitate fiscal coordination between member states, but does not have the power to pre-approve member state budgets.

5 The Commission can use *ex post* financial sanctions for noncompliance with the SGP to coerce member states into adopting austerity measures to reduce their structural deficits. It could use *ex ante* pre-approval powers for the same purpose.
proposal — an alternative method of enforcing the SGP criteria, given that the Commission has historically opted not to pursue financial sanctions.

Note that \textit{ex ante} and \textit{ex post} monitoring incentivize member states to adopt austerity measures using different approaches. Austerity measures can include tax hikes or spending cuts. With \textit{ex ante} monitoring, the Commission imposes financial sanctions to punish EMU members that do not take corrective action by implementing austerity measures. If the Commission could pre-approve member state budgets, it could condition budget approval on a member state’s adoption of sufficiently severe austerity measures. Generally speaking, \textit{ex ante} monitoring provides tighter control because \textit{ex post} monitoring (i.e., threats to impose punishments) can be non-credible.

**Independent Variables**

A rational individual’s support for Commission monitoring will depend on three variables: (1) a member state’s noncompliance with the SGP deficit criterion, (2) a member state’s noncompliance with the SGP debt criterion, and (3) whether an individual supports the EMU (i.e., has a self-reported interest in maintaining the stability of the EMU). A member state’s compliance with the SGP criteria matters because it drives the expected political outcomes of monitoring (discussed below). An individual’s support for the EMU affects whether they view these outcomes as costs or benefits.

A member state’s noncompliance with the SGP deficit criterion determines whether the Commission can legally initiate enforcement actions that incentivize member states to adopt austerity measures, which increase the probability of a recession; the Commission can only do so when a member state’s deficit is SGP-noncompliance. Thus, monitoring only has the potential to be costly, in terms of Commission-imposed austerity, if a member state is not in compliance with the SGP deficit criterion (Column 4 of Table 1).

It is important to note that the Commission cannot enforce the SGP debt criterion directly; rather, it enforces the debt criterion indirectly by enforcing the deficit criterion. Once a member state has accumulated a large public debt, the Commission cannot do
anything about it short of helping the member state negotiate with investors to restructure their sovereign debt. The objective of monitoring is to limit new contributions to member states’ existing debts by constraining deficit spending. Every time a member state runs a deficit, it must borrow to cover outlays in excess of revenue by issuing government bonds, which directly contributes to the sovereign debt.

A member state’s noncompliance with the debt criteria affects the probability of sovereign default. There is a risk of sovereign default when a member state is violating only the debt criteria, as any deficit is a marginal contribution to the debt. But that risk is higher when the member state is also violating the deficit criteria, as the marginal contribution to the debt is relatively larger (Column 5 of Table 1). When a member state’s sovereign debt is expanding at a sufficiently accelerating rate, a speculative attack by investors becomes more likely. Raising interest rates can then push a member state to default.

By affecting (a) whether the Commission can impose austerity and (b) the risk of sovereign default, a member state’s noncompliance with the SGP criteria drives the expected effect of Commission monitoring on three political outcomes that individuals will have preferences over: (a) the probability of austerity, (b) the probability that an individual member state will exit the EMU, and (c) the probability that the EMU will break up (i.e., the long-term stability of the EMU). As I discuss below, whether individuals view these political outcomes as costs or benefits, which depends on their support for the EMU, will determine their support for the policy of Commission monitoring.

First, Commission monitoring increases the probability of Commission-imposed austerity, but only when a member state’s debt and deficit as SGP-noncompliant. The Commission has the ability to impose austerity when a member state’s deficit is non-compliant, but recent research shows that the Commission selectively enforces compliance with EU law (König and Mäder 2014; Baerg and Hallerberg 2016; Fjelstul and Carrubba 2018). The Commission is more likely to actually enforce the SGP deficit criterion when the member state faces legitimate risk of a sovereign default, which is when a member state's debt is also SGP-noncompliant (Column 6 of Table 1).
Table 1. Summary of Theory

<table>
<thead>
<tr>
<th>Interests</th>
<th>Domestic economic context</th>
<th>Implications</th>
<th>Expected effect of monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>EMU</td>
<td>Deficit</td>
<td>Debt</td>
<td>Austerity Pr(Default)</td>
</tr>
<tr>
<td>Support</td>
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<td>Yes</td>
</tr>
<tr>
<td>Support</td>
<td>Compliant</td>
<td>Noncompliant</td>
<td>No</td>
</tr>
<tr>
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<td>Compliant</td>
<td>Yes</td>
</tr>
<tr>
<td>Support</td>
<td>Compliant</td>
<td>Compliant</td>
<td>No</td>
</tr>
<tr>
<td>Oppose</td>
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<td>Noncompliant</td>
<td>Yes</td>
</tr>
<tr>
<td>Oppose</td>
<td>Compliant</td>
<td>Noncompliant</td>
<td>No</td>
</tr>
<tr>
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<td>Compliant</td>
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</tr>
<tr>
<td>Oppose</td>
<td>Compliant</td>
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<td>No</td>
</tr>
</tbody>
</table>

Note: Columns 1–3 indicate the independent variables of interest: an individual’s support for the EMU, their member state’s compliance with the SGP deficit criteria, and their member state’s compliance with the SGP debt criteria. Each row corresponds to a unique combination of values. Column 4 indicates whether the Commission can incentivize austerity due to a violation of one of the SGP criteria. Column 5 indicates the probability of sovereign default. Columns 6–8 indicate the expected effect of Commission monitoring on the probability of Commission-imposed austerity, the probability the member state will need to exit the EMU in order to recover from a sovereign default, and the probability the EMU will break up due to financial contagion caused by a sovereign default (by any member state). The symbols in parentheses indicate whether an individual, based on their support for the EMU, is likely to view each these effects as a cost (−), a benefit (+), or whether they would be indifferent (no symbol).
Second, Commission monitoring decreases the probability that a member state will be forced to exit the EMU when a member state’s debt is SGP-noncompliant. When a member state’s deficit is also SGP-noncompliant, monitoring reduces the risk of a sovereign default, which could force a member state to exit the EMU in order to depreciate its domestic currency, thereby reducing its real debt burden. When a member state’s deficit is SGP-compliant, on the other hand, monitoring promotes fiscal discipline in the future. Governments have an incentive to over-spend due to a time inconsistency problem. Monitoring creates a disincentive for the member state to over-spend to counterbalance this incentive. Note that monitoring presents a tradeoff for individuals in EMU members whose deficits and debts are SGP-noncompliant: a lower risk of default and exit from the EMU in the long term in exchange for a higher risk of economic recession in the short term (Columns 6 and 7 of Table 1). This is the stability/austerity tradeoff mentioned above.

Third, Commission monitoring decreases the probability of the EMU breaking up by reducing moral hazard. This is true regardless of a member state’s noncompliance with the SGP criteria (Column 8 of Table 1). A sovereign default, even by a small member state, could threaten the stability of the entire EMU because of the potential for financial contagion. By reducing the risk of sovereign default, monitoring helps to prevent a situation in which financial contagion could spread to other member states. A sovereign default would force other member states and their financial institutions to take a loss non-performing sovereign bonds, which could also cause a banking crisis. Financial contagion could prompt the worst-hit member states to withdraw from the EMU in order to re-introduce their own domestic currencies, which they could then depreciate to reduce their real debt burden.

An individual’s support for the EMU will condition whether they view each of these three political outcomes of Commission monitoring as costs or benefits. The exception is that an individual’s support for the EMU will not condition how they view an increase in the probability of Commission-imposed austerity; all individuals should view an increase in this probability as a cost of monitoring (Column 6 of Table 1). The downside of austerity is that it increases the risk of a severe economic recession in the short term. From a
Keynesian perspective, the more severe a member state’s austerity policies, the bigger the contractionary impact of reduced government spending on its domestic economy. This cost applies when a member state’s debt and deficit are both SGP-noncompliant, as that is when the Commission is likely to enforce the SGP criteria.

That being said, an individual who supports the EMU will be more likely to see a decrease in the probability that their member state will be forced to exit the EMU as a benefit of monitoring. Monitoring reduces the likelihood that a member state will need to exit the EMU in order to recover from a sovereign default by re-introducing and depreciating its own currency. This benefit applies when a member state’s debt is SGP-noncompliant (Column 7 of Table 1). Individuals who oppose the EMU, on the other hand, are more likely to be indifferent to a change in this probability.

A similar logic applies to how individuals will view a decrease in the probability of the EMU breaking up due to contagion caused by the sovereign default of another EMU member state. By addressing the EMU’s moral hazard problem, Commission monitoring decreases the probability that a sovereign default by any EMU member state will spread financial contagion to other member states. This is true regardless of a member state’s compliance with the SGP criteria. However, individuals who support the EMU are more likely to see a decrease in this probability as a benefit, whereas individuals who oppose the EMU are more likely to be indifferent (Column 8 of Table 1).

Hypotheses

I develop testable hypotheses about how an individual’s support for the EMU will interact with their member state’s noncompliance with the SGP criteria to shape their support for Commission monitoring. Since interactions are symmetric, I develop predictions for how the effect of each of these three variables on support for monitoring is moderated by the other two. This ensures that I do not ignore testable predictions (Brambor, Clark and Golder 2006; Franzese and Kam 2009; Berry, Golder and Milton 2012).
First, I consider how the effect of an increase in a member state’s noncompliance with the SGP debt criterion on an individual’s support for Commission monitoring depends on (a) whether the individual supports the EMU and (b) whether their member state’s deficit is SGP-noncompliant (see Hypothesis 1 in Table 2).\(^6\)

When an individual supports the EMU and their member state’s deficit is SGP-noncompliant, the effect of an increase in their member state’s noncompliance with the SGP debt criterion on their support for monitoring is ambiguous. In this case, the individual faces the stability/austerity tradeoff: an increase in their member state’s noncompliance with the SGP debt criterion reduces the probability that a sovereign default will force their member state to exit the EMU (see Column 7 of 1), but their member state is also exposed to Commission-imposed austerity (see Column 6 of 1). The net effect is ambiguous.

When an individual supports the EMU and their member states’s deficit is SGP-compliant, an increase in their member state’s noncompliance with the SGP debt criterion increase their support for monitoring. In this case, there is no tradeoff. Their member state is not violating the SGP deficit criterion, so there is no real risk of Commission-imposed austerity (see Column 6 in Table 1). Strict monitoring of the SGP debt criteria locks in current deficit spending levels, limiting the size of accumulating deficits. This reduces the probability that a sovereign default will force their member state to exit the EMU, which they will view as a benefit (see Column 7 in Table 1).

When an individual does not support the EMU and their member state’s deficit is SGP-noncompliant, an increase in their member state’s noncompliance with the SGP debt criterion will decrease their support for monitoring. Since the member state’s deficit is SGP-noncompliant, an increase in their member state’s noncompliance with the SGP debt criterion increases the risk of Commission-imposed austerity (see Column 6 in Table 1). This will also decrease the probability that a sovereign default will force their member state to exit the EMU (see Column 7 in Table 1). However, since the individual does not support

\(^6\) Note that a change in a member state’s compliance with the SGP debt criterion, conditional on their support for the EMU, will not change the effect of monitoring on the probability of the EMU breaking up or how an individual views that outcome (see Column 8 in Table 1).
the EMU, they will be indifferent to a change in this probability. Thus, their support for monitoring will decrease.

When an individual opposes the EMU and their member state’s deficit is SGP-compliant, an increase in their member state’s noncompliance with the SGP debt criterion will have no effect on their support for monitoring. Because their member state’s deficit is SGP-compliant, the risk of Commission-imposed austerity remains constant as their member state’s noncompliance with the SGP debt criterion increases (see Column 6 in Table 1). The probability that a sovereign debt crisis could force their member state to exit the EMU decreases, but because the individual does not support the EMU, they are indifferent to this effect (see Column 7 in Table 1).

**Hypothesis 1a.** If an individual supports the EMU and their member state’s deficit is SGP-compliant, an increase in noncompliance with the SGP debt criterion will increase their support for monitoring.

**Hypothesis 1b.** If an individual opposes the EMU and their member state’s deficit is SGP-noncompliant, an increase in noncompliance with the SGP debt criterion will decrease their support for monitoring.

Second, I consider how the effect of an individual’s support for the EMU on their support for Commission monitoring depends on (a) whether their member state’s deficit is SGP-noncompliant and (b) whether their member state’s debt is SGP-noncompliant (see Hypothesis 2 in Table 2). Commission monitoring increases the stability of the EMU by addressing the EMU’s moral hazard problem (see Column 8 of Table 1); thus, individuals who support the EMU will be more likely to support monitoring, regardless of their member state’s compliance with the SGP criteria. However, their member state’s compliance with the SGP criteria will affect the magnitude of this positive effect.

Individuals who support the EMU will gain an additional benefit from monitoring when their member state’s debt is SGP-noncompliant, as monitoring also reduces the probability that their member state will be forced to exit the EMU in response to a sovereign debt crisis.
Table 2. Summary of Hypotheses

<table>
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</tr>
<tr>
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</tr>
<tr>
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<td>Constant</td>
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<tr>
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<td>Support</td>
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<td>Constant</td>
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<td>Support</td>
<td>Noncompliant</td>
<td>Decrease</td>
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</tbody>
</table>

Note: Column 1 indicates a change in one of the independent variables. Columns 2 and 3 indicate values of the other two independent variables (i.e., the moderating variables). Column 4 indicates how support for monitoring should change in response to the change indicated in the first column, conditional on the two moderating variables.
Thus, the positive marginal effect of an individual’s support for the EMU will be larger in magnitude when their member state’s debt is SGP-noncompliant than when their member state’s debt is SGP-compliant.

This interaction effect is conditional on whether a member state’s deficit is SGP-compliant. When a member state’s deficit is SGP-noncompliant, the increased benefits of monitoring that come with a larger, more noncompliant debt (i.e., a decrease in the probability that a member state will be forced to exit the EMU in response to a sovereign debt crisis) will be partially offset by a higher probability of Commission-imposed austerity (see Column 6 of Table 1). Thus, conditional on noncompliance with the SGP debt criterion, the positive marginal effect of an individual’s support for the EMU will be larger in magnitude when their member state’s deficit is SGP-compliant (i.e., when there is no risk of Commission-imposed austerity) than when the member state’s deficit is SGP-noncompliant.

**Hypothesis 2a.** Individuals who support the EMU will be more likely to support Commission monitoring, regardless of their member state’s compliance with the SGP criteria, than individuals who oppose the EMU.

**Hypothesis 2b.** The positive effect of an increase in an individual’s support for the EMU on their support for Commission monitoring will be smallest when their member state’s debt is SGP-compliant (regardless of their member state’s compliance with the SGP deficit criterion) and largest when their member state’s deficit is SGP-compliant and their member state's debt is SGP-noncompliant.

Third, I consider how the effect of a member state’s noncompliance with the SGP deficit criterion on an individual’s support for Commission monitoring depends on (a) that member state’s noncompliance with the SGP debt criterion and (b) the individual’s support for the EMU (see Hypothesis 3 in Table 2). In this case, a member state’s noncompliance with the SGP debt criterion drives the magnitude of the effect.

When the member state’s debt is SGP-compliant, an increase in the member state’s noncompliance with the SGP deficit criterion will not affect an individual’s support for
monitoring (see Rows 1 and 3 under Hypotheses 3 in Table 2). If an individual opposes the EMU, they will be indifferent to Commission monitoring because an increase in the member state’s noncompliance with the SGP deficit criteria will not increase the risk of Commission-imposed austerity (because the member state’s debt is compliant). If an individual supports the EMU, on the other hand, they will support monitoring because, while it does not affect their member state, it does address moral hazard, which increases the stability of the EMU (and because they support the EMU, they view that as a benefit).

When the member state’s debt is SGP-noncompliant, an increase in the member state's noncompliance with the SGP deficit criterion will decrease support for monitoring (see Rows 2 and 4 under Hypotheses 3 in Table 2). This is because Commission-imposed austerity is more likely. Because the member state’s debt is SGP-noncompliant, the risk of sovereign default is higher, which creates an incentive for the Commission to actually enforce the SGP deficit criterion. The more severe the member state’s noncompliance with the SGP debt criteria, the larger the decrease in an individual’s support for monitoring. This is true regardless of an individual’s support for the EMU.

**Hypothesis 3.** As a member state’s noncompliance with the SGP deficit criterion increases, an individual’s support for Commission monitoring will decrease, but only when the member state’s debt is SGP-noncompliant.

**Empirics**

Studies of mass IPE depend on observational survey data, usually collected by someone other than the researcher (Urbatsch 2013; Curtis, Jupille and Leblang 2014; and Bearce and Tuxhorn 2017 use field original surveys; Hays, Ehrlich and Peinhardt 2005; Hainmueller and Hiscox 2006, 2007; Mansfield and Mutz 2009; and Pandya 2010 use published survey data). In this paper, I use Eurobarometer survey data. The Commission administers the Standard Eurobarometer twice per year, once in the spring and once in the fall.\(^7\) Since the start of the\(^7\) I use the anonymized raw data provided by the GESIS – Leibniz Institute for the Social Sciences.
Eurozone crisis, the Standard Eurobarometer has included a special bank of questions about attitudes towards specific economic policies. Rarely does a cross-national survey contain so many targeted questions about economic policy.

Each Standard Eurobarometer survey wave conducts face-to-face interviews with citizens of every EU member state. My sample includes data from waves 79 and 80, administered in the spring and fall of 2013, respectively. The bank of questions on the crisis changes from wave to wave, and these two waves are the only two that include questions on monitoring. Wave 79 includes the then-27 EU member states. Wave 80 adds Croatia, which joined the EU between the waves. I subset the sample to only include current Eurozone members plus Latvia and Lithuania. In most member states, around a thousand respondents are interviewed, but in the smallest ones, that number is around five hundred. Since these two survey waves were administered only months apart, I pool them to construct a cross-sectional sample of 53,434 individual respondents.

I treat non-responses as missing values. The most common approach to missing data is list-wise deletion. Missing data due to item non-response, however, may impede inferences about the population if those non-responses are correlated with support for monitoring. In many cases, the respondent only fails to answer one question needed to calculate the variables included in my models. I use multiple imputation to avoid throwing away data. I include a set of auxiliary variables to improve imputation of the dependent variable. I impute multiple data sets, perform analysis on each, combine the estimates, and apply the appropriate adjustments to the standard errors (Rubin 2004).

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8 I include Latvia and Lithuania because they were in the process of implementing the convergence criteria to join the EMU. Latvia joined on January 1, 2014 and Lithuania joined on January 1, 2015. Knowing they were set to join the EMU, respondents in these countries faced the same set of tradeoffs and incentives as those in current EMU members.
Measurement

The individual-level measures all come from the Eurobaromter data. These include measures of an individual’s support for monitoring (ex ante and ex post), a measure of an individual’s support for the EMU, and a set of individual-level control variables.

I use the following question to create individual-level measures of support for ex ante monitoring (i.e., pre-approval of member state budgets by the Commission) and ex post monitoring (i.e., financial sanctions for noncompliance): “A range of measures to tackle the current financial and economic crisis is being discussed in the European institutions. For each, could you tell me whether you think it would be effective or not?” The interviewer then shows the respondent a list of policies.

For each policy, the respondent can answer (1) “Very effective,” (2) “Fairly effective,” (3) “Not very effective,” (4) “Not at all effective,” or (5) “Don’t know.” One policy, corresponding to ex ante monitoring, is: “EU approval in advance of EU Member States’ governments’ budgets.” Another, corresponding to ex post monitoring, is: “Fines for EU Member States’ governments that spend or borrow too much.” I create a four-point index for each policy with higher values indicating stronger support.

I use the following question to create an individual-level measure of support for the EMU: “What is your opinion on each of the following statements? Please tell me for each statement, whether you are for it or against it.” One statement is: “A European economic and monetary union with one single currency, the euro.” Respondents can answer (1) “For,” (2) “Against,” or (3) “Don’t know.” I create a dummy variable that takes a value of one if the respondent supports the EMU.

To measure SGP-noncompliance, I use macroeconomic data from Eurostat. I measure noncompliance with the SGP debt criterion as the degree to which a member state’s debt exceeds the SGP criterion of 60 percent of GDP, expressed as a percent of GDP. This measure ranges from 0 percent of GDP for all member states that are in compliance to 99.6 percent of GDP. Only 47.51 percent of individuals live in a member state that are in compliance
with the SGP debt criterion. Unsurprisingly, Greece’s is the maximum value: its sovereign debt exceeds the SGP limit by an enormous 99.6 percent of GDP.

I measure noncompliance with the SGP deficit criterion using a dummy variable that indicates whether a member state’s deficit exceeds the SGP criterion of 3 percent of GDP, and therefore whether the Commission has the option to impose austerity measures on the member state. Only 37.87 percent of individuals in the sample live in a member state that are in compliance with the SGP deficit criterion. For both measures, I use data from 2012 to avoid post-treatment bias.

As previously mentioned, I impute missing values. The two measures of noncompliance with the SGP criteria have no missingness. Support for the EMU is missing 6.59 percent of observations (3,302). Support for *ex ante* monitoring is missing 14.24 percent of observations (6,659), whereas support for *ex post* monitoring is missing 8.23 percent (4,057).\textsuperscript{9}

I control for a variety of individual-level factors, including: whether an individual views the EU institutions as competent to respond to the crisis (a dummy); an individual’s sophistication (based on their factual knowledge of the EU); an individual’s cosmopolitanism (based on how frequently they exhibit a set of cosmopolitan behaviors); an individual’s household financial situation; an individual’s level of education; an individual’s gender; and an individual’s age. Data on these respondent-level measures come from the same Eurobarometer surveys described above.

I also control for two country-level factors: the severity of a member state’s austerity policies and its unemployment rate. Austerity refers to measures that reduce a member state’s deficit. I operationalize austerity as the percent change in a member state’s deficit from the onset of the sovereign debt crisis in 2009 to the administration of the survey in 2013. Data for these country-level measures come from Eurostat.

\textsuperscript{9} The imputation model includes the two dependent variables, the three independent variables of interest, the control variables, and a set of auxiliary variables used in the matching model described below.
Figure 1. Descriptive Statistics for Respondent-Level Measures

Note: This figure shows descriptive statistics for the respondent-level measures. Panel A shows the proportion of respondents who think *ex ante* monitoring will be fairly effective or very effective by Eurozone member. Panel B shows the distribution of responses with respect to *ex ante* monitoring across all Eurozone members. Panel C shows the proportion of respondents who think *ex post* monitoring will be fairly effective or very effective by Eurozone member. Panel D shows the distribution of responses with respect to *ex post* monitoring across all Eurozone members. Panel E shows the proportion of respondents who support the EMU by Eurozone member. Panel F shows the proportion of respondents across all Eurozone members that support the EMU.
Figure 2. Noncompliance with the SGP Criteria

Note: This figure shows noncompliance with the SGP debt criterion (debt as a percent of GDP in excess of 60 percent) and with the SGP deficit criterion (deficit as a percent of GDP in excess of 3 percent) in 2012. Germany did not run a deficit or a surplus in 2012.

Descriptive Statistics

The respondent-level measures vary considerably across member states. Figure 1 displays descriptive statistics on the key respondent-level measures: support for \textit{ex ante} monitoring, support for \textit{ex post} monitoring, and support for the EMU. Panels A and B describe support for \textit{ex ante} monitoring. In all eurozone members, a majority of respondents supports pre-approval of member state budgets. In each member state, between 55 percent and 80 percent of respondents answer that they think pre-approval of member states budgets is “Fairly effective” or “Very effective.” Pooling respondents across member states, the modal response was “Fairly effective.” Panels C and D describe support for \textit{ex post} monitoring. Again, support is high: between 55 percent and 90 percent of respondents support monitoring. The modal category is again “Fairly effective,” but there are far more responses of “Very
effective.” Panels E and F describe support for the EMU. Across member states, between 45 percent and 85 percent of respondents support the EMU. Overall, respondents support the EMU by a two-to-one margin.

These statistics indicate that respondents think \textit{ex post} monitoring provides a better solution to the stability/austerity tradeoff. It could be that less people support \textit{ex ante} monitoring because it is a tighter control mechanism than \textit{ex post} monitoring, making it easier for the Commission to incentivize costly austerity measures.

Figure 2 shows descriptive statistics on the key country-level measures: noncompliance with the SGP’s debt and deficit criteria (at the end of 2012). Panel A shows noncompliance with the debt criterion (60 percent of GDP), whereas Panel B shows noncompliance with the deficit criterion (3 percent of GDP). What is striking is the extensiveness and severity of noncompliance. Only 7 of the 19 member states in the sample are in compliance with the debt criterion, and that includes Latvia and Lithuania, whose upcoming membership was conditional on full compliance with the SGP criteria.

Compliance with the deficit criterion is no better. Again, only 7 of the 19 member states in the sample are in compliance (although the 7 differ). Critically, both France (debt and deficit) and Germany (debt) are in violation of the SGP criteria. Their noncompliance disincentivized the Commission from enforcing the SGP, opening the door for others to follow (Baerg and Hallerberg 2016).

\textbf{Estimation Strategy}

The structure of the data is multilevel: individuals are nested within states. To account for this structure, I estimate multilevel models (Gelman 2006; Armingeon and Ceka 2014; Gomez 2015). Multilevel modeling offers two main advantages. First, it accounts for individual-level and member state-level variation in estimating the member state-level regression coefficients. Second, it allows me to take into account member state-level variation in the uncertainty over individual-level coefficients (Gelman 2006).
I estimate varying-intercept multilevel linear regression models that include individual-level predictors, member state-level predictors, and cross-level interaction terms. This estimator allows the intercept to vary by member state but not the slopes of individual-level predictors. A varying-intercept, varying-slope model would estimate the variance of the slope across member states (Gelman 2006). There is no a priori theoretical basis for assuming that the slopes of individual-level predictors of interest vary across member states, apart from the interaction effects that I hypothesize and model.

The sample includes \( i = 1, \ldots, n \) individuals nested in \( j = 1, \ldots, J \) member states. Let \( j[i] \) be the member state in which individual \( i \) is located. There are \( l = 1, \ldots, L \) policies that an individual \( i \) has preferences over. The model includes individual-level predictors \( x_i \) and member state-level predictors \( x_j \). Including cross-level interaction terms, there are \( k \) predictors. Thus, including a constant, there are \( k + 1 \) parameters to estimate. I estimate the following varying-intercept model:

\[
y_{i}^{l} = N\left(\alpha_{j[i]} + X_{i}\beta, \sigma_{y^l}^{2}\right), \quad \text{for} \ i = 1, \ldots, n
\]
\[
\alpha_{j} \sim N\left(\mu_{\alpha}, \sigma_{\alpha}^{2}\right), \quad \text{(2)}
\]

where \( \alpha_{j[i]} \) is a constant and \( X \) is a \( n \times k \) matrix composed of column vectors for individual-level predictors, member state-level predictors, and in some specifications, same-level or cross-level interaction terms, but not a constant. Equation (1) is the lower level and Equation (2) is the upper level. Since this is a varying-intercept model, the only coefficient that varies across member states is the constant, \( \alpha_{j[i]} \). We can equivalently write the model with normally distributed member state-specific errors, \( \eta_{j} \), instead of with member state-specific intercepts with normally distributed errors:

\[
y_{i}^{l} = N\left(X_{i}\beta + \eta_{j[i]}, \sigma_{y^l}^{2}\right), \quad \text{for} \ i = 1, \ldots, n
\]
\[
\eta_{j} \sim N\left(0, \sigma_{\eta}^{2}\right), \quad \text{(4)}
\]
where $X$ is an $n \times (k+1)$ matrix composed of column vectors for a constant, individual-level predictors, member state-level predictors, and cross-level interaction terms. Again, Equation (3) is the lower level and Equation (4) is the higher level.

I estimate multilevel linear models instead of multilevel ordered logit models. Honaker, King and Blackwell (2011) recommend imputing ordinal variables as if they were continuous, as non-integer values contain information that is if we force-imputed values to be integers. Moreover, it is easier to interpret marginal effects with linear models when there are interaction terms, which requires marginal effects plots (Brambor, Clark and Golder 2006; Berry, Golder and Milton 2012). With ordered logit models, we have to estimate the marginal effect on the probability of observing each ordered category.

**Analysis and Findings**

This section presents the results from the imputed sample. The non-imputed results are substantively similar. I find empirical support for each hypothesis. Across the board, the sizes of the substantive effects of the variables of interest are small. This is not surprising, however, because we should expect public opinion data on such a complex topic to be extremely noisy. As many scholars have found (e.g., Curtis, Jupille and Leblang 2014), non-opinions dominate. And even during a financial crisis, salience is only so high. The substantive effects of the control variables in the model are also small.

I estimate a three-way interaction between support for the EMU, noncompliance with the SGP deficit criterion, and noncompliance with the SGP debt criterion. The three-way interaction term has a statistically significant effect on both types of monitoring. Likelihood-ratio tests indicate these multilevel models provide a better fit than OLS models. To evaluate the hypotheses, we need to examine marginal effects plots. Figure 3 shows 6 marginal effects plots. Panels A and B test Hypotheses 1a and 1b; Panels C and D test Hypotheses 2a and 2b; and Panels E and F test Hypothesis 3.

Hypothesis 1a predicts that the marginal effect of noncompliance with the debt criterion will be positive when an individual supports the EMU and their member state is complying
with the deficit criterion. Hypothesis 1b, on the other hand, predicts that the marginal
effect will be negative when and individual does not support the EMU and their member
state is not complying with the deficit criterion. Theory does not make a prediction for the
other two cases. The results in Panel A, with respect to *ex ante* monitoring, are consistent
with these predictions. A marginal increase in noncompliance with the debt criterion has
a statistically significant positive effect (0.006, \( p < 0.01 \)) when the respondent supports
the EMU and the respondent’s member state is complying with the deficit criterion and
a statistically significant negative effect (−0.003, \( p < 0.01 \)) when the respondent does not
support the EMU and the respondent’s member state is not complying with the deficit
criterion. The results in Panel B, with respect to *ex post* monitoring, are substantively
similar (0.003, \( p < 0.05 \); −0.005, \( p < 0.01 \)).

Hypothesis 2a predicts that the marginal effect of support for the EMU will be positive,
regardless of a member state’s noncompliance with the SGP criteria. Hypothesis 2b predicts
that the effect will be smallest with a member state’s debt is SGP-compliant and largest when
its deficit is SGP-compliant and its debt is SGP-noncompliant. Panels C and D provide clear
support for this prediction. Consistent with Hypothesis 2a, the marginal effect is always
positive. The effect is smallest when the member state’s debt is SGP-compliant. The size of
the effect is substantively similar regardless of the member state’s compliance with the SGP
deficit criterion. The effect is largest when the member state’s deficit is SGP-compliant and
its noncompliance with the SGP debt criterion is severe. This is consistent with Hypothesis
2b. In Panel C, the estimated effect increases from 0.16 to 0.83 as noncompliance with the
debt criterion increases (over its in-sample range), conditional on the member state’s deficit
being SGP-compliant. When the member state’s deficit is SGP-noncompliant, the effect
ranges from 0.23 to 0.41. The effects in Panel D are substantively similar.

Hypothesis 3 predicts that the marginal effect of a member state’s noncompliance with
the deficit criterion will be negative, but only when the member state’s debt is SGP-
noncompliant. Panels C and D provide mixed support for this hypothesis. The marginal
effect of an increase in the member state’s noncompliance with the SGP deficit criterion is
Figure 3. Marginal Effect Plots (Imputed Sample)

Note: This figure shows the results from the imputed sample. It shows the conditional marginal effects of noncompliance with the SGP debt criterion (Panels A and B), support for the EMU (Panels C and D), and noncompliance with the SGP deficit criterion (Panels E and F) on support for ex ante monitoring (Panels A, C, and E) and ex post monitoring (Panels B, D, and F).
negative when the member state’s debt is sufficiently SGP-noncompliant, but only if the respondent supports the EMU. For respondents who support the EMU, the negative effect is statistically significant for a sufficiently high level of noncompliance with the SGP debt criterion (over 50 percent of GDP). However, the effect is not statistically significant for respondents who oppose the EMU, although the sign is negative for *ex ante* monitoring (see Panel E). As predicted, the effect is insignificant when the respondent’s member state’s noncompliance with the debt criterion is low, as the Commission is less likely to enforce relatively minor violations.

Looking at Panel F, noncompliance with the SGP deficit criterion only has a statistically significant effect on support for *ex post* monitoring for the largest values of noncompliance with the SGP debt criterion, suggesting that respondents only believe that the Commission will enforce the SGP deficit criterion, thereby imposing austerity, when a member state’s noncompliance with the debt criterion is extremely poor (i.e., the member state is running a real risk of sovereign default). This is not surprising. The Commission’s self-selection out of *ex post* monitoring directly contributed to the outbreak of the sovereign debt crisis. As such, a belief that the Commission would only enforce the SGP deficit criterion for the most at-risk member states would be well-founded.

Overall, I find evidence that, in the aggregate, the preferences of survey respondents are largely consistent with individual rationality. Consistent with theory, support for the EMU interacts with a member state’s compliance with the SGP criteria to shape support for *ex ante* and *ex post* Commission monitoring. The evidence does not indicate whether individuals rationally evaluate the policy of Commission monitoring, however.

**Challenges to Inference**

An important inferential challenge is that a respondent’s support for the EMU is not randomly assigned. I black-box the origins of an individual’s self-reported support for the EMU and implicitly treat that variable as exogenous, but my empirical analysis needs to address
the possibility that an individual’s self-reported support for the EMU is endogenous to the public discourse about possible policy responses to the Eurozone crisis.

For my estimates to be unbiased, support for the EMU needs to be distributed as if at random, conditional on the covariates in the model, but there could be systematic differences between people who support the EMU and those that do not along dimensions that predict support for Commission monitoring. To increase confidence that this form of endogeneity is not significantly biasing my estimates, I use matching as a preprocessing technique and re-run my analysis using the matched sample (Ho et al. 2007). This estimates the average treatment effect on the treated (ATT), which is the average effect of support for the EMU on support for monitoring among respondents who support the EMU.

Note that this matching design does not address another source of endogeneity. One of the independent variables of interest (whether an individual supports the EMU) is endogenous to the dependent variable (support for Commission monitoring of member state compliance with the SGP criteria) because supporting the EMU implicitly means supporting the institutional structure of the monetary union, which includes the SGP and Commission monitoring. In other words, Commission monitoring of the SGP criteria could influence an individual’s support for the EMU. However, among drivers of public support for the EMU, the institutional structure of the monetary union is unlikely to rank highly.

I use one-to-one propensity score matching (Rosenbaum and Rubin 1983). Each treated observation is matched to a control observation based on its propensity of getting the treatment. This process approximates an experiment in the sense that each member in a pair of matched observations have the same likelihood of getting the treatment, but only one actually does. This eliminates extreme counterfactuals (King and Zeng 2006). I match each treated observation to the control observation with the closest propensity score (i.e., nearest neighbor matching). Matching requires common support; that is, the distributions of propensity scores for the treatment and control groups need to overlap sufficiently. To increase the number of treated observations in the region of common support, I match with replacement using a caliper.
There are two common strategies to implementing propensity score techniques using multilevel data: within-cluster matching and across-cluster matching (Kim and Steiner 2015). The within-cluster approach estimates propensity scores by stratum (here, by member state) and then only matches treatment and control observations that come from the same stratum. As such, this approach only uses individual-level covariates in the matching model (i.e., the model used to generate the propensity scores). The biggest disadvantage with the within-cluster approach is that it can be harder to find good matches when matched pairs must come from the same stratum. The across-cluster approach incorporates stratum-level measures into the matching model and matches across strata. The strata, then, only matter to the matching algorithm insofar as they affect an observation’s propensity score. To get the closest matches, I use across-cluster matching.\footnote{To increase the number of treated observations in the region of common support, I match with replacement using a caliper. This allows treatment observations to be paired with multiple control observations or}

\textbf{Figure 4. Balance Plot}

\textit{Note:} This figure shows the balance between the matched and unmatched samples for all covariates in the matching model.
Matching on observables is appropriate when the factors that determine treatment assignment are observable and measurable. The matching model (i.e., the model used to generate the propensity scores) includes my control variables and several auxiliary variables that I expect to be related to the selection mechanism.

The first set of measures capture ideology. Many studies have identified a pro-/anti-EU dimension to political ideology in Europe. Recent research has shown that framing effects are critical in the design of survey questions, so I include two measures of pro-/anti-EU ideology (Hiscox 2006; Ardanaz, Murillo and Pinto 2013). One is based on a question framed around support for further EU integration, the other based on a question framed around support for leaving the EU. A second set of measures capture trust in EU institutions and member state institutions, as an individual’s overall attitudes towards these institutions could shape which they think should implement monetary policy. A third set of measures capture an individual’s general assessment of the direction in which the EU and their member state are moving. A final measure captures an individual’s pan-Europeanism (i.e., the degree to which they identify as European versus their nationality), which could be correlated with affinity for the euro as a symbol of European cooperation.

To assess the balance of the treatment and control groups, I calculate the standardized percent bias. A common rule of thumb is that the standardized percent bias should be less than 25 percent for all covariates in the matching model (Ho et al. 2007). As shown in Figure 4, the matched sample is far more balanced than the unmatched sample: the standardized percent bias of all covariates is less than 10 percent.

Finally, I re-run my analysis using the matched sample. All of the results are substantively the same as those from my analysis using the unmatched sample (see Figure 5). These results indicate that, conditional on the matching model including the appropriate confounding variables, that respondents’ self-reported support for the EMU is not endogenous to their support for monitoring.

\textit{vice versa}, but only if their propensity scores are sufficiently close. The matching algorithm assigns each observation a weight that indicates how many times it is used to construct a matched pair. The vast majority of observations are only used once.
Figure 5. Marginal Effect Plots (Matched Sample)

Note: This figure shows the results from the matched sample. It shows the conditional marginal effects of noncompliance with the SGP debt criterion (Panels A and B), support for the EMU (Panels C and D), and noncompliance with the SGP deficit criterion (Panels E and F) on support for ex ante monitoring (Panels A, C, and E) and ex post monitoring (Panels B, D, and F).
Conclusion

In light of a recent global trend toward using direct democracy to make major economic policy decisions, whether aggregate preferences are consistent with individual rationality has important implications for the coherence of economic policy. I provide evidence from the European sovereign debt crisis that, in a high-information environment, where public debate is robust, aggregate preferences are surprisingly consistent with individual rationality.

To provide a hard test of the ability of public debate to rationalize policy preferences, I look at a complex, technical policy issue — Commission monitoring of member state compliance with the SGP — that EU citizens would struggle to analyze on their own.

This paper goes in a different direction than the recent literature on the political economy of public opinion. Recent studies think about rationality in terms of whether well-informed individuals are more likely to support policies that advance their material interests (e.g., Gomez and Wilson 2006; Bearce and Tuxhorn 2017). This paper, in contrast, uses a different set of criteria to assess the rationality of individuals’ policy preferences. A highly rational individual would (a) identify the outcomes that a policy is likely to affect, (b) understand how their current economic context might condition the effects of the policy, (c) identify any tradeoffs that the policy might create, and (d) express support for the policy if it advances their self-defined interests.

Scholars can use these criteria to assess how respondents evaluate complex, multi-dimensional policies in other contexts. Beyond establishing the generality of these findings, future research should look at how the information environment impacts respondent sophistication. In a high-information environment where the policy in question is the subject of intense, sustained media coverage, it is easier for respondents to develop policy preferences. An important next step is to learn whether these findings generalize to contexts in which rationality requires more respondents to independently seek out information and do more of the cognitive work themselves without cues from politicians and the media.
References


