

# Conditionality in Official Lending: Compliance through strategic assessment\*

Daragh Clancy<sup>†</sup>

Aitor Erce<sup>‡</sup>

Andreja Lenarcic<sup>§</sup>

Ramon Marimon<sup>¶</sup>

September 30, 2021

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## Abstract

Countries must comply with loan conditions in order to receive official-sector financial support. Using a unique dataset with condition-level information for euro area financial assistance programmes, we demonstrate the importance of creditors' discretion on the timing and content of assessments in boosting compliance with conditionality. Creditors take account of the prevailing macro-financial environment and the financial imperative of conducting a review when deciding whether to assess conditions. We also provide evidence that compliance with a small subset of conditions, especially fiscal measures aimed at the immediate stabilisation of public finances and those with explicit numerical targets, is sufficient to satisfy creditors and trigger disbursements. Our results show that, from the perspective of boosting compliance, the design of official-loan conditionality should be brought closer to the state-contingent approaches employed in the theoretical literature.

*Keywords:* Conditionality; Official lending; Strategic behaviour

*JEL Classification:* C21; E61; F33; F34

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\*Provisional draft, do not quote without authors' permission. We thank Emanuele Ciola and Pietro Guglielmi for excellent research assistance and seminar participants at the Central Bank of Ireland (CBI) for comments. We acknowledge support by the European Stability Mechanism (ESM), through a project of the Pierre Werner Chair of the European University Institute. Most of this work was undertaken while Clancy and Lenarcic were at the ESM. However, these are the views of the authors and not necessarily those of the of the CBI, ESM or the International Monetary Fund (IMF) staff, Management, or Executive Board.

<sup>†</sup>Email: daragh.clancy@centralbank.ie; CBI.

<sup>‡</sup>Email: erce.aitor@gmail.com; Navarra Public University, LUISS University.

<sup>§</sup>Email: alenarcic@imf.org; IMF.

<sup>¶</sup>Email: Ramon.Marimon@eui.eu; EUI, UPF - BSE, CEPR and NBER.

# 1 Introduction

When market access for a sovereign borrower is impaired, it often requires financial support from official crisis lenders such as the International Monetary Fund (IMF). The provision of this support is usually contingent on the implementation of a set of policies that aim, amongst other things, to address the weaknesses that contributed to the crisis. Countries must comply with these conditions in order to receive disbursements of funds and thus the compliance assessment process is of critical importance.<sup>1</sup>

In this paper, we provide a rigorous analysis of this compliance assessment process. In contrast with much of the existing literature, which uses proxies of compliance derived from aggregate programme information, we use a unique dataset with condition-level information on the various official lending programmes provided during the recent European sovereign debt crises.<sup>2</sup> The highly-granular nature of our data allows us to decompose the compliance process into the creditor’s decision to assess a condition, and the debtor’s decision to comply with it. We use a selection model (Heckman, 1979) to jointly model these two decisions, and to study the extent to which the timing of the assessment has a systematic effect on compliance with conditionality. The strategic interaction between these two decisions has, to the best of our knowledge, never been analysed together.

We demonstrate the importance of creditors’ discretion on the timing and content of assessments in boosting compliance with conditionality, with the prevailing macro-financial environment and the financial imperative of a favourable review important determinants of the decision to assess conditions. Despite the large number of conditions in these programmes, compliance with a subset of critical conditions, especially fiscal measures aimed at the immediate stabilisation of

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<sup>1</sup>A key message from the theoretical literature analysing official lending is the need to find a balance on loan conditionality that provides the right incentives to both creditors and debtors. Sachs (1989) argues for a limited role of conditionality due to weak enforcement. Similarly, Fink and Scholl (2016) argues that the intensity of conditionality lowers borrowers’ willingness to participate in financial assistance programmes. On the other hand, Muller et al. (2019) notes that light conditionality increases moral hazard and makes creditors less likely to provide assistance, and Marchesi and Thomas (1999) point out that conditionality serves as a signal of a country’s willingness to reform. Diwan et al. (1992) find that a loan must be sufficiently large to convince a constrained government to accept conditions with immediate adjustment costs and eventual benefits, while Boz (2011) shows that conditions can help make official-sector loan contracts more enforceable than those from the private sector. See Dreher (2009) for a comprehensive survey of all aspects of IMF loan conditionality.

<sup>2</sup>The European Stability Mechanism (ESM) provides a publically-available database of the six euro area financial assistance programmes carried out between 2010 and 2018. A first contribution of this paper is the correction and extension of this database that renders it usable for analytical purposes. We provide an overview of euro area official-sector financial assistance process in Appendix A, and discuss an example loan condition highlighting some of the main features of the database in Appendix B. In Appendix C we describe some of the main elements of the construction of this analytical database.

public finances and those with explicit numerical targets, is sufficient to keep the programme on track (i.e. to continue receiving disbursements).

We extract a number of lessons from our analysis that could help to reduce the implementation failures witnessed in many official loan programmes. First, the focus on conditions set ex-ante makes loan conditionality difficult to enforce.<sup>3</sup> Our use of a selection model allows us to uncover evidence that conditions are not assessed until compliance is more likely. As the programme evolves and lenders and debtors better understand the evolving macroeconomic and financial situation, they engage in a process of delaying the evaluation of specific conditions, often re-drafting conditions in a manner that makes them easier to comply with.<sup>4</sup> One interpretation of these results is that the focus on ex-ante conditions makes official loans too rigid, forcing official lenders and debtor governments to find innovative ways to gain flexibility.

Second, compliance is greater for quantifiable loan conditions. These conditions were assessed less regularly, were subject to less delays, and were generally complied with. Third, given the negative relationship between the total number of conditions and the likelihood of compliance, focusing on a smaller number of critical conditions could help boost compliance. In particular, conditions related to structural reforms were seemingly not a priority for creditors or debtors in the euro area financial programmes.<sup>5</sup>

Taken together, our results indicate that when designing conditionality for official loans, lenders should focus on fewer conditions, stated in quantifiable terms. Programmes should include in-built mechanisms for transparently adjusting these conditions as the situation evolves. Such a move towards transparent ex-post adjustments of conditionality would bring the practice of official lending closer to a state-contingent approach.<sup>6</sup>

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<sup>3</sup>This should not be confused with ex-ante *eligibility criteria* required for access to precautionary official loans. By ex-ante, we mean the setting of conditions before full information on the macro-financial environment (i.e. GDP growth, primary deficit) is known.

<sup>4</sup>We find that redrafted conditions are more likely to get assessed but are, on average, less likely to be complied with. Future work could explore the determinants of redrafts, in a manner similar to how we analyse the determinants of delays in assessments.

<sup>5</sup>According to [Sachs \(1989\)](#), given the complexity of structural adjustment and the difficulty of enforcing conditionality, he believes conditional loans are more likely to be successful if macroeconomic stabilisation receives priority over structural reforms.

<sup>6</sup>This would be in line with recent theoretical literature such as [Abrahám et al. \(2019\)](#), who develops a model of a Financial Stability Fund serving a union of sovereign countries. They show substantial welfare gains from improved risk sharing through state-contingent lending compared to the use of conventional sovereign bonds, even in the face of limited enforcement and moral hazard constraints.

*Literature review:*

We contribute to the literature assessing the drivers of implementation of official loan conditions, which mostly focuses on conditionality in IMF financial assistance programmes.<sup>7</sup> While these studies revealed low compliance with conditions in past programmes, cross-study comparisons are complicated by the use of different measures of implementation Dreher (2006). Most common are the use of *proxies* for implementation, such as measures of programme interruption (Edwards, 2005; Arpac et al., 2008) and share of committed funds disbursed (Killick, 1995; Dreher, 2003; Joyce, 2006). These studies highlight that a wide range of economic and political-economy factors affect compliance with loan conditionality, including such disparate determinants as the scale of foreign direct investment flows and a country’s membership on the UN Security Council.<sup>8</sup>

However, most papers focus on circumstances outside of the negotiation process and control of staff designing and assessing conditions. Our paper instead considers how compliance is shaped by the iterative process between the creditors and the national authorities and is therefore more closely related to a set of studies that analyse the impact of internal processes on the design and implementation of programmes. Reinsberg et al. (2021) find that the number of conditions is a robust predictor of implementation failure, and provide a novel theoretical explanation for this relatively common result: that over-ambitious programme designs are due to intra-organisational bargaining within the creditor’s institution. Chweroth (2013) and Chweroth (2015) also find evidence for the role of this type of informal governance in financial assistance programmes. In contrast, Mourmouras et al. (2003) find no evidence that creditor staff effort and the extent and structure of conditionality materially influences programme prospects.<sup>9</sup>

Our study adds to this literature in several ways. First, most studies of the determinants of programme implementation use compliance information from the IMF’s Monitoring Fund

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<sup>7</sup>We do not consider the effects of conditional loans i.e. whether fulfilling conditions is worthwhile from the perspective of improved macro-financial performance and/or risk reduction. There is a large literature examining this issue, however evidence on the usefulness of conditionality is mixed (Conway, 1994; Przeworski and Vreeland, 2000; Bird and Rowlands, 2001; Barro and Lee, 2005; Mody and Saravia, 2006). Some studies find a negative effect on growth from entering a financial assistance programme, while others find a positive effect, especially when the country’s fundamentals have not yet deteriorated significantly. Sample selection is a key issue in these studies, with the use of political economy variables often used as instruments to overcome endogeneity concerns. See Stubbs et al. (2020) for a review of the various methodologies employed, and a new identification strategy to overcome the multiple endogenous components of IMF programmes.

<sup>8</sup>See Steinwand and Stone (2008) and Dreher (2009) for comprehensive reviews of this literature.

<sup>9</sup>Staff effort is the estimated dollar cost of IMF financial assistance programmes, representing the hours spent by staff on programme implementation (both preparation and supervision) and the average salaries of staff by grade.

Arrangement (MONA) database. While this contains comprehensive data from hundreds of programmes across multiple decades, it is not without flaws. [Bird and Willett \(2004\)](#) note, for example, that since MONA only covers conditionality assessed in reviews by the IMF Executive Board, this data has an upwards bias towards programme implementation. The detailed information on compliance with conditionality in our database allows us to avoid this issue. Moreover, it allows us to largely avoid the use of proxies for implementation commonplace in the literature. Second, we are able to identify separately the creditors decision to assess and the debtors decision to comply, which helps us to directly analyse the role of interaction between the creditors and the debtors in determining programme implementation.

We structure our paper as follows. Section 2 describes our dataset, while Sections 3 and 4 describe our empirical methodology and results respectively. We further explore the motivations behind the strategic timing of assessments in Section 5, while Section 6 concludes.

## 2 Data

The European Sovereign Debt Crisis saw several euro area member states suffer difficulties securing market financing at sustainable rates. Given the lack of crisis-lending experience in European institutions, the authorities initially leaned heavily on IMF expertise. As the crisis evolved, euro area policymakers developed their own crisis resolution framework. This placed greater emphasis on fiscal consolidation and structural reforms, compared to IMF financial assistance programmes that focus more on resolving balance of payments crises, often through exchange rate and monetary policy measures.<sup>10</sup> The intergovernmental agreements establishing the temporary European Financial Stability Facility (EFSF) and the permanent ESM both explicitly state that financial assistance is subject to *strict conditionality*.

We analyse conditionality in these programmes using the EFSF \ESM programme database, which contains a rich set of cross-sectional (six programmes in five countries) and time series (2010-2018) data.<sup>11</sup> The database contains lending information (loan disbursements, principal

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<sup>10</sup>[Corsetti et al. \(2020\)](#) provide a detailed description of this institutional development process, and study the effect of different lending terms on market borrowing costs and fiscal performance. We discuss the specificities of the euro area official-sector financial assistance process in Appendix A

<sup>11</sup>The countries are Cyprus, Greece, Ireland, Portugal and Spain. Spain represents a special case, with all loan conditions exclusively focused on the Spanish financial sector (i.e. there was no macro-fiscal conditionality). The loan conditions for Spain were all continuous (i.e. scheduled for repeated assessment), they were always assessed and they remained unchanged for the entire duration of the financial assistance programme (i.e. there was no redrafting). Just over 50% of the conditions were fulfilled by the first programme review, while just over 90% of them were completed by the end of the programme. The institutions deemed the remaining conditions as

repayments, past interest, and fee payments) and data on programme monitoring (loan conditionality and economic and financial indicators, including real-time nowcasts \ forecasts).<sup>12</sup> Loan conditions aimed to tackle underlying issues that contributed to the need for financial assistance, and are grouped into sectors. Broadly speaking, the conditions targeted an improvement in the public finances (“Fiscal” and “Fiscal-Structural”), financial stability (“Financial”) and the productive capacity of the economy (“Structural Labour”, “Structural Product” and “Other”).

The sectoral distribution of conditions reflects the degree to which these problems affected each country. The Cypriot and Irish programmes were focused on financial sector policies, while the Greek and Portuguese programmes were largely fiscal (Table 1, panel a). The proportion of conditions with explicit numerical targets varies widely across countries and sector (“Numeric”, panel b). Almost 20% of Portuguese conditions have an explicit numerical target, while for Ireland it is well under 10%. In principle, all conditions are subject to assessment during the lifetime of the financial assistance programme. While some are due for one-off assessment, others are scheduled for repeated assessment throughout the duration of a programme. This also differs considerably across country and sector (“Continuous”, panel c), with the majority of Greece’s fiscal-structural targets being subject to continuous assessment and Ireland having none in most sectors. A large proportion of conditions were redrafted throughout the duration of a financial assistance programme (“Redrafted”, panel d), ranging from nearly 65% in Cyprus to just over 30% in Ireland.<sup>13</sup>

Although seemingly straight forward conceptually, in reality the conditionality assessment process proved quite complicated. One complication is the division of some conditions into multiple sub-conditions to track the fulfilment of specific objectives. This leads to multiple assessments of the same aggregate condition. We assign a unique assessment for conditions with multiple subcomponents (and therefore multiple assessments).<sup>14</sup> To do so, we follow IMF (2012d) and

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not relevant because a group of banks recapitalised without State aid. The highly-specific nature of the Spanish programme means we exclude it from our empirical analysis.

<sup>12</sup>A value added of the database is its granularity, with 2,279 unique conditions tracked throughout the programmes. Multiple assessments of individual conditions means that there are 8,152 assessment observations in total. We provide an example loan condition highlighting the main features of the database in Appendix B and a description of how we rendered the publically-available database useful for empirical analysis in Appendix C.

<sup>13</sup>The programme database differentiates between significant redrafts, which materially alter the condition or its terms (e.g. a change in the deadline for completion), and minor wording changes that do not change the substance. We only consider significant redrafts in the summary statistics presented in Table 1 and our empirical analysis.

<sup>14</sup>This reduces the number of unique policy conditions to 2,034 and the assessments to 6,562, as we convert 2,165 assessments of multiple sub-conditions into 586 unique values. Our aggregation of multiple subcomponents

assign a value of 0 to unmet conditions, 0.5 to partially met conditions and 1 to completely fulfilled conditions. We then calculate an average across assessments of the subconditions and assign a final (i.e. unique) compliance category for the aggregate condition by comparing the average to simple thresholds of  $1/3$  and  $2/3$ .<sup>15</sup>

In Table 2 we demonstrate the distribution of assessments across condition categories. Although there is substantial heterogeneity across country and sector, it is clear that a substantial percentage of conditions were never assessed ("Total", panel a). Indeed, for Ireland and Portugal the majority of conditions were never assessed. The assessment rate of numerical conditions is larger for all countries except Portugal (panel b), while the assessment rate of continuous (panel c) and redrafted (panel d) conditions is generally no greater than for regular conditions. The programme database includes the dates for which a given condition is scheduled for assessment. Therefore, we can also identify cases where a condition was assessed as scheduled ("On time") or with a delay ("Delayed").<sup>16</sup> Again this varies widely across countries and sectors. Around one third of Greek conditions were assessed only after a delay, while this occurred in only 1% of Irish conditions.

In Table 3 we present the distribution of compliance outcomes for assessed conditions. The database contains a range of possibilities for compliance, representing the degree to which the condition is complied with. For the descriptive statistics and our empirical analysis, we only consider conditions categorised as "Observed". This represents conditions that are fully complied with.<sup>17</sup> While just over 50% of Cypriot conditions were fulfilled, the compliance rate was less than 20% in Ireland and Portugal (panel a). There is substantial sectoral heterogeneity in the compliance rate, with over 60% of financial sector conditions and less than 5% of structural-labour conditions fully complied with in the Irish programme, for example. The compliance

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of a given condition has little material effect on the aggregate structure of the data.

<sup>15</sup>We have only three possible values for each subcondition: 0, 0.5 and 1. When we take the average across all subconditions, we get a value between 0 and 1. Any value less than  $1/3$  is classified as 0, between  $1/3$  and  $2/3$  as 0.5 and above  $2/3$  as 1. These are, therefore, quite naive thresholds. In an alternative approach, we derive the thresholds by minimizing the distance between empirical distributions before and after the aggregation of sub-conditions. This approach delivers a lower threshold greater than  $1/3$  but a very similar upper threshold. Since our analysis focuses on completely fulfilled conditions, the upper threshold is of far greater importance. Therefore, our results are not affected by our choice of method for deriving thresholds.

<sup>16</sup>We consider an assessment as delayed relative to the expected due date in the latest MoU. In the relatively few cases with several due dates, we consider the first one, as later dates typically reappeared in the redrafts of the same condition and are thus relevant due dates for those redrafted versions of conditions.

<sup>17</sup>Therefore, conditions assessed as "Largely observed", "Partial/Ongoing", "Ongoing", "Not relevant" are also included in the "Not observed" categorisation. This is a conservative choice, but greatly reduces the influence of subjectivity in the fulfillment category that is the key variable of interest in our analysis by reducing ambiguity over the extent to which a condition is complied with.

rate is generally greater for numerical (panel b) and continuous (panel c) conditions, while it is about the same for the redrafted conditions as for normal conditions (panel d). Finally, conditions assessed with a delay generally have a lower compliance rate (panel e).

### 3 Empirical approach

Our interest lies in understanding the determinants of compliance with conditionality. But our data overview shows that programme compliance is not a straightforward process. Creditors can only deem a condition as fulfilled if they assess it first. In fact, many conditions are only assessed after a delay (and often a redraft) or are never assessed. This has an important econometric implication, as it implies that our dependent variable, the ability to comply with conditionality, can be missing as a result of another process, the willingness of creditors to assess it. As described in [Greene \(2003\)](#), this selection process can bias the estimation of the determinants of compliance with conditionality if the decision to assess a condition is not random.

In order to account for this bias, we use a two-step approach to correct for sample selection ([Heckman, 1979](#)). More specifically, we want to estimate the effect of specific factors on the success ( $s_j = 1$ ) in meeting a pre-agreed condition  $j$ . A model for whether a condition successfully passes an assessment could look like:

$$s_j = \beta x_j + \epsilon_j \tag{1}$$

where  $x_j$  is a set of explanatory variables and  $\epsilon_j$  is an error term. However, creditors can decide not to assess a condition at the pre-agreed time or to even ignore it completely. A model of the decision to assess is:

$$d_j = \delta z_j + \nu_j \tag{2}$$

where  $z_j$  is a set of explanatory variables and  $\nu_i$  is an error term. In this framework,  $(s_j)$  can only be observed if  $d_j = 1$ . Therefore, if  $E(s_j|z_j, d_j = 1) \neq 0$ , the estimates are biased and require a correction to capture selection effects.

Following [Heckman \(1979\)](#), we first estimate  $\hat{\delta}$  from a probit regression and use it to obtain an estimate of the Inverse Mill's Ratio,  $\hat{\lambda}_j$ . We then use  $\hat{\lambda}_j$  to control for sample-induced



endogeneity, i.e. the extent to which the decision to evaluate influences also the result of the evaluation.<sup>18</sup> Therefore, the fulfillment equation we estimate becomes:

$$s_j = \beta x_j + \gamma \hat{\lambda}_j + \epsilon_j. \quad (3)$$

In order to model the drivers of the *assessment decision*, we estimate Equation (2) where  $d_j$  is a binary variable that takes a value of one when a loan condition is assessed and zero otherwise.<sup>19</sup> We start from the assumption that creditors set conditions (i.e. policy measures) and deadlines within which to implement them according to their current expectations for the current and future state of the economy. National authorities must fulfill the conditions by a set date. At the due date, the official creditors might decide to postpone the assessment. We assume they based their decision on the information set available to them at the time an assessment is due. As control variables, we include:

- a dummy for conditions with an explicit numerical target;
- a dummy for conditions set for continuous assessment;
- a dummy for conditions that were previously redrafted;
- the expected time to assessment (in quarters) when setting the condition;
- the number of conditions imposed in the MoU a condition was set;
- the interaction of the numerical and continuous dummies;
- the institutions' nowcasts of annual real GDP growth;
- the nowcast error;
- the 10-year sovereign bond spread in the current quarter;
- the upcoming gross disbursement relative to the GDP nowcast;
- dummies for different policy sectors.

We include the nowcasts as a proxy for the institutions' *expectations* of the economic situation at the time of the programme design and in subsequent reviews. The inclusion of nowcast errors,

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<sup>18</sup>We use bootstrapping to compute the standard errors of the fulfillment decision regression. See [Cameron and Trivedi \(2005\)](#) for a discussion.

<sup>19</sup>For conditions that were not assessed, we use the values from their scheduled assessment date or the next programme review (if unspecified).

which we define as the difference between the nowcasts and their ex-post realisation, allow us to ascertain the impact of unexpected innovations to key assumptions underpinning the conditionality design.<sup>20</sup> The 10-year sovereign spread (to the German Bund) provides a signal of market scrutiny.<sup>21</sup> The upcoming disbursement, relative to the nowcast of GDP, provides information on the financial relevance of compliance. The number of conditions imposed serves as a proxy for programme complexity, while the dummy for explicit numerical targets allows us to ascertain if this formulation of conditionality increases the likelihood of assessment.

In turn, in order to model the *fulfilment decision*, we assume that compliance with conditionality largely depends on the effort of the borrowing country. In analysing the compliance decision, we set the dependent variable equal to one if the condition is fulfilled and zero for any other degree of compliance. This is because creditors only have discretion over the assessment of conditions that are not fully complied with (i.e. that fall into the categories “not fulfilled”, “not relevant”, “ongoing”, “partially fulfilled” or “largely fulfilled”). In contrast, they can only categorise fulfilled conditions as “fulfilled”, so there is no room for ambiguity.<sup>22</sup> An advantage of this approach is that it allows us to focus only on what drives the borrower’s efforts to fulfill the conditions set in a given MoU, rather than the creditors subjective interpretation of compliance. It also allows us to focus on the information set at the time of a given MoU’s drafting (i.e. at the “design” of the condition), which should be the most important if the decision of the debtor to fulfill a condition is affected by the state of the economy in the run up to a programme review.<sup>23</sup>

To assess the drivers of the fulfillment decision, we estimate Equation (3) where  $s_j$  is a binary variable that takes a value of one when a loan condition is fulfilled and zero otherwise. The statistical significance of explanatory variables in the selection equation, the inverse Mills ratio  $\hat{\lambda}_j$  and the correlation between  $\epsilon_j$  and  $\nu_j$  give us an indication whether there is a sample selection

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<sup>20</sup>Another interpretation of the forecast errors is that they measure the optimism of the official sector. A notable example of this alternative is the underestimation of the size of fiscal multipliers, which resulted in overly optimistic growth forecasts during the European sovereign debt crisis (Blanchard and Leigh, 2013). When analysing the fulfillment decision, we instead use the error between nowcasts produced during a given MoU round and the ex-post realised value since this is the period during which the fulfillment decision is made.

<sup>21</sup>When analysing the fulfillment decision, we instead use the average 10-year bond spread over the period between the setting of a condition and its assessment since this is the period during which the fulfillment decision is made.

<sup>22</sup>As a robustness check, we also run equation (3) when the dependent variable includes the “largely fulfilled” and “partially fulfilled categories”. Our results are unaffected (see Appendix E). Of interest is that the size of the positive coefficient on the inverse Mills ratio gets larger as the categorisation of fulfilled conditions becomes less tightly defined.

<sup>23</sup>This may not necessarily be the case for conditions with due dates that are further away. These are only a small minority of conditions, however.

issue or not (Certo et al., 2016).

We drop the GDP nowcast as an explanatory variable in our fulfillment equation, thereby serving as an exclusion restriction.<sup>24</sup> In order to be a useful instrument, a variable must affect the decision to assess, but not to decision to fulfill. Our rationale for why this is a good restriction is that while the creditors' expectations for economic growth may affect their decision to assess a condition, it is unlikely to influence the debtors' decision to fulfill a condition, over and beyond any unexpected surprises, which the regression also controls for. Also, the decision to fulfill has largely been made between the time a condition was set and the time of assessment, and not only at the assessment time at which the nowcast is made. Comfortingly, this variable is highly significant in the assessment regression and insignificant when included in the fulfillment regression.<sup>25</sup>

We estimate Equations (2) and (3) treating our data as a pooled cross section. Although our dataset contains programmes from different countries that evolve over time, treating our dataset as a panel is inappropriate for a number of reasons. First, since data collection only begins at each programme's initial MoU negotiation mission, it is highly unbalanced.<sup>26</sup> The Irish and Portuguese programmes were close to finishing by the time the Cypriot programme began, while the third Greek programme took place more or less on its own. Second, there is irregular spacing in the time series component of the dataset, as there is at least one quarter in each programme during which no review took place. Also, during the third Greek programme, several reviews took place within the same quarter.<sup>27</sup> Finally, conditions appear in the dataset at the moment they are introduced in programme documentation for the first time, which can happen throughout the programme. Conditions can be then observed in subsequent reviews, either redrafted or exactly the same, or, in majority of cases, never appear again. These features renders analysis with the panel data techniques ineffective.

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<sup>24</sup>If the explanatory variables included in the selection equation (i.e. our assessment decision) and outcome equation (i.e. our fulfillment decision) are identical, the Heckman correction relies on the nonlinearity of the inverse Mills ratio for identification. While not always necessary (Wilde, 2000), exclusion restrictions can help reduce this reliance (Puhani, 2000). The fact that our spread and nowcast error variables are slightly different across the assessment and fulfillment regressions means they could potentially also be considered as exclusion restrictions.

<sup>25</sup>This holds whether we use the nowcast set at the MoU, as is standard for our assessment regressions, or the nowcast set at the CA, as is standard for our fulfillment regressions.

<sup>26</sup>Table 4 shows the structure of our database. The "M"s represent MoUs, while the "CA"s represent compliance assessments. See Appendix A for a general description of the financial assistance process and Appendix B for a specific example that illustrates the evolution of a loan condition throughout the programme.

<sup>27</sup>This is particularly problematic for the estimation of dynamic panels. See Millimet and McDonough (2017) and Sasaki and Xin (2017) for approaches to overcome the issues with unequally spaced panel data.

We ensure the robustness of our results by also including year and country dummies in some regression specifications. Year dummies should capture period-specific factors that may have influenced the assessment or fulfillment decisions, over and beyond the included explanatory variables. Country dummies should capture any time-invariant within-country effects, such as national or institutional preferences and competence.

## 4 Results

We first examine the (creditor's) decision to assess a given condition (i.e. equation (2)). The dependent variable has a value of one when creditors assess the condition, regardless of whether it does so on time or with a delay (i.e. even if this assessment occurs later than originally scheduled). We display the results from this analysis in Table 5. We show the results from several model specifications, to understand how the results change as we consider different factors. However, we only comment on the results with sector-specific, year and country dummies.<sup>28</sup> This is the fifth column in each table. We allow for clustering in the standard errors at condition level, as a sizable portion of conditions are assessed on more than one occasion and these (seemingly) separate decisions may be correlated.<sup>29</sup>

Conditions that were previously redrafted are more likely to be assessed. We interpret this as tentative evidence that creditors decision to redraft reflects their view that the condition is important (i.e. it is worth redrafting rather than just omitting from subsequent MoUs). Our finding that assessments are positively related to higher GDP growth nowcasts indicates that creditors are more likely to assess when macro-financial conditions are more favourable and conditions are more likely to be complied with. For example, higher GDP growth mechanically makes it easier to fulfill deficit-to-GDP targets.

Higher sovereign bond spreads also make assessment of a given condition more likely. We believe this is due to the effect of greater external scrutiny on creditors. Finally, the larger the upcoming disbursement, the more likely a condition is to be assessed. We consider that this is due to the need for creditors to see more progress with programme targets in advance of large financial outlays.

In contrast, we find that the expected time to assessment, the number of conditions and whether

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<sup>28</sup>The coefficients on the time and country dummies are omitted as our interest lies in whether our explanatory variables and not on the specific effect of a given period or country.

<sup>29</sup>We also run these specifications without clustered standard errors and the results are largely unchanged.

the condition is a fiscal measure are negatively associated with the decision to assess. A longer expected time to assessment could indicate that a condition is not viewed as an immediate priority, or that it is difficult and will take a greater effort to fulfill. Either way, these conditions are less likely to be assessed at any stage of the programme.<sup>30</sup> A greater number of conditions may include a larger portion of irrelevant conditions, or is too burdensome administratively for the creditors to assess. The relevance of the negative association between fiscal conditions and assessment probability will become clear when we move to the fulfillment analysis.

We next examine the (debtor's) decision to fulfill a given condition (i.e. equation (3)). In this case, the dependent variable has a value of one when debtors fulfill the condition, regardless of whether it does so on time or with a delay (i.e. even if this fulfillment occurs later than originally scheduled). We display the results from this analysis in Table 6. Here we also include a sixth column that omits the inverse Mills ratio, in order to demonstrate the effect of not controlling for sample selection.<sup>31</sup>

As with the decision to assess, a longer expected time to assessment and a larger total number of conditions make it less likely a condition is fulfilled. We believe the same logic we provided before applies here also.

Debtors are more likely to fulfill conditions with explicit numerical targets and those that are scheduled for continuous assessment. We believe the choice of creditors to specify precise targets and to deem some conditions worthy of needing continuous fulfillment throughout the programme are indicators of their importance. Accordingly, debtors realise that compliance with these will have a greater impact on a positive compliance assessment and the likelihood of unlocking disbursements. While all the sectoral dummies are significant, the likelihood of fulfillment seems to be the highest for fiscal conditions.

When coupled with our finding that fiscal conditions are less likely to be assessed, we believe our results provide evidence of the greater importance of fiscal conditions. Creditors, knowing their importance to keeping the programme on track, are hesitant to assess them. They strategically time assessments (i.e. delaying them as necessary) to improve the chances of compliance when eventually assessed.

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<sup>30</sup>Remember, our dependent variable represents all assessments that take place, regardless of whether they are at the originally-scheduled time or not.

<sup>31</sup>We provide the results without the inverse mills ratio for all regression specifications in Appendix D.

Evidence for this strategic behaviour, not just for fiscal, but for all conditions, comes from the statistical significance of the inverse Mills ratio.<sup>32</sup> The positive coefficient on the inverse Mills ratio indicates that the non-random behaviour of creditors when deciding whether to assess a condition helps boost the likelihood of compliance. This is a novel finding and we discuss this important aspect of our results in more detail in next section.

## 5 Strategic assessment of loan conditions: A discussion

Our results show a strongly significant and positive sign for the inverse Mills ratio on the second stage, and also that lenders consider the macro-financial environment when deciding whether to assess a given loan condition. This points towards an strategic timing of the assessment, which increases the likelihood of fulfillment.

It seems that greater flexibility on the part of creditors boosts overall compliance with loan conditionality. But what is the underlying motivation for such behaviour? One possibility could be that lenders employ discretion over the timing of assessment to take advantage of any new information that arrived after they set the condition. This would be in the spirit of the official lender in [Abrahám et al. \(2019\)](#). Another, less favourable, interpretation could be that lenders are unsure whether the conditions they set are appropriate, and strategically time assessments to minimise external scrutiny of the compliance process.<sup>33</sup> This would resemble a principal-agent relation in the spirit of [Antic and Persico \(2020\)](#), whereby the lenders face a trade-off between providing the debtor with incentives to exert optimal effort and incentives to communicate transparently. By delaying a large portion of assessments, lenders can buy themselves time until debtors comply with the conditions.

To try to ascertain the underlying motivation for the strategic behaviour of creditors, we next provide the results from a regression analysing the drivers of the decision to delay the assessment of a given condition (Table 7). In this case, the dependent variable has a value of one only if a condition is assessed with a delay.

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<sup>32</sup>The statistical significance of the inverse Mills ratio coefficient suggests that correcting for sample selection is appropriate. However, in column six, we display the results for a regression excluding the inverse Mills ratio. Redrafted conditions and the GDP nowcast error are now statistically significant. More importantly, the statistical significance of the upcoming disbursement suggests a negative relationship between financial incentives and the decision to fulfill. This very counterintuitive result could have potentially large policy implications if taken seriously.

<sup>33</sup>This could be, for example, because lenders publically demand that all conditions are complied with, but privately believe that only a select number are truly relevant.

The positive sign on the GDP growth nowcast and negative sign on the nowcast error are supportive of incoming information affecting creditors' decisions to assess. If conditions are expected to improve and/or are better-than-expected, creditors delay assessing in the hopes that the improving macro-financial environment will make compliance easier to achieve.

Instead, the large and positive coefficient on the upcoming disbursement, the negative coefficient for the interaction term between numerical and continuous conditions and the negative coefficient on the fiscal measures dummy are supportive of the principal-agent relation. This is because it indicates that this subset of conditions (numerical, continuous and fiscal) are those that creditors deem truly important. The fact that the vast majority of the programme funds were disbursed despite the large number of conditions that were not complied with is evidence of this.<sup>34</sup>

## 6 Conclusion

We find that compliance with a subset of critical conditions, especially fiscal measures aimed at the immediate stabilisation of public finances and those with explicit numerical targets, was sufficient to keep euro area financial assistance programmes on track. We also provide evidence that creditors time their assessments in a manner that helps to boost compliance. Finally, counter to the emphasis in programme documents, we demonstrate that compliance with structural reforms aimed at enhancing economies' productive capacity appears to be of limited importance.

There are a number of lessons from our analysis that could improve the design of official-loan conditionality. First, the focus on ex-ante conditionality makes the programmes difficult to enforce. As the programme evolves and the institutions and national authorities better understand the underlying macroeconomic and financial situation, they engage in a process of redrafting the conditions. We find that these redrafts get scrutinised more often than other conditions, but are on average less likely to be complied with. We also provide some evidence that conditions are not assessed until compliance is more likely. These results demonstrate that the focus on ex-ante conditions makes financial assistance programmes more opaque, as the

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<sup>34</sup>Only the final disbursement of the Cypriot and Portuguese programmes was not made. In these cases, some particularly unpalatable reforms were required to unlock disbursement. However, the improved macro-financial environment, in particular the return of (private) market access, meant that the national authorities had alternative financing available and did not need the disbursements. Future work could use these as natural experiments to try to further disentangle which type of conditions were important to creditors.

institutions and national authorities have to find innovative ways to gain flexibility.

Second, compliance is greater for quantifiable loan conditions. These conditions were assessed less regularly, were subject to less redrafts, and were generally complied with. Third, efforts to boost the productive capacity of the economy should be less prescriptive on individual structural reforms. These made up the vast majority of conditions, and we demonstrate a negative relationship between the total number of conditions and likelihood of compliance.

Taken together, our results indicate that when designing conditionality for official loans, lenders should focus on fewer conditions, stated in quantifiable terms, and should have an in-built mechanism for transparently adjusting these conditions as the financial assistance programme evolves. These messages are broadly aligned with the recommendations contained in various IMF Reviews of Conditionality (RoCs) and ESM Programme Evaluations.<sup>35</sup>

Our analysis provides important lessons for the design of post-pandemic international support schemes, such as the European Union has created a Recovery and Resilience Facility to provide loans and grants to support reforms and investment in Member States. To access these funds, Member States must prepare recovery and resilience plans, in which they specify their plans for the accessed funds. The European Commission (EC) will assess these plans at the outset and also monitor their implementation throughout the 2021-2026 period, with disbursements conditional on compliance with pre-agreed targets and milestones. Initial plans contain a significant amount of detail on numerous individual reforms and investment projects. While the home-grown nature of the plans can make ownership of these plans stronger, a narrow and clearly defined focus when evaluating these plans could help avoid repeating past mistakes.<sup>36</sup>

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<sup>35</sup>The IMF recurrently evaluates the different elements of programme design through the conduct of RoCs. Similar to us, these studies use very detailed information to identify the various mappings described above from different perspectives. The 2005 RoC (IMF, 2005) found that prior actions have a larger implementation ratio than any other type of condition and that they are used more copiously when countries are ex-ante weaker. The report highlighted the need to streamline conditionality and place greater focus on core areas of IMF responsibility. The next RoC, conducted in 2011, recommended a continuation of the process of consolidating conditionality and to enhance country ownership. Following the 2005 RoC recommendations, the 2011 RoC conducted a deep analysis of macroeconomic outcomes, the link between implementation of structural conditionality and macroeconomic outcomes, and the role of country ownership. IMF (2012d) provides an overview of the findings, while the analysis itself is contained in various background papers (IMF, 2012a,b,c). The latest RoC took place in 2018 and flagged several areas for improvement IMF (2019), including the need to give priority to critical conditions.

<sup>36</sup>See Jacoby and Hopkin (2020) for an analysis and discussion of how conditionality in the European Union has evolved over the past two decades.



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Table 1: **Distribution of loan conditions by sector and country (%)**

	Financial	Fiscal	Fiscal- Structural	Structural Labour	Structural Product	Other	Total Obs
<i>a. Total</i>							
Cyprus	0.537	0.077	0.186	0.082	0.094	0.025	1.000
Greece	0.080	0.022	0.567	0.041	0.260	0.030	1.000
Ireland	0.672	0.063	0.089	0.054	0.085	0.037	1.000
Portugal	0.108	0.151	0.415	0.050	0.276	0.000	1.000
<i>b. Numeric</i>							
Cyprus	0.412	0.368	0.059	0.074	0.015	0.074	0.168
Greece	0.051	0.101	0.595	0.034	0.186	0.034	0.131
Ireland	0.564	0.200	0.073	0.018	0.073	0.073	0.070
Portugal	0.068	0.531	0.372	0.017	0.011	0.000	0.199
<i>c. Continuous</i>							
Cyprus	0.783	0.000	0.000	0.174	0.043	0.000	0.057
Greece	0.096	0.025	0.645	0.021	0.169	0.044	0.140
Ireland	0.000	0.000	0.000	0.000	0.000	1.000	0.025
Portugal	0.350	0.007	0.552	0.000	0.091	0.000	0.081
<i>d. Redrafted</i>							
Cyprus	0.523	0.046	0.225	0.073	0.107	0.027	0.649
Greece	0.063	0.014	0.576	0.050	0.259	0.039	0.384
Ireland	0.685	0.052	0.080	0.056	0.084	0.044	0.318
Portugal	0.157	0.131	0.394	0.051	0.266	0.000	0.430

*Notes:* Data from the EFSF \ESM programme database, covering the Cypriot (2013-2016), Greek (2011-2014, 2015-2018), Irish (2010-2013) and Portuguese (2011-2014) financial assistance programmes. Obs: 6,381. Rounding may affect totals.

Table 2: **Distribution of assessed loan conditions by sector and country (%)**

	Financial	Fiscal	Fiscal- Structural	Structural Labour	Structural Product	Other	Total Obs
<i>a. Total</i>							
Cyprus	0.514	0.082	0.221	0.058	0.102	0.024	0.728
Greece	0.072	0.017	0.546	0.036	0.305	0.025	0.546
Ireland	0.567	0.050	0.119	0.070	0.129	0.065	0.255
Portugal	0.094	0.009	0.406	0.071	0.420	0.000	0.325
<i>b. Numeric</i>							
Cyprus	0.396	0.377	0.038	0.075	0.019	0.094	0.779
Greece	0.086	0.059	0.589	0.043	0.196	0.023	0.570
Ireland	0.750	0.000	0.063	0.031	0.063	0.094	0.582
Portugal	0.129	0.000	0.839	0.000	0.032	0.000	0.088
<i>c. Continuous</i>							
Cyprus	0.933	0.000	0.000	0.067	0.000	0.000	0.652
Greece	0.099	0.009	0.641	0.024	0.179	0.047	0.443
Ireland	0.000	0.000	0.000	0.000	0.000	1.000	0.550
Portugal	0.091	0.000	0.636	0.000	0.273	0.000	0.077
<i>d. Redrafted</i>							
Cyprus	0.515	0.045	0.255	0.045	0.115	0.025	0.763
Greece	0.053	0.007	0.575	0.030	0.310	0.024	0.531
Ireland	0.433	0.000	0.200	0.067	0.133	0.167	0.120
Portugal	0.124	0.010	0.390	0.095	0.381	0.000	0.413
<i>e. Delayed</i>							
Cyprus	0.364	0.061	0.303	0.091	0.121	0.061	0.112
Greece	0.045	0.007	0.530	0.032	0.366	0.020	0.299
Ireland	0.500	0.000	5.000	0.000	0.000	0.000	0.010
Portugal	0.053	0.000	0.309	0.085	0.553	0.000	0.163

*Notes:* Data from the EFSF \ESM programme database, covering the Cypriot (2013-2016), Greek (2011-2014, 2015-2018), Irish (2010-2013) and Portuguese (2011-2014) financial assistance programmes. Obs: 2,935. Rounding may affect totals. Last column represents totals of assessed in a certain category, e.g. numeric, except for panel e, where it is assessed with delay in total assessed.

Table 3: **Distribution of fulfilled conditions by sector and country (%)**

	Financial	Fiscal	Fiscal- Structural	Structural Labour	Structural Product	Other	Total Obs
<i>a. Total</i>							
Cyprus	0.536	0.116	0.198	0.048	0.067	0.034	0.512
Greece	0.081	0.023	0.534	0.036	0.308	0.018	0.358
Ireland	0.605	0.061	0.102	0.048	0.109	0.075	0.186
Portugal	0.097	0.013	0.420	0.103	0.367	0.000	0.180
<i>b. Numeric</i>							
Cyprus	0.364	0.455	0.023	0.045	0.000	0.114	0.647
Greece	0.096	0.072	0.536	0.042	0.241	0.012	0.371
Ireland	0.800	0.000	0.033	0.033	0.033	0.100	0.545
Portugal	0.182	0.000	0.773	0.000	0.045	0.000	0.063
<i>c. Continuous</i>							
Cyprus	0.929	0.000	0.000	0.071	0.000	0.000	0.609
Greece	0.114	0.013	0.614	0.032	0.222	0.006	0.330
Ireland	0.000	0.000	0.000	0.000	0.000	1.000	0.500
Portugal	0.000	0.000	0.571	0.000	0.429	0.000	0.049
<i>d. Redrafted</i>							
Cyprus	0.526	0.066	0.255	0.044	0.073	0.036	0.523
Greece	0.068	0.009	0.569	0.027	0.311	0.014	0.313
Ireland	0.429	0.000	0.071	0.000	0.143	0.357	0.056
Portugal	0.134	0.018	0.390	0.146	0.311	0.000	0.215
<i>e. Delayed</i>							
Cyprus	0.421	0.105	0.211	0.105	0.053	0.105	0.092
Greece	0.039	0.011	0.529	0.025	0.386	0.011	0.297
Ireland	0.000	0.000	1.000	0.000	0.000	0.000	0.007
Portugal	0.075	0.000	0.302	0.113	0.509	0.000	0.166

*Notes:* Data from the EFSF \ESM programme database, covering the Cypriot (2013-2016), Greek (2011-2014, 2015-2018), Irish (2010-2013) and Portuguese (2011-2014) financial assistance programmes. Obs: 1,896. Rounding may affect totals. Last column represents totals of fulfilled in a certain category, e.g. numeric, except for panel e, where it is fulfilled with delay in total fulfilled.

Table 4: **Structure of the EFSF \ESM programme database**

	IE	PT	GR (EFSF)	CY	GR (ESM)
2010Q3					
2010Q4	M00				
2011Q1					
2011Q2	CA1, M01	M00			
2011Q3	CA3, M02	CA1, M01			
2011Q4	CA4, M03	CA2, M02	M05		
2012Q1	CA5, M04	CA3, M03	CA0, M06		
2012Q2	CA6, M05	CA4, M04			
2012Q3	CA7, M06	CA5, M05			
2012Q4	CA8, M07	CA6, M06	CA1, M07		
2013Q1	CA9, M08				
2013Q2	CA10, M09	CA7, M07	CA2, M08	M00	
2013Q3	CA11, M10	CA8, M08	CA3, M09	CA1, M01	
2013Q4	CA12	CA10, M09		CA2, M02	
2014Q1		CA11		CA3, M03	
2014Q2			CA4, M10	CA4, M04	
2014Q3			CA4b	CA5, M05	
2014Q4					
2015Q1					
2015Q2				CA6, M06	
2015Q3				CA7	M00, CA0ba, M01, CA0a
2015Q4					CA0d, M13, CA0e20
2016Q1					
2016Q2					CA1, M02
2016Q3					CA1a
2016Q4					CA1b
2017Q1					
2017Q2					CA2, M04
2017Q3					
2017Q4					CA2a
2018Q1					CA3aa, M07
2018Q2					CA4, M11
2018Q3					

*Notes:* Data from the EFSF \ESM programme database, covering the Cypriot (2013-2016), Greek (2011-2014, 2015-2018), Irish (2010-2013) and Portuguese (2011-2014) financial assistance programmes. The “M”s represent MoUs, while the “CA”s represent compliance assessments. See Appendix A for a description of the financial assistance process.



Table 5: **Assessment of conditions**

	(1)	(2)	(3)	(4)	(5)
Numerical	-0.348*** (0.075)	-0.163** (0.081)	-0.309*** (0.076)	-0.332*** (0.074)	-0.111 (0.079)
Continuous	0.017 (0.075)	0.029 (0.074)	-0.009 (0.071)	0.017 (0.074)	-0.014 (0.068)
Redrafted	0.094** (0.038)	0.084** (0.038)	0.152*** (0.039)	0.097** (0.038)	0.106*** (0.040)
Expected time to assessment	-1.557*** (0.098)	-1.516*** (0.101)	-1.714*** (0.111)	-1.559*** (0.104)	-1.678*** (0.114)
Number of conditions	0.004 (0.031)	-0.045 (0.035)	-0.272*** (0.057)	0.049 (0.056)	-0.841*** (0.185)
Numerical · Continuous	0.356 (0.222)	0.248 (0.224)	0.361* (0.205)	0.341 (0.213)	0.278 (0.205)
GDP growth nowcast	-0.113*** (0.017)	-0.112*** (0.017)	0.023 (0.021)	-0.128*** (0.018)	0.271*** (0.045)
Nowcast error	-0.203*** (0.029)	-0.207*** (0.030)	-0.204*** (0.048)	-0.173*** (0.030)	-0.070 (0.055)
Spread at assessment	-0.065*** (0.015)	-0.064*** (0.015)	0.062** (0.025)	-0.059*** (0.016)	0.063** (0.027)
Next disbursement-to-GDP	12.983*** (0.730)	12.923*** (0.728)	15.214*** (0.957)	12.229*** (0.789)	14.266*** (1.028)
Financial		-0.180 (0.153)			-0.222 (0.147)
Fiscal		-0.809*** (0.190)			-0.743*** (0.188)
Fiscal-structural		-0.083 (0.145)			-0.018 (0.139)
Structural-labour		-0.089 (0.181)			-0.090 (0.181)
Structural-product		0.167 (0.149)			0.207 (0.144)
Constant	-0.219 (0.169)	0.092 (0.237)	0.041 (0.261)	-0.365 (0.256)	2.941*** (0.759)
<i>N</i>	6160	6160	6160	6160	6160
pseudo <i>R</i> <sup>2</sup>	0.209	0.222	0.244	0.212	0.269
Year dummies	No	No	Yes	No	Yes
Country dummies	No	No	No	Yes	Yes

*Notes:* Our dependent variable is a dummy that equals one if a condition is assessed during the programme, and zero otherwise. See Section 3 for details. Standard errors, clustered at condition level, in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 6: **Fulfillment of conditions**

	(1)	(2)	(3)	(4)	(5)	(6)
Numerical	0.270** (0.127)	0.228** (0.091)	0.188** (0.090)	0.122 (0.108)	0.188* (0.101)	0.232** (0.103)
Continuous	0.683*** (0.138)	0.739*** (0.138)	0.662*** (0.141)	0.630*** (0.126)	0.708*** (0.143)	0.708*** (0.140)
Redrafted	-0.036 (0.064)	-0.021 (0.060)	-0.139* (0.073)	-0.036 (0.055)	-0.086 (0.062)	-0.181*** (0.069)
Expected time to assessment	-1.307*** (0.182)	-1.407*** (0.156)	-1.524*** (0.274)	-1.896*** (0.158)	-1.773*** (0.208)	-0.741*** (0.152)
Number of conditions	-0.041 (0.051)	0.009 (0.049)	-0.320*** (0.059)	-0.377** (0.151)	-0.362*** (0.133)	-0.348* (0.181)
Numerical · Continuous	0.152 (0.349)	0.196 (0.388)	0.256 (0.418)	0.265 (0.341)	0.360 (0.483)	0.193 (0.419)
GDP nowcast error	0.146*** (0.028)	0.158*** (0.030)	-0.010 (0.032)	0.260*** (0.031)	0.023 (0.041)	0.066 (0.042)
Avg spread btw MoU and CA	-0.106*** (0.011)	-0.104*** (0.012)	0.067*** (0.020)	-0.077*** (0.015)	0.012 (0.037)	-0.000 (0.045)
Next disbursement-to-GDP	7.069*** (0.961)	6.816*** (1.032)	0.795 (2.160)	4.486*** (1.178)	1.618 (1.735)	-4.075** (1.654)
Delayed	-0.045 (0.084)	-0.025 (0.085)	0.078 (0.104)	-0.123 (0.087)	0.163* (0.098)	0.168* (0.097)
Redrafted · Delayed	-0.059 (0.127)	-0.056 (0.116)	0.027 (0.115)	-0.031 (0.118)	-0.008 (0.117)	0.043 (0.111)
Financial		0.512** (0.260)			0.599*** (0.232)	0.737*** (0.248)
Fiscal		1.481*** (0.409)			1.476*** (0.368)	1.883*** (0.409)
Fiscal-structural		0.291 (0.236)			0.429* (0.230)	0.430* (0.239)
Structural labour		0.390 (0.276)			0.590** (0.260)	0.625** (0.309)
Structural product		0.307 (0.245)			0.585** (0.234)	0.463* (0.249)
Inverse mills ratio	0.429*** (0.121)	0.450*** (0.129)	0.833*** (0.239)	1.026*** (0.132)	1.155*** (0.204)	
Constant	0.876*** (0.296)	0.320 (0.350)	6.343*** (0.400)	2.517*** (0.617)	5.832*** (0.522)	7.042*** (0.805)
Observations	2730	2730	2730	2730	2730	2730
Pseudo $R^2$	0.063	0.076	0.119	0.104	0.144	0.134
Year dummies	No	No	Yes	No	Yes	Yes
Country dummies	No	No	No	Yes	Yes	Yes

*Notes:* Our dependent variable is a dummy that equals one if a condition is fulfilled during the programme, and zero otherwise. See Section 3 for details. Standard errors, clustered at condition level, in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 7: Divers of delayed assessments

	(1)	(2)	(3)	(4)	(5)
Numerical	-0.159* (0.088)	-0.027 (0.092)	-0.094 (0.098)	-0.203** (0.093)	0.114 (0.106)
Continuous	-0.501*** (0.133)	-0.450** (0.182)	0.025 (0.187)	-0.276 (0.186)	0.117 (0.187)
Redrafted	-0.112** (0.057)	-0.164*** (0.061)	0.043 (0.069)	0.023 (0.071)	-0.070 (0.072)
Expected assesment time	-2.915*** (0.194)	-2.970*** (0.175)	-4.216*** (0.243)	-3.600*** (0.249)	-4.416*** (0.265)
Number of conditions	0.949*** (0.064)	0.893*** (0.101)	0.712*** (0.181)	2.720*** (0.323)	-0.656* (0.344)
Numerical · Continuous	-0.344 (0.501)	-0.538 (0.502)	-0.505* (0.272)	-0.405 (0.419)	-0.642* (0.329)
GDP growth nowcast	0.109*** (0.022)	0.114*** (0.033)	0.551*** (0.084)	0.229*** (0.043)	1.026*** (0.226)
Nowcast error	-0.785*** (0.051)	-0.823*** (0.102)	-1.077*** (0.257)	-1.129*** (0.154)	-1.666*** (0.370)
Spread at assessment	-0.105*** (0.020)	-0.113*** (0.020)	-0.136* (0.069)	-0.180*** (0.025)	-0.134 (0.157)
Next disbursement-to-GDP	25.997*** (1.085)	26.742*** (1.883)	40.656*** (3.126)	39.844*** (3.563)	42.257*** (3.289)
Financial		-0.240 (0.195)			-0.331 (0.246)
Fiscal		-0.676** (0.288)			-0.772** (0.351)
Fiscal-structural		0.073 (0.171)			0.037 (0.228)
Structural-labour		0.228 (0.220)			0.153 (0.270)
Structural-product		0.493*** (0.174)			0.459** (0.227)
Constant	-7.043*** (0.369)	-6.882*** (0.689)	-9.980*** (0.885)	-15.507*** (1.694)	-4.888** (2.212)
$N$	6160	6160	6160	6160	6160
pseudo $R^2$	0.397	0.415	0.547	0.450	0.584
Year dummies	No	No	Yes	No	Yes
Country dummies	No	No	No	Yes	Yes

*Notes:* Our dependent variable is a dummy that equals one if a condition is assessed after its scheduled due date, and zero otherwise. See Section 3 for details. Standard errors, clustered at condition level, in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## Appendix A EFSF \ESM financial assistance programmes

The EFSF and ESM (co-)financed six financial assistance programmes in the euro area between 2010 and 2018.<sup>37</sup> There are three broad phases to each programme. After the national authorities requested financial assistance, they negotiated a Memorandum of Understanding (MoU) with the EC, European Central Bank (ECB) and the IMF (hereafter, “the institutions”).<sup>38</sup> The MoU details the institutions’ assessment of current and future (up to three-years ahead) economic and financial situation, as well as the policy conditions to be implemented in exchange for financial assistance.<sup>39</sup> These conditions aimed to eliminate or reduce weaknesses in the beneficiary country’s economy and/or financial sector that contributed to their need for financial aid. This is the programme *design* phase.

Upon the successful conclusion to the MoU negotiations between the national authorities and the institutions, the EFSF \ESM proposed financial conditions for the loan, including the disbursement and repayment schedules, interest and fee payments. The EFSF \ESM Board of Governors, where all euro area countries are represented and each country has voting rights commensurate with their number of shares in the ESM capital stock, gave the final approval of the financial assistance package.<sup>40</sup> The database contains all the current and projected economic and financial indicators, policy conditions and loan arrangements of the approved financial assistance package at each programme review.

During the programme *implementation* phase, the institutions carried out periodic assessments of the national authorities’ compliance with the agreed-upon policy conditions in the MoU (programme “reviews”). The institutions provided the EFSF \ESM Board of Directors with a “compliance assessment” report, which was the basis for disbursement decisions.<sup>41</sup> At each

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<sup>37</sup>The ESM is a permanent institution that replaces the temporary EFSF. The EFSF provided loans to Ireland, Portugal and Greece, while the ESM provided loans to Spain and Cyprus. The EFSF cannot provide new loans and is a separate legal entity from the ESM. However, due to the need for post-programme monitoring until full repayment of the loans, the EFSF and ESM share staff and facilities. The ESM update the database after both EFSF and ESM post-programme monitoring missions.

<sup>38</sup>The IMF directly participated in four of the six financial assistance programmes. Under the proposed ESM reform, the EC and ESM are jointly responsible for the design and implementation of policy conditionality in future financial assistance programmes.

<sup>39</sup>The institutions, and for the third Greek programme, the ESM, also produced longer-term forecasts that underpin their Debt Sustainability Analysis. These forecasts, however, are not included in the EFSF \ESM programme database.

<sup>40</sup>All major EFSF \ESM decisions were generally unanimous. However, there is an emergency voting procedure in the ESM Treaty, whereby financial assistance can be granted if supported by a qualified majority of 85 % of the votes. This effectively provides a veto to Germany, France and Italy.

<sup>41</sup>While the first phase is broadly consistent across countries and programmes, substantial differences arise during the second phase. Most notable is the period between programme reviews. While the median gap between reviews was three months, there were often six months, and, in the case of Greece, up to a year between

of these programme reviews, the institutions and national authorities also produced a revised MoU in which the required policy conditions could be different from the previously-agreed MoU. The institutions also updated the economic and financial data and forecasts available at each programme review, and the EFSF \ESM at times adjusted the financial conditions of the loans.<sup>42</sup>

The final phase covers the programme *exit*. This incorporated a final assessment of remaining policy conditions, as well as updates of the current and forecasted economic and financial situation. This phase also has considerable cross-country and programme differences. Only Ireland and Greece (in the third and final programme) completed the final review. Portugal, Cyprus and Spain did not complete all the necessary conditions and therefore did not draw down the final disbursement. The institutions' assessment that policy conditions were not being met meant that the first and second Greek programmes went off track.

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reviews. This uneven structure prohibits the use of regressions with time fixed effects. Instead, we use time dummies to capture period-specific disturbances that could effect our estimates.

<sup>42</sup>The terms of the loans to Ireland, Portugal, and Greece were altered during or after their programmes. These alterations included extensions to the weighted average maturity of loans and reduced fees. [Corsetti et al. \(2020\)](#) analyse the effect of these changes and find that they helped restore market access. They were therefore crucial in achieving a primary goal of the financial assistance programmes.

## Appendix B An example loan condition

The ESM provides a publically-available database of the six euro area financial assistance programmes carried out between 2010 and 2018.<sup>43</sup> It includes information from around 60 different reviews across all EFSF and ESM financial assistance programmes.<sup>44</sup> To illustrate the features of the database, we provide an example of a loan condition and the elements we use to analyse compliance.

As a precondition for loan disbursements, the institutions required the Portuguese authorities to establish a fiscal council. These advisory bodies can help strengthen fiscal discipline and complement existing procedures, such as fiscal rules (Calmfors and Wren-Lewis, 2011). We outline the assessment and compliance process for this condition in Table B1. During the programme design phase (M00, May 2011), the institutions specified a completion deadline of the third quarter of 2011. They did not assess compliance with this condition during the September 2011 (CA1) programme review. The change in deadline to the fourth quarter of 2011 in the updated MoU (M01) constituted a significant redraft. The institutions deemed the condition as complied with during the December 2011 (CA2) review, given the approval of the statutes of the Fiscal Council and its expected operationalisation by the end of the year.<sup>45</sup> The change in the MoU text (M02) was only a minor revision.

However, after the failure of the Portuguese authorities to operationalise the Fiscal Council by the end of 2011, the institutions revised their assessment of compliance with the condition during the March 2012 review (CA3). They also substantially redrafted the text in the MoU (M03) by changing the deadline to the first quarter of 2012. The institutions completed the assessment process for this condition in the June 2012 review (CA4). With the Portuguese Fiscal Council

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<sup>43</sup>The creation of such a database was one of the recommendations of the 2017 EFSF \ESM Financial Assistance Evaluation Report. Specifically, the report recommends that the “ESM should implement mandatory public reporting, including a database for the dissemination of harmonised data on country programmes”. The database, made publically available in October 2019, fulfills this recommendation.

<sup>44</sup>The database uses EC reports of programme reviews, produced in liaison with the ECB. Data from IMF reports are not included in the database. Despite using the same institutional source, the reporting format across (and even within) programmes was not always consistent. An important aim of the programme database is to make certain key concepts consistent, to the extent possible without re-evaluating or altering historical records. The ESM applied automatic and manual matching techniques to better relate assessments to conditions and provide a consistent evolution of conditions across time. They also harmonised the degree of compliance and sectoral groupings. Programme experts from the EC and ESM reviewed and approved these aspects.

<sup>45</sup>It is important to note that the date of the reviews match the date of publication of these documents. There was often a lag of at least one month between the completion of the mission, whereby staff from the institutions travelled to the country for discussions with the national authorities, and publication of the corresponding report. In this particular example, the mission took place in November 2011. For this reason, the institutions could not be sure of compliance with the condition, and based their assessment on their expectation of completion.

operational since February 2012, the institutions deemed the condition was complied with and dropped it from subsequent MoUs.

At the start of each programme, the institutions collect and analyse quantitative macroeconomic and financial indicators in order to form an opinion on a country's current situation and the outlook for the remainder of the programme. As the programme advances, the institutions may revise these projections. We use these data to analyse the role that they play in the assessment and compliance process. For our example condition, despite better than expected GDP growth and budget deficit in 2011, public debt increased by considerably more than projected (Table [B2](#)). This was due to larger-than-forecast bank recapitalisations. The interest rate on this debt was roughly in line with projections, as expected for a slow-moving variable.

Table B1: Condition: Establish a Portuguese Fiscal Council

Review	Document	Wording
M00 (May 2011)	MoU	<b>3.16.</b> Adopt the Statutes of the Fiscal Council, based on the working group report of 6 April 2011. The Council will be operational in time for the 2012 budget. [Q3-2011]
CA1 (Sept 2011)	Compliance	<b>No assessment</b>
M01 (Sept 2011)	MoU	<b>3.16.</b> Adopt the Statutes of the Fiscal Council. [Q3-2011] The Fiscal Council will be operational by [Q4-2011].
CA2 (Dec 2011)	Compliance	<b>Observed:</b> The Statutes of the Fiscal Council were approved on 8 September and entered into force on 20 October (Law 54/2011 on 19 October). Fiscal Council will be operational by end of the year as stipulated by the MoU.
M02 (Dec 2011)	MoU	<b>3.14.</b> The Fiscal Council will be operational by [Q4-2011].
CA3 (Mar 2012)	Compliance	<b>Broadly observed:</b> The Fiscal Council was been established, its operation should start in March.
M03 (Mar 2012)	MoU	<b>3.9.</b> The Fiscal Council was been established and will be operational by [Q1-2012].
CA4 (Jun 2012)	Compliance	<b>Observed</b>

*Notes:* The labels for the MoUs and compliance assessments (e.g. M00, CA1) align with those found in the database. The dates for the MoU and CA documents generally accord to date of publication. However, due to publication lags, in some instances the publication date falls in the quarter after the review mission. Since we sometimes use controls in our regressions that depend on information available in a given quarter, we manually adjust these cases to align them with the timing of the review, to better reflect the information available at the time the documents were produced. This example condition was also highlighted by [Moshammer and Siskind \(2020\)](#).



Table B2: Economic and financial indicators: Portugal

Review	$t - 1$	$t$	$t + 1$	$t + 2$	$t + 3$
<b>GDP growth (%)</b>					
M00 (May 2011)	1.3	-2.2	-1.8	1.2	2.5
M01 (Sept 2011)	1.3	-2.2	-1.8	1.2	2.5
M02 (Dec 2011)	1.4	-1.6	-3.0	0.7	2.4
M03 (Mar 2012)	-1.5	-3.3	0.3	2.1	1.9
M04 (Jun 2012)	-1.6	-3.0	0.2	2.1	1.9
<b>Primary deficit (% of GDP)</b>					
M00 (May 2011)	6.1	1.7	-0.3	-2.1	-2.8
M01 (Sept 2011)	6.1	1.7	-0.3	-2.0	-2.8
M02 (Dec 2011)	6.7	1.6	-0.5	-2.2	-3.0
M03 (Mar 2012)	-0.1	-0.3	-1.7	-2.6	-3.0
M04 (Jun 2012)	0.4	-0.2	-1.7	-2.6	-3.0
<b>Public debt (% of GDP)</b>					
M00 (May 2011)	93.0	101.7	107.4	108.6	107.6
M01 (Sept 2011)	92.9	101.1	106.2	107.3	106.4
M02 (Dec 2011)	93.3	107.2	116.2	118.1	116.0
M03 (Mar 2012)	106.8	112.4	115.3	114.4	112.7
M04 (Jun 2012)	107.8	114.4	118.6	117.7	115.7
<b>Interest rate (%)</b>					
M00 (May 2011)	3.7	4.4	4.7	4.8	4.9
M01 (Sept 2011)	3.7	4.4	4.7	4.8	4.9
M02 (Dec 2011)	3.7	4.5	4.6	4.5	4.6
M03 (Mar 2012)	4.3	4.4	4.3	4.4	4.4
M04 (Jun 2012)	4.1	4.2	4.2	4.3	4.3

*Notes:* The labels for the MoUs and compliance assessments (e.g. M00, CA1) align with those found in the database. Nowcasts and forecasts are annual, and therefore  $t - 1$  represents the year before,  $t$  the year of and  $t + 1$  the year after the production of a given MoU.

## Appendix C Constructing the *analytical* database

The publically-available EFSF\ESM programme database provides granular lending information (loan disbursements, principal repayments, past interest, and fee payments) and data on programme monitoring (loan conditionality and economic and financial indicators, including real-time forecasts) in 6 EFSF\ESM programmes. However, it is unsuitable for empirical analysis. This appendix provides an overview of the substantial work we undertook to enable use of the database for analytical purposes.<sup>46</sup>

The first issue is that the data comes in five separate files: one each for disbursements, repayments, interest and fees, conditionality and economic indicators. This means that one cannot immediately use all of the available variables. Merging the data, however, is not straightforward. Different files, because they focus on distinct aspects, can have different numbers of observations. The conditionality file contains 8,282 observations, which represents the number of conditions scheduled for assessment. The economic indicators file instead contains 45,648 observations, and the disbursement file has 1,509.

To merge the individual files, we matched information on individual conditions, including their type and assessment and compliance status,<sup>47</sup> with information on financial assistance and real-time macroeconomic forecasts.

The next step was to add condition identifiers and transform the data into a quarterly frequency. To determine the correct quarter, we utilised cut-off dates for data used and the timing of country missions as reported in the programme documentation and assessed what was the relevant information set available to the creditors during the production of a given document. For example, a programme document published very early in a quarter was assigned to the previous quarter, as that was more representative of the information set available to the institutions when the document was produced.

Another key step was the treatment of conditions with multiple sub-conditions that were assessed separately. We aggregate their compliance status into a single condition with a unique

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<sup>46</sup>This is over and beyond the various mistakes we noticed in the publically-available database. Such mistakes are inevitable in such a detailed database that was collated using data matching techniques, as human checking of each and every observation is impossible.

<sup>47</sup>We extracted information on the sector of the condition, whether it was a prior action, whether a condition needs to be complied with continuously and whether it had any numerical targets. We also corrected any mismatching of sectors or missing prior action label that we discovered upon careful inspection of the description of conditions. For instance, we created a prior action dummy taking the value of 1 if the condition is labelled as prior action or if the description mentions “prior to disbursement”.

compliance status by weighting the share of fulfilled by 1, share of others by 0.5 and share of not fulfilled by 0, following the implementation ratio approach adopted in IMF (2012d).

After these steps, we have a database with a consistent number of observations and a time structure conducive to empirical analysis. The next task was to create a number of variables that we consider useful in understanding the determinants of compliance with official loan conditionality. We, for instance, calculated the total number of conditions in each review as another explanatory variable. We then extracted information on conditions that reappear in the next review of the programme, whether they have been redrafted or not. We follow the evolution of each condition, so we also record the past status in terms of assessment, completion and redrafting.

Next, we determined what were the applicable due dates for each condition. We extracted this information from the description of the condition and translated it into quarters. In the case of several due dates, we took as the relevant due date the one closest to the timing of the document in which the condition was specified. For conditions that are to be fulfilled on a continuous basis and have no due date, we assume that the due date is next quarter. Around 12% of conditions have no due date specified. We created an additional variable that translates the due dates into quarters and where we assume that conditions without a due date were meant to be assessed at the next review. If the condition is labelled as prior action, then we take the review in the same quarter as the due date if any as a relevant review. <sup>48</sup>.

From this, we also calculate several variables of interest that we use in our regressions. We calculate the expected time for assessment as a number of quarters between the appearance of the condition and the expected assessment (in two versions, one vis-à-vis the due date and another vis-à-vis the relevant future review. For the assessed conditions, we also calculate the delay between the due date and the actual assessment, where we subtract one quarter, since often the condition would be assessed only in the next quarter if the due date is at the end of previous quarter. <sup>49</sup>

Finally, we added macroeconomic forecasts as reported in MoUs, their subsequent reviews and

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<sup>48</sup>This variable is created as follows. For those conditions that have a due date, the quarter of the next actual review document is taken (CA document). For instance, i.e. if due date is 31 December 2015, the relevant quarter for due date is 2015-Q4, but measured in terms of when it could be reviewed, this could only be done in the next review, which could be 2016- Q1 or later if there was no review in that particular quarter

<sup>49</sup>We do not control for whether the due date was in the beginning or end of the quarter, so by constructing the variable in this manner we are biasing the delay downwards to some extent.

compliance assessments, including a lagged value, a nowcast and 1 to 2 year ahead forecast for the main macroeconomic aggregates. We added ex-post realization of these aggregates and calculated forecast errors. We also added information on spreads in the assessment quarter and average spread between the quarter when the condition was set and the quarter of assessment. We calculated also upcoming disbursements at each review and the total envelope of financial assistance.

Overall, these changes and the combined database will enable researchers to utilise the rich details included in the EFSF \ESM programme database for empirical analysis. We consider this endeavour as a large value added of our paper, and hope that it will lead to greater usage of the database to produce even more insights into the design of conditionality in official lending.

## Appendix D Ignoring sample selection

Table B3: Fulfillment of conditions, with no sample selection

	(1)	(2)	(3)	(4)	(5)
Numerical	0.325*** (0.108)	0.242** (0.099)	0.312*** (0.106)	0.265** (0.109)	0.239** (0.098)
Continuous	0.657*** (0.124)	0.709*** (0.151)	0.683*** (0.120)	0.589*** (0.120)	0.713*** (0.126)
Redrafted	-0.038 (0.062)	-0.021 (0.058)	-0.189*** (0.069)	-0.059 (0.068)	-0.154** (0.076)
Expected time to assessment	-0.917*** (0.136)	-1.006*** (0.139)	-0.723*** (0.121)	-0.903*** (0.148)	-0.773*** (0.161)
Number of conditions	-0.007 (0.045)	0.049 (0.046)	-0.211*** (0.076)	-0.442*** (0.146)	-0.379* (0.224)
Numerical · Continuous	0.051 (0.358)	0.109 (0.379)	0.047 (0.408)	0.049 (0.328)	0.151 (0.480)
GDP nowcast error	0.198*** (0.025)	0.210*** (0.025)	0.045 (0.038)	0.289*** (0.029)	0.106** (0.045)
Avg spread btw MoU and CA	-0.112*** (0.011)	-0.111*** (0.011)	0.041 (0.027)	-0.101*** (0.013)	-0.024 (0.042)
Next disbursement-to-GDP	4.568*** (1.001)	4.322*** (1.056)	-4.101*** (1.579)	0.939 (1.178)	-4.039** (1.653)
Delayed	-0.088 (0.086)	-0.071 (0.094)	0.089 (0.096)	-0.140* (0.076)	0.135 (0.094)
Redrafted · Delayed	-0.059 (0.095)	-0.055 (0.114)	0.046 (0.113)	-0.028 (0.115)	0.040 (0.113)
Financial		0.493** (0.227)			0.693*** (0.243)
Fiscal		1.652*** (0.364)			1.833*** (0.389)
Fiscal-structural		0.281 (0.214)			0.414* (0.244)
Structural labour		0.369 (0.252)			0.569** (0.253)
Structural product		0.245 (0.219)			0.447* (0.251)
Constant	1.268*** (0.227)	0.658** (0.326)	7.138*** (0.454)	3.510*** (0.602)	7.042*** (0.896)
Observations	2730	2730	2730	2730	2730
Pseudo $R^2$	0.061	0.073	0.114	0.090	0.133
Year dummies	No	No	Yes	No	Yes
Country dummies	No	No	No	Yes	Yes

*Notes:* Our dependent variable is a dummy that equals one if a condition is fulfilled during the programme, and zero otherwise. See Section 3 for details. Standard errors, clustered at condition level, in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## Appendix E Less stringent fulfillment categorisation

Table B4: Fulfillment of conditions, including “largely observed”

	(1)	(2)	(3)	(4)	(5)
Numerical	0.261** (0.130)	0.227** (0.093)	0.192** (0.090)	0.107 (0.109)	0.195* (0.104)
Continuous	0.678*** (0.134)	0.732*** (0.139)	0.672*** (0.124)	0.631*** (0.124)	0.714*** (0.135)
Redrafted	-0.017 (0.063)	-0.003 (0.060)	-0.114 (0.078)	-0.014 (0.056)	-0.063 (0.062)
Expected time to assessment	-1.399*** (0.174)	-1.493*** (0.154)	-1.593*** (0.258)	-2.042*** (0.161)	-1.818*** (0.201)
Number of conditions	-0.043 (0.052)	0.000 (0.050)	-0.305*** (0.063)	-0.379** (0.147)	-0.381*** (0.122)
Numerical · Continuous	0.141 (0.351)	0.175 (0.387)	0.223 (0.437)	0.257 (0.345)	0.321 (0.484)
GDP nowcast error	0.151*** (0.029)	0.163*** (0.030)	0.010 (0.031)	0.274*** (0.030)	0.057 (0.044)
Avg spread btw MoU and CA	-0.099*** (0.012)	-0.098*** (0.011)	0.065*** (0.019)	-0.071*** (0.015)	-0.008 (0.039)
Next disbursement-to-GDP	6.768*** (0.989)	6.500*** (1.041)	0.549 (2.161)	4.276*** (1.167)	1.683 (1.793)
Delayed	-0.065 (0.084)	-0.047 (0.087)	0.047 (0.103)	-0.154* (0.087)	0.134 (0.095)
Redrafted · Delayed	-0.061 (0.124)	-0.056 (0.118)	0.025 (0.111)	-0.031 (0.117)	-0.007 (0.115)
Financial		0.465* (0.266)			0.554** (0.233)
Fiscal		1.404*** (0.414)			1.420*** (0.356)
Fiscal-structural		0.274 (0.242)			0.416* (0.240)
Structural labour		0.334 (0.277)			0.534** (0.269)
Structural product		0.296 (0.251)			0.569** (0.244)
Inverse mills ratio	0.519*** (0.121)	0.540*** (0.122)	0.871*** (0.237)	1.156*** (0.132)	1.176*** (0.198)
Constant	0.891*** (0.307)	0.336 (0.342)	6.381*** (0.465)	2.560*** (0.622)	5.878*** (0.549)
Observations	2730	2730	2730	2730	2730
Pseudo $R^2$	0.065	0.078	0.119	0.107	0.144
Year dummies	No	No	Yes	No	Yes
Country dummies	No	No	No	Yes	Yes

*Notes:* Our dependent variable is a dummy that equals one if a condition is fulfilled or largely fulfilled during the programme, and zero otherwise. See Section 3 for details. Standard errors, clustered at condition level, in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



Table B5: **Fulfillment of conditions, including “largely” and “partially observed”**

	(1)	(2)	(3)	(4)	(5)
Numerical	0.271** (0.125)	0.268*** (0.102)	0.210* (0.116)	0.142 (0.109)	0.246** (0.097)
Continuous	0.654*** (0.136)	0.712*** (0.142)	0.649*** (0.136)	0.646*** (0.132)	0.719*** (0.136)
Redrafted	-0.050 (0.066)	-0.043 (0.061)	-0.143* (0.081)	-0.056 (0.064)	-0.117 (0.075)
Expected time to assessment	-1.479*** (0.172)	-1.544*** (0.164)	-1.631*** (0.258)	-2.049*** (0.196)	-1.823*** (0.225)
Number of conditions	-0.203*** (0.058)	-0.180*** (0.050)	-0.453*** (0.079)	-0.541*** (0.175)	-0.502*** (0.134)
Numerical · Continuous	0.041 (0.353)	0.056 (0.387)	0.117 (0.392)	0.144 (0.372)	0.214 (0.430)
GDP nowcast error	0.145*** (0.029)	0.154*** (0.030)	-0.018 (0.037)	0.251*** (0.031)	0.026 (0.044)
Avg spread btw MoU and CA	-0.099*** (0.012)	-0.098*** (0.013)	0.054** (0.025)	-0.078*** (0.014)	-0.020 (0.036)
Next disbursement-to-GDP	8.235*** (1.081)	8.100*** (1.109)	2.800 (1.757)	6.532*** (1.203)	4.981** (1.955)
Delayed	-0.107 (0.086)	-0.093 (0.091)	0.047 (0.091)	-0.186* (0.101)	0.112 (0.097)
Redrafted · Delayed	-0.009 (0.117)	-0.008 (0.130)	0.078 (0.128)	0.018 (0.133)	0.052 (0.115)
Financial		0.534** (0.265)			0.592** (0.237)
Fiscal		1.201*** (0.415)			1.139*** (0.386)
Fiscal-structural		0.411* (0.241)			0.516** (0.237)
Structural labour		0.448* (0.257)			0.584** (0.258)
Structural product		0.460* (0.250)			0.669*** (0.245)
Inverse mills ratio	0.579*** (0.126)	0.596*** (0.126)	0.934*** (0.225)	1.131*** (0.151)	1.217*** (0.188)
Constant	1.808*** (0.310)	1.235*** (0.330)	6.759*** (0.454)	3.493*** (0.726)	6.544*** (0.591)
Observations	2730	2730	2730	2730	2730
Pseudo $R^2$	0.073	0.081	0.096	0.102	0.112
Year dummies	No	No	Yes	No	Yes
Country dummies	No	No	No	Yes	Yes

*Notes:* Our dependent variable is a dummy that equals one if a condition is fulfilled, largely fulfilled or partially fulfilled during the programme, and zero otherwise. See Section 3 for details. Standard errors, clustered at condition level, in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$